IKOS SENIOR LIVING

32-11 31ST STREET
QUEENS, NEW YORK

Remedial Investigation Work Plan

NYSDEC BCP Site No.: C241290
AKRF Project Number: 240854

Prepared For:

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1.0 INTRODUCTION

This Remedial Investigation Work Plan (RIWP) has been prepared by AKRF, Inc. (AKRF) on behalf of Ikos Senior Living LLC (the Volunteer), for the property located at 32-11 31st Street, in the Astoria section of Queens, NY, hereafter referred to as the "Site." The Site is identified by the City of New York as Borough of Queens, Tax Block 611, Lot 25. The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), under Site No. C241290. The Volunteer entered into a Brownfield Cleanup Agreement (BCA) with NYSDEC on October 6, 2025.

Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures. The Site location and topography of the Site and surrounding area are shown on Figure 1, and the Site layout is shown on Figure 2. The Site is abutted to the north by commercial uses (restaurants, a bar, retail, and offices), followed by Broadway; to the south by residential units and the Cretans Association Omonia, Inc. Cultural Facility, followed by office space; to the east by residential units and 32nd Street; and to the west by 31st Street and an elevated NYC subway station, followed by commercial/retail and residential units. The greater surrounding area includes primarily commercial, retail, residential, and transit uses.

Two subsurface investigations were conducted by AKRF in October 2022 and December 2024, and documented in a January 2024 Subsurface (Phase II) Investigation Report and January 2025 Remedial Investigation Report (RIR), respectively. The 2022 investigation was conducted in accordance with a New York City Department of Environmental Protection (NYCDEP)-approved Phase II Work Plan. The 2024 investigation was conducted in accordance with a New York City Mayor's Office of Environmental Remediation (OER)-approved Phase II Work Plan. The subsurface investigations identified elevated levels of polycyclic aromatic hydrocarbons (PAHs), metals, pesticides, and perfluorooctanesulfonic acid (PFOS) in soil; chlorinated solvent-related volatile organic compounds (VOCs), PAHs, and metals in groundwater; and chlorinated solvent-related and petroleum-related VOCs in soil vapor.

This RIWP describes the procedures to be used to further define the nature and extent of contamination at the Site. The data compiled from the Remedial Investigation (RI), as described in this RIWP, will be used to prepare a RIR. All work will be completed in accordance with this RIWP, which includes a Quality Assurance Project Plan (QAPP) (Appendix A), a Health and Safety Plan (HASP) (Appendix B) and Community Air Monitoring Plan (CAMP) (Appendix C). The CAMP will be implemented during all subsurface investigation activities involving soil disturbance at the Site.

Contact information for the parties responsible for the work described in this RIWP are included in Table 1:

Table 1
Remedial Investigation Personnel Contact Information

Company	Individual Name	Title	Contact Number
NYSDEC	Elliott Jackson	Project Manager	(518) 402-9789
NYSDOH	Mya Burns	Project Manager	(518) 457-9957
AKRF	Deborah Shapiro	Project Director, QEP	(646) 388-9544
	Adrianna Bosco	Project Manager	(646) 388-9576
	Marc Godick	Project QA/QC Officer	(212) 696-0670
	Ben Hess	Alternate Project Manager	(212) 696-0670
	Mackenzie Miller	Field Team Leader/Site Safety Officer (SSO)	(631) 357-9404
	Chad Walters	Alternate Field Team Leader/SSO	(646) 388-9752

Table 1
Remedial Investigation Personnel Contact Information

Company	Individual Name	Title	Contact Number
Ikos Senior Living LLC	Alexa Mendel	Volunteer's Representative	(929) 463-7686

2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Description and Surrounding Land Use

The Site consists of an approximately 0.48-acre parcel located at 32-11 31st Street in the Astoria section of Queens, New York, and is identified by the City of New York as Queens Borough Tax Block 611, Lot 25. Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures. The surrounding area is predominantly commercial, residential, and transit-related. A surrounding land use map is provided as Figure 3.

2.2 Site Geology, Hydrogeology, and Subsurface Characteristics

Based on the U.S. Geological Survey (USGS), Central Park, New York 2013 Quadrangle map, the Site lies at approximately 50 feet above mean sea level, with the general surrounding area topography gently sloping down in a westerly direction towards the East River. Based on an architectural survey prepared by Montrose Surveying Co., LLP, dated September 2021, elevation of the Site ranges from 49 to 57 feet above mean sea level.

During AKRF's December 2024 subsurface investigation, depth to groundwater beneath the Site ranged from 31.4 feet below grade in the eastern portion of the Site to 35.06 feet below grade in the southwestern portion of the Site, as measured from temporary monitoring wells. Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River, approximately 1 mile west of the Site; however, actual groundwater flow at the Site can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements or nearby subway lines. There are no surface water bodies or streams on or immediately adjacent to the Site. Groundwater in this portion of Queens is not used as a source of potable water.

The stratigraphy of the Site consists of fill material (comprised of sand, silt, and gravel, with varying amounts of brick, asphalt, and concrete) down to approximately 3 to 11 feet below grade, underlain by apparent native sand with trace to little amounts of gravel to the boring terminus (approximately 45 feet below grade). During a September 2022 geotechnical investigation performed by GEODesign, Inc. P.C. (GEODesign), bedrock was encountered at approximately 51 feet below grade in the southern portion of the Site and 57 feet below grade in the northeastern portion of the Site.

2.3 Proposed Development Plan

Proposed redevelopment of the Site includes construction of two new buildings: a 13-story mixed-use residential building along 31st Street with approximately 167 affordable senior residential units and ground-floor retail; and a three-story community facility building on the Site's 32nd Street frontage. The community facility building would be connected to the residential building on the first floor. The remainder of the Site would include outdoor landscaped recreational space. The proposed project would include green roofs and solar panels on both buildings. Approximately 30% of the residential units would be reserved for formerly homeless seniors, and one superintendent's unit. The community facility building would provide a variety of social service programing including workforce development, English literacy, technological literacy classes, and LGBTQ+ services.

The current zoning designation of the Site is R5 (residential) with a commercial overlay (C1-2) along 31st Street. The Site is being rezoned to R5 and C4-5 along 31st Street. The rezoning action is proposed under the Ikos Senior Housing Rezoning & Urban Development Action Area Project

(UDAAP), subject to City Environmental Quality Review (CEQR), and will allow for the development of community facility space and increased residential space.

2.4 Site History

Available records indicate that the Site was developed with a residential dwelling from at least 1898 to 1979 and included several vacant lots. The Site was depicted in its current configuration as one contiguous lot and identified as a parking facility by 1988. The City of New York has owned and operated the Site since December 18, 1997, through a court order in which the City of New York acquired title to the Site via eminent domain for use as a municipal parking field.

3.0 PREVIOUS ENVIRONMENTAL REPORTS

Copies of previous reports prepared for the Site are included in Appendix D, and summarized below:

Phase I Environmental Site Assessment – 31-07 31st Street, Astoria, NY, AKRF, Inc., June 2021

AKRF prepared a Phase I Environmental Site Assessment (ESA) for the Site in June 2021 in accordance with the requirements of American Society for Testing and Materials (ASTM) Standard E1527-13 (the applicable standard at that time). A Tier 1 Vapor Encroachment Screen was also conducted in accordance with ASTM Standard E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. At the time of AKRF's assessment, the Site was occupied by a municipal parking lot with no structures. The Phase I ESA included a review of current and historical Sanborn Fire Insurance maps; state and federal environmental regulatory databases; local records; and reconnaissance of the Site and its surroundings. A summary of the assessment findings is presented below:

Recognized Environmental Conditions (RECs):

- One groundwater monitoring well was observed on the 31st Street sidewalk west-adjacent to the Site.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry-cleaning uses in the surrounding area.

AKRF identified the following Business Environmental Risks (BERs) outside the scope of ASTM E1527-13:

- Buried demolition debris from former on-site structures could contain asbestos-containing materials (ACM), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and/or underground storage tanks.

DeMinimus:

- Three five-gallon containers of orphan waste were located on the southeastern-most corner of the Site. Two of the three containers were labeled as kerosene and lacquer; the third container was unmarked.

Subsurface (Phase II) Investigation Report – 31-07 31st Street, Astoria, NY, AKRF, Inc., January 2024

AKRF conducted a Phase II investigation at the Site in October 2022 in accordance with a NYCDEP-approved Phase II Work Plan, dated June 2022. Field activities included a geophysical survey, the advancement of seven soil borings, and the installation of four temporary wells and five soil vapor probes, with the collection of 14 soil samples, 4 groundwater samples, and 5 soil vapor samples for laboratory analysis. A summary of the findings is provided below:

- Two soil samples were collected from each boring and analyzed for VOCs, semi-volatile organic compounds (SVOCs), PCBs, pesticides, and metals. The 14 soil samples were compared to the NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs), Restricted Residential Soil Cleanup Objectives (RRSCOs), and Protection of Groundwater Soil Cleanup Objectives (PGWSCOs). Acetone was detected above the UUSCO and PGWSCO in two samples; no VOCs were detected above the RRSCOs. Up to seven SVOCs were detected above the UUSCOs, RRSCOs, and/or PGWSCOs, including benzo(a)anthracene [max. 25 milligrams per kilogram (mg/kg)], benzo(a)pyrene (max. 23 mg/kg), benzo(b)fluoranthene (max. 29 mg/kg), benzo(k)fluoranthene (max. 7.6 mg/kg), chrysene (max. 23 mg/kg), dibenz(a,h)anthracene (max 2.7 mg/kg), and indeno(1,2,3-c-d)pyrene (max. 17 mg/kg). Four metals were detected in up to four samples above their UUSCOs, but below the RRSCOs and PGWSCOs, including copper (max. 63.1 mg/kg), lead (max. 283 mg/kg), mercury (max. 0.59 mg/kg), and zinc (max. 149 mg/kg). The pesticide P,P'-DDT was detected in sample SB-05_0-2_20221004 at a concentration of 0.0063 mg/kg above the UUSCO of 0.0033 mg/kg, but below the RRSCO and PGWSCO.

- Four groundwater samples were collected from temporary wells TW-01 through TW-04 (installed in borings SB-01 through SB-04) and analyzed for VOCs, SVOCs, PCBs, pesticides, and metals (total and dissolved). Three VOCs [tetrachloroethene (PCE) (max. 330 micrograms per liter (µg/L)], cis-1,2-dichloroethene (max. 14 µg/L), and chloroform (max. 9.2 µg/L)] were detected in at least one of the four samples above the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs). Six SVOCs, including benzo(a)anthracene (max. 2.1 µg/L), benzo(a)pyrene (max. 1.6 µg/L), benzo(b)fluoranthene (max. 2.2 µg/L), bis(2-ethylhexyl) phthalate (max. 6.2 µg/L), chrysene (max 2 µg/L), and indeno(1,2,3-c-d)pyrene (max. 1.6 µg/L), were detected in sample TW-01_20221005 at concentrations above the AWQSGVs. In the unfiltered (total) metals analysis, 14 metals were detected at concentrations above the AWQSGVs, including arsenic (max. 62.9 µg/L), barium (max. 3,540 µg/L), beryllium (max. 14.2 µg/L), chromium, total (max. 3,390 µg/L), copper (max. 1,340 µg/L), iron (max. 971,000 µg/L), lead (max. 857 µg/L), magnesium (max. 355,000 µg/L), manganese (max. 24,600 µg/L), mercury (max. 1.7 µg/L), nickel (max. 922 µg/L), sodium (max. 140,000 µg/L), thallium (max. 5.1 µg/L), and zinc (max. 2,640 µg/L). In the filtered (dissolved) metals analysis, four metals, including iron (max. 1,630 µg/L), magnesium (max. 45,900 µg/L), manganese (max. 450 µg/L), and sodium (max. 141,000 µg/L) were detected at concentrations above the AWQSGVs. No PCBs or pesticides were detected above laboratory reporting limits in the groundwater samples.
- Several solvent-related VOCs [including PCE [max 1,900 micrograms per cubic meter (µg/m^3)], trichloroethene (TCE) (max. 45 µg/m^3), and cis-1,2-dichloroethylene (max. 200 µg/m^3)] were detected in the soil vapor samples. Petroleum-related VOCs benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) were detected in up to all five soil vapor samples at concentrations up to 29 µg/m^3 (toluene in SV-04_20221003).

Remedial Investigation Report, 31-07 31st Street, Astoria, NY, AKRF, Inc., January 2025

As part of the proposed rezoning action, the Site was assigned an E-Designation (E-1001) in May 2024 for hazardous materials.

Although a subsurface investigation was conducted in 2022 under a NYCDEP-approved Work Plan, OER required an additional subsurface investigation. AKRF conducted a Remedial Investigation at the Site in December 2024 in accordance with an OER-approved Phase II Work Plan, dated November 2024. Field activities included a geophysical survey, the advancement of nine soil borings, and the installation of three temporary wells and three soil vapor probes, with the collection of 23 soil samples, three groundwater samples, and three soil vapor samples for laboratory analysis. A summary of the findings is provided below:

- Twenty-three soil samples were collected for laboratory analysis during this investigation. One sample (SB-08_0-2_20241213) was also analyzed for perfluoroalkyl and polyfluoroalkyl substances (PFAS). VOCs were detected at concentrations up to 0.087 mg/kg, below the UUSCOs, RRSCOs, and PGWSCOs. Up to six SVOCs [benzo(a)anthracene (max. 2.8 mg/kg), benzo(a)pyrene (max. 2.7 mg/kg), benzo(b)fluoranthene (max. 3.8 mg/kg), benzo(k)fluoranthene (max. 1.4 mg/kg), chrysene (max. 2.8 mg/kg), and indeno(1,2,3-c,d)pyrene (max. 1.4 mg/kg)] were detected above the UUSCOs, RRSCOs, and/or PGWSCOs in five soil samples. Four metals were detected above their respective UUSCOs in one or more of the soil samples: copper (max. 62.3 mg/kg), lead (max. 379 mg/kg), mercury (max. 0.27 mg/kg), and zinc (max. 173 mg/kg). No metals were detected above the RRSCOs or PGWSCOs. PCBs were not detected above laboratory reporting limits in any of the soil samples analyzed during the investigation. The pesticides P,P'-DDE and P,P'-DDT were detected in one sample at concentrations of 0.004 mg/kg and 0.008 mg/kg, respectively, above the UUSCO of 0.0033 mg/kg, but below their respective RRSCOs and PGWSCOs. PFOS was detected in the soil sample analyzed (SB-08_0-2_20241213) at a concentration of 2.17 parts per billion (ppb), above the UUSCO guidance value of 0.88 ppb, and the PGWSCO guidance value of 1.0 ppb, but below the RRSCO guidance value

of 44 ppb. Perfluorooctanoic acid (PFOA) and 1,4-dioxane were not detected above laboratory reporting limits.

- Three groundwater samples were collected from temporary wells TW-08 through TW-10 and analyzed for VOCs, SVOCs, PCBs, pesticides, metals (total and dissolved), and 1,4-dioxane. Six VOCs (bromodichloromethane, chloroform, cis-1,2-dichloroethylene, dibromochloromethane, PCE, and TCE) were detected in one or more groundwater samples at concentrations ranging from 0.34 µg/L of bromodichloromethane to 310 µg/L of PCE. PCE was detected in all three groundwater samples at concentrations ranging from 60 to 310 µg/L, above the AWQSGV of 5 µg/L. Three SVOCs, 1,4-dioxane, caprolactam, and di-n-butyl phthalate, were detected in one or more of the groundwater samples at concentrations up to 21 µg/L, below their respective AWQSGVs. 14 metals were detected above the AWQSGVs in one or more of the total (unfiltered) samples: arsenic (max. 73.3 µg/L), barium (max. 4,580 µg/L), beryllium (max. 14 µg/L), total chromium (max. 1,350 µg/L), copper (max. 1,000 µg/L), iron (max. 667,000 µg/L), lead (max. 707 µg/L), magnesium (max. 370,000 µg/L), manganese (max. 18,400 µg/L), mercury (max. 1.1 µg/L), nickel (max. 814 µg/L), sodium (max. 123,000 µg/L), thallium (max. 1.6 µg/L), and zinc (max. 2,040 µg/L). Manganese and sodium were also detected above the AWQSGVs in the dissolved (filtered) groundwater samples. No PCBs or pesticides were detected above laboratory reporting limits in any of the groundwater samples. 1,4-Dioxane was detected in two groundwater samples at concentrations up to 0.13 µg/L, below the AWQSGV of 0.35 µg/L.
- Three soil vapor samples were collected for laboratory analysis from soil vapor points SV-06, SV-07, and SV-11, and analyzed for VOCs by EPA TO-15. Petroleum-related VOCs were detected at concentrations ranging from 2.3 $\mu g/m^3$ to 66 $\mu g/m^3$. Solvent-related VOCs were detected at concentrations ranging from 1.4 $\mu g/m^3$ to 25 $\mu g/m^3$. No compounds were detected above the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Matrices requiring mitigation, regardless of indoor air concentration.

Soil concentrations above the UUSCOs, RRSCOs, and/or PGWSCOs, groundwater concentrations above AWQSGVs, and soil vapor detections are shown on Figures 4, 5, and 6, respectively.

3.1 Areas of Concern (AOCs)

Based on the Site's history and previous reports prepared for the Site, the AOCs for the RI include:

1. Historic commercial, industrial, and automotive uses in the surrounding area, including a filling station, a garage and auto repair shop with gasoline tanks, a dry cleaner, and a machine shop and warehouse;
2. Polyaromatic hydrocarbons (PAHs) in soil; and
3. Elevated concentrations of solvent-related compounds in soil vapor and groundwater.

4.0 FIELD PROGRAM

The RI field program will focus on collecting soil, groundwater, and soil vapor data to further define and characterize the nature and extent of Site contamination and to assist with determining the appropriate remedial action.

4.1 Field Program Summary

The field program scope of work (SOW) includes: a utility location survey; the advancement of 15 soil borings with the collection and laboratory analysis of at least two soil samples from each soil boring; the installation of eight permanent groundwater monitoring wells (three of which will be constructed as nested well locations) with the collection and laboratory analysis of one groundwater sample per well; and the installation of five temporary soil vapor probes with the collection and laboratory analysis of five soil vapor samples. The proposed sample locations are shown on Figure 7.

The soil boring and temporary soil vapor point locations will be surveyed using a Global Positioning System (GPS) and will be measured off of fixed points in the field. The groundwater monitoring wells will be surveyed by a New York State-licensed surveyor. Any field evidence of contamination (visual, olfactory, and/or elevated PID readings) will be recorded on logs for inclusion in the RIR. All sampling equipment will be either dedicated or decontaminated between sampling locations.

The aforementioned SOW will be conducted by AKRF and its subcontractors. Qualifications for AKRF personnel are included in Attachment A of the QAPP. The following sections describe the methods that will be used to complete the aforementioned SOW.

4.2 Utility Location Survey

A geophysical survey was previously conducted across the entire Site in December 2024 during the Phase II Subsurface Investigation. During the geophysical survey, multiple shallow electrical lines associated with on-site lighting and parking meters were located and marked with spray paint. Several manholes connected to the municipal sewer system were also identified. As part of this RI, a utility survey will be performed to confirm and clear the proposed sampling locations. Ground-penetrating radar (GPR) uses electromagnetic wave propagation and scattering to image and identify changes in electrical and magnetic properties in the ground. Magnetometers measure irregularities in the magnetic field in a given area. Any anomalies indicative of UST(s) will be marked in the field, measured off of fixed points in the field, and surveyed using GPS.

4.3 Soil Boring Advancement and Soil Sampling

A track-mounted Geoprobe® Direct-Push Probe (DPP) will be used to advance 15 soil borings (denoted as RI-SB-01 through RI-SB-15) at the approximate locations shown on Figure 7. As discussed further in Section 4.4, a Rotosonic drill rig may be utilized, if necessary, to install nested monitoring wells to the bedrock surface (RI-SB-01, RI-SB-05, and RI-SB-08). Continuous soil cores will be collected in 5-foot long, 2-inch diameter, stainless steel macrocore piston rod samplers fitted within internal, dedicated acetate liners. Soil borings will be advanced to the groundwater table, estimated between approximately 31 and 36 feet below grade. Soil borings that will be converted to monitoring wells will be advanced to approximately 5 feet below the water table, or down to the bedrock surface for nested well installation. Soil samples will be inspected by AKRF field personnel for evidence of contamination (e.g., odors, staining, etc.), screened for the presence of VOCs with a calibrated PID, and logged using the modified Burmister soil classification system.

Select soil samples will be collected at the depths listed in Table 2 necessary to vertically and horizontally delineate exceedances that were observed during the 2022 and 2024 Phase II Investigations. At all other soil boring locations, one soil sample will be collected for analysis from the upper 2 feet below existing pavement, all 2-foot intervals exhibiting visual or olfactory evidence of contamination, and the 2-foot interval immediately above groundwater. If evidence of contamination is observed, an additional sample will be collected at the first interval indicating no contamination. If feasible, surficial soil samples (0-2 inches) will be collected from all boring locations from the material immediately underlying any asphalt/sub-based beneath the paved surface.

Soil samples slated for laboratory analysis will be labeled and placed in laboratory-supplied containers and shipped to the laboratory via a courier with chain-of-custody (COC) documentation in accordance with appropriate United States Environmental Protection Agency (EPA) protocols to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory.

Soil samples will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, Target Analyte List (TAL) metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, per- and polyfluorinated compounds (PFAS) by Modified EPA 1633A, and 1,4-dioxane by EPA Method 8270.

After each boring is completed, the boreholes will be filled with on-site materials (if not noticeably contaminated) in accordance with Section 3.3(e) of DER-10. Soil cuttings displaying field evidence of contamination will be containerized in properly labeled Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal at a permitted facility. Boreholes that require drill cutting disposal will be filled with bentonite chips (hydrated). Disposable sampling equipment that comes in contact with environmental media will be double bagged and disposed of as municipal trash as non-hazardous refuse.

The rationale for the proposed soil sample locations is summarized in Table 2.

Table 2
Proposed Soil Sample Rationale

Sample Location	Sample Intervals for Laboratory Analysis[1]	Location	Rationale
RI-SB-01	0-2 inches 0-2, 2-4, 15-17, 2-ft interval about groundwater	Eastern	To support the QHHEA and evaluate soil conditions along eastern Site boundary.
RI-SB-02	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Northern	To support the QHHEA and evaluate soil conditions along northwestern Site boundary.
RI-SB-03	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Eastern	To vertically delineate PAH detections at SB-01.

Table 2
Proposed Soil Sample Rationale

Sample Location	Sample Intervals for Laboratory Analysis[1]	Location	Rationale
RI-SB-04	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Northern	To support the QHHEA and evaluate soil conditions in the northern footprint of the proposed building.
RI-SB-05	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Central	To support the QHHEA and evaluate soil conditions in the central footprint of the proposed building.
RI-SB-06	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Southwestern	To support the QHHEA and evaluate soil conditions along the southwestern Site boundary.
RI-SB-07	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Southern	To support the QHHEA and evaluate soil conditions in the southern portion of the Site.
RI-SB-08	0-2 inches 0-2, 2-4, 15-17, 2-ft interval above groundwater	Southeastern	To support the QHHEA and evaluate soil conditions along the southeastern Site boundary.
RI-SB-09	0-2 inches 2-4, 4-6, 6-8, 8-10, 10-12, 12-14, 14-16, 16-18, 18-20, 20-22, 22-24, 24-26, 26-28, 28-30, 30-32 feet	Eastern	To delineate extent of PAHs detected in SB-05 during the 2024 Phase II Investigation.
RI-SB-10	0-2 inches 4-6, 6-8, 8-10 feet	Eastern	To delineate extent of PAH contamination detected in SB-15 during the 2024 Phase II Investigation.
RI-SB-11	0-2 inches 0-2, 2-4, 4-6 feet	Eastern	To delineate extent of PAH contamination detected in SB-15 during the 2024 Phase II Investigation.
RI-SB-12	0-2 inches 4-6, 6-8, 8-10 feet	Eastern	To delineate extent of PAH contamination detected in SB-14 during the 2024 Phase II Investigation.
RI-SB-13	0-2 inches 0-2, 2-4, 4-6 feet	Eastern	To delineate extent of PAH contamination detected in SB-14 during the 2024 Phase II Investigation.
RI-SB-14	0-2 inches 2-4, 4-6, 15-17 feet	Central	To support the QHHEA and evaluate soil conditions in the central portion of the Site.
RI-SB-15	0-2 inches 2-4, 4-6, 15-17 feet	Central - Southern	To support the QHHEA and evaluate soil conditions in the southern portion of the Site.

Notes:
1. Indicates sample depth below existing pavement.
2. Additional samples may be collected from one or several borings if field evidence of contamination is observed.

4.4 Groundwater Monitoring Well Installation and Development

Five permanent monitoring wells (denoted as RI-MW-01 through RI-MW-08) will be installed using a track-mounted Geoprobe® Direct-Push Probe (DPP) at the proposed locations shown on Figure 7. If refusal is encountered during shallow soil boring installation, a Rotosonic drill rig will be utilized to install deeper borings and monitoring wells. Monitoring wells RI-MW-01, RI-MW-05, and RI-MW-08 will be constructed as nested wells with shallow, intermediate and deep screened intervals. At each location, the shallow well screen will be set approximately 5 feet below the water table (approximately 31 to 35 feet below grade). At the nested monitoring well locations (RI-MW-01, RI-MW-05, and RI-MW-08), the intermediate screen will be set at approximately 40 to 50 feet below grade. If bedrock is encountered past 50 feet, a deep well screen will be set immediately above the bedrock surface at approximately 50 to 60 feet below grade.

The monitoring wells will be constructed with 10 feet of 2-inch diameter 0.002-inch slotted polyvinyl chloride (PVC) well screen. The boreholes will be at least 6 inches in diameter to allow for a minimum 2-inch annular space surrounding the monitoring well. A No. 2 morie sandpack will be installed from the base of the well to approximately 2 feet above the well screen. The annular space around the solid well riser above the sandpack will be sealed with approximately 2 feet of bentonite followed by a non-shrinking grout/cement mixture to approximately one foot below grade. Each of the wells will be finished with a locking j-plug and flush-mounted well cover with a concrete pad. Well construction logs will be prepared and included as an appendix to the RIR.

Following installation, each groundwater monitoring well will be developed via pumping and surging to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. Development will continue until turbidity within the well is less than 50 nephelometric turbidity units (NTUs) for three successive readings; and until water quality indicators have stabilized to within 10% for pH, temperature, and specific conductivity for three successive readings. In the event that 50 NTUs cannot be achieved, at least three well volumes will be purged from the well. Well development details will be noted on groundwater development logs, included as an appendix to the RIR.

The rationale for the proposed groundwater sample locations is summarized in Table 3.

Table 3
Proposed Groundwater Sample Rationale

Groundwater Monitoring Well ID	Location	Rationale
RI-MW-01S/I/D	Eastern	To vertically delineate the extent of chlorinated solvent contamination in the eastern portion of the Site, confirm PCE detections at TW-08, and determine Site-specific groundwater flow direction and elevation.
RI-MW-02	Northern	To evaluate potential for off-site migration of groundwater contamination, assess groundwater quality in the northern portion of the Site, and determine Site-specific groundwater flow direction and elevation.
RI-MW-03	Northeastern	To assess groundwater quality in the northeastern portion of the Site, confirm PCE detections at TW-01, and determine Site-specific groundwater flow direction and elevation.
RI-MW-04	Northern-central	To assess groundwater quality on the northern-central portion of the Site, horizontally delineate extent of chlorinated solvent

Table 3
Proposed Groundwater Sample Rationale

Groundwater Monitoring Well ID	Location	Rationale
		contamination, and determine Site-specific groundwater flow direction and elevation.
RI-MW-05S/I/D	Central	To vertically delineate the extent of chlorinated solvent contamination in the central portion of the Site, confirm PCE detections in TW-09, and determine Site-specific groundwater flow direction and elevation.
RI-MW-06	Southwestern	To evaluate potential for off-site migration of groundwater contamination and determine Site-specific groundwater flow direction and elevation.
RI-MW-07	Southern	To assess groundwater quality on the southern portion of the Site, confirm PCE detection at TW-10, and determine Site-specific groundwater flow direction and elevation
RI-MW-08S/I/D	Southern	To evaluate potential for off-site migration of groundwater contamination, vertically delineate the extent of chlorinated solvent contamination in the southern portion of the Site, confirm PCE detection in TW-04, and determine Site-specific groundwater flow direction and elevation.

4.5 Groundwater Elevation Survey

The groundwater monitoring wells will be surveyed by a New York State-licensed surveyor to determine their accurate location and elevation. Two elevation measurements will be taken at each well location: the at-grade elevation; and the elevation of the top of PVC casing (north side at marking), to facilitate preparation of a groundwater contour map and to determine the direction of groundwater flow. The elevation datum for the sampling points will be based on NAVD 88 Elevation Datum. The groundwater elevation survey will be included as an appendix to the RIR.

4.6 Groundwater Sampling

In accordance with EPA low-flow sampling protocols, the wells will be sampled one to two weeks following their development. Prior to sampling, an electronic interface meter will be used to measure water levels and a bailer will be used to measure any separate phase liquid. The purge water will be monitored for turbidity and water quality indicators [i.e., pH, dissolved oxygen, oxidation-reduction potential (ORP), temperature, and specific conductivity] with measurements collected approximately every five minutes. The criteria for stabilization will be three successive readings within ±10% for pH, temperature, and specific conductivity. All purge water will be containerized in properly labeled, DOT-approved 55-gallon drums for off-site disposal at a permitted facility.

Groundwater samples slated for laboratory analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory. The samples collected from the shallow interval will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS by EPA Method 1633A, and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM) using Category B deliverables. Filtering will occur in the field. Sampling for PFAS will be conducted in

accordance with the April 2023 NYSDEC-issued sampling protocol, except that a low-density polyethylene (LDPE) bladder will be used as no industry-approved high-density polyethylene (HDPE) alternative currently exists. The samples collected from the intermediate and deep intervals for the nested wells will only be analyzed for VOCs by EPA Method 8260. Monitoring well sampling details will be noted on groundwater sampling logs, included as an appendix to the RIR.

4.7 Soil Vapor Sampling

Five soil vapor samples (denoted as RI-SV-01 through RI-SV-05) will be collected from five temporary vapor monitoring probes at the approximate locations shown on Figure 7. Soil vapor samples will be installed to a depth of approximately 28 feet below grade or the two-foot interval above the groundwater table (whichever is encountered first). Soil vapor sampling will be performed in accordance with the guidelines provided in the NYSDOH document entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," (October 2006, revised 2017 and 2024)."

The temporary soil vapor points will be installed by advancing an expendable drive point using either a direct-push drill rig, a slide hammer, or hammer drill to the target sampling depth. At each monitoring point, a 6-inch stainless steel screen implant, connected to Teflon tubing will be installed by hand or through the drilling rods and threaded into the drive point. The sampling tubing will extend from the end of the screen to above grade. The push probe rods will then be removed and the boring will be backfilled with clean silica sand to 3 to 6 inches above the screen. Hydrated bentonite will be used to fill the remaining void around the sampling tubing to the ground surface.

The soil vapor samples will be collected over a 2-hour time period from each monitoring point using a 6-Liter, batch-certified SUMMA® canister equipped with a vacuum gauge and flow regulator set at a maximum rate of 0.2 liter per minute.

Prior to sample collection, the soil vapor sampling points will be purged of three sample volumes using a GilAir air sampling pump. During purging, a shroud will be placed over the sampling point and helium gas will be introduced to saturate the atmosphere around the sample port with helium gas. Purged vapors will be collected into a Tedlar™ bag and field-screened for organic vapors using a PID. The purged air will also be monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point. If the purged soil vapor contains greater than 10% helium, additional bentonite will used to enhance the surface seal, and the point will be retested.

Following purging, a soil vapor sample will be collected using the vacuum from the SUMMA® canister. Immediately after opening the flow control valve equipped with a two-hour regulator, the initial SUMMA® canister vacuum (inches of mercury) will be noted. After two hours, the flow controller valve will be closed, the final vacuum noted, and the canister placed in a shipping carton for delivery to the laboratory.

The soil vapor samples will be analyzed for VOCs by EPA Method TO-15 by a NYSDOH ELAP-certified laboratory with Category B deliverables. Samples will be shipped to the laboratory with appropriate COC documentation.

The rationale for the proposed soil vapor samples is summarized in Table 4.

Table 4
Proposed Soil Vapor Sample Rationale

Vapor Point ID	Sample Location	Rationale
RI-SV-01	Eastern	To delineate concentrations of VOCs on the eastern portion of the Site and evaluate the potential for off-site exposure to the east.
RI-SV-02	Northern	To delineate concentrations of VOCs on the northern portion of the Site and evaluate the potential for off-site exposure to the north.
RI-SV-03	Northeastern	To delineate concentrations of VOCs on the northeastern portion of the Site and evaluate the potential for off-site exposure to the northeast.
RI-SV-04	Western	To delineate concentrations of VOCs on the western portion of the Site and evaluate the potential for off-site exposure to the west.
RI-SV-05	Southern	To delineate concentrations of VOCs on the southern portion of the Site and evaluate the potential for off-site exposure to the south.

4.8 Quality Assurance/Quality Control (QA/QC)

The analytical results will be reported using Category B deliverables. As required by the Category B sampling techniques, additional analysis will be included for QC measures. The QA/QC samples for soil and groundwater will include one field blank, one trip blank, one matrix spike/matrix spike duplicate (MS/MSD), and one blind duplicate sample at a frequency of one sample per 20 field samples per media. The field blank, blind duplicate, and MS/MSD samples will be analyzed for the same analyte list as the accompanying field samples. The laboratory-prepared trip blanks will be submitted for analysis of VOCs only to determine the potential for cross-contamination. QA/QC samples accompanying the soil and groundwater samples will also be analyzed for PFAS by EPA Method 1633A and 1,4-dioxane by EPA Method 8270 (SIM analysis will be used for groundwater samples). Additionally, one equipment blank will be collected for each day of groundwater sampling and analyzed for PFAS by EPA Method 1633A only.

Upon receipt of the analytical data from the laboratory, it will be reviewed by a third-party data validator, who will prepare a Data Usability summary Report (DUSR). The QAPP, included as Appendix A, describes the QA/QC protocols and procedures that will be followed during implementation of this RIWP.

4.9 Decontamination Procedures

All non-dedicated sampling equipment will be decontaminated between sampling locations using the following procedure:

1. Scrub equipment with a bristle brush using a tap water/Alconox® solution.
2. Rinse with tap water.
3. Scrub again with a bristle brush using a tap water/Alconox® solution.
4. Rinse with tap water.
5. Rinse with distilled water.
6. Air-dry the equipment.

Non-dedicated equipment used for soil and groundwater sampling of emerging contaminants will be decontaminated with laboratory-certified PFAS-free water.

4.10 Management of Investigation-Derived Waste (IDW)

IDW that does not exhibit field evidence of contamination will be used to backfill the corresponding borehole that generated them to within 12 inches of the surface. Soil IDW exhibiting evidence of gross contamination will be containerized in DOT-approved 55-gallon drums. All development and purge groundwater will be containerized in 55-gallon drums. The drums will be sealed at the end of each work day and labeled with the date, the well or boring number(s), the type of waste (i.e., drill cuttings, decontamination fluids, development water, or purge water) and the name of an AKRF point-of-contact. All drums will be labeled "pending analysis" until laboratory data is available. All boreholes will be restored after backfill. Handling of IDW and backfilling of boreholes will be conducted in accordance with Section 3.3(e) of DER-10.

5.0 REPORTING REQUIREMENTS

5.1 Daily Field Reports

During the field activities, daily reports will be submitted to the NYSDEC and NYSDOH Project Managers by noon the following day, and will include:

- A summary of progress made during the reporting day (e.g., borings advanced, monitoring wells installed, sample collection, etc.);
- An updated Site plan;
- A summary of CAMP data and response actions (if necessary);
- An explanation of notable findings; and
- Photographs of the Site documenting daily activities.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RIWP or other sensitive or time critical information. However, such conditions will also be included in the daily reports. Emergency conditions and changes to the RIWP will be addressed directly with the NYSDEC Project Manager via personal communication.

5.2 Remedial Investigation Report (RIR)

Upon completion of all field work and receipt of laboratory analytical results, the draft RIR will be updated in compliance with Section 3.14 of DER-10 that will: document field activities; present field and laboratory data; evaluate exposure pathways in an exposure assessment; identify and characterize the source(s) of contamination; a summary of the overall nature and extent of contamination using the applicable standards, criteria, and guidance; and discuss conclusions and recommendations drawn from the results of the RI.

5.2.1 Description of Field Activities

The RIR will include a section that will describe the field methods used to characterize the Site conditions, including: sampling techniques; field screening equipment; drilling and excavation equipment; monitoring well installation procedures; and management of IDW. This section will also include descriptions of hydrogeologic factors of the Site.

5.2.2 Soil Assessment

The RIR will include a section that presents field and laboratory data for soil results. The section will include a description of soil characteristics and figures will be provided that illustrate soil boring locations. Field and laboratory analytical results will be presented in the body of the report, summarized in tables and figures, and the detected concentrations will be compared to regulatory standards and/or guidance values. Soil boring logs and laboratory analytical reports will be provided as attachments. Category B deliverables will be provided by the laboratory and a third-party DUSR will be prepared and discussed.

5.2.3 Groundwater Assessment

The RIR will include a section that presents field and laboratory data from the groundwater monitoring results. The section will include a description of groundwater characteristics and figures will be provided that illustrate monitoring well locations. Well survey data and water level measurements will be used to create a groundwater elevation contour map and determine the inferred groundwater flow direction. Field and laboratory analytical results

will be presented and compared with regulatory standards and/or guidance values. Well construction, well development, and groundwater sampling logs, and laboratory analytical reports will be provided as attachments. Category B deliverables will be provided by the laboratory and a third-party DUSR will be prepared and discussed.

5.2.4 Soil Vapor Assessment

The RIR will include a section that presents field and laboratory data from the soil vapor results. The section will include a description of soil vapor characteristics and will provide a comparison of soil vapor sample analytical data. Figures will be provided that illustrate the soil vapor point locations. Field and laboratory analytical results will be presented and compared with regulatory standards and/or guidance values. Soil vapor sample logs and laboratory analytical reports will be provided as attachments. Category B deliverables will be provided by the laboratory and a third-party DUSR will be prepared and discussed.

5.2.5 Qualitative Human Health Exposure Assessment (QHHEA)

The RIR will include a QHHEA, which will be performed in accordance with DER-10 Section 3.3(c)4 and Appendix 3B.

6.0 PROPOSED PROJECT SCHEDULE

Table 5
Proposed Project Schedule

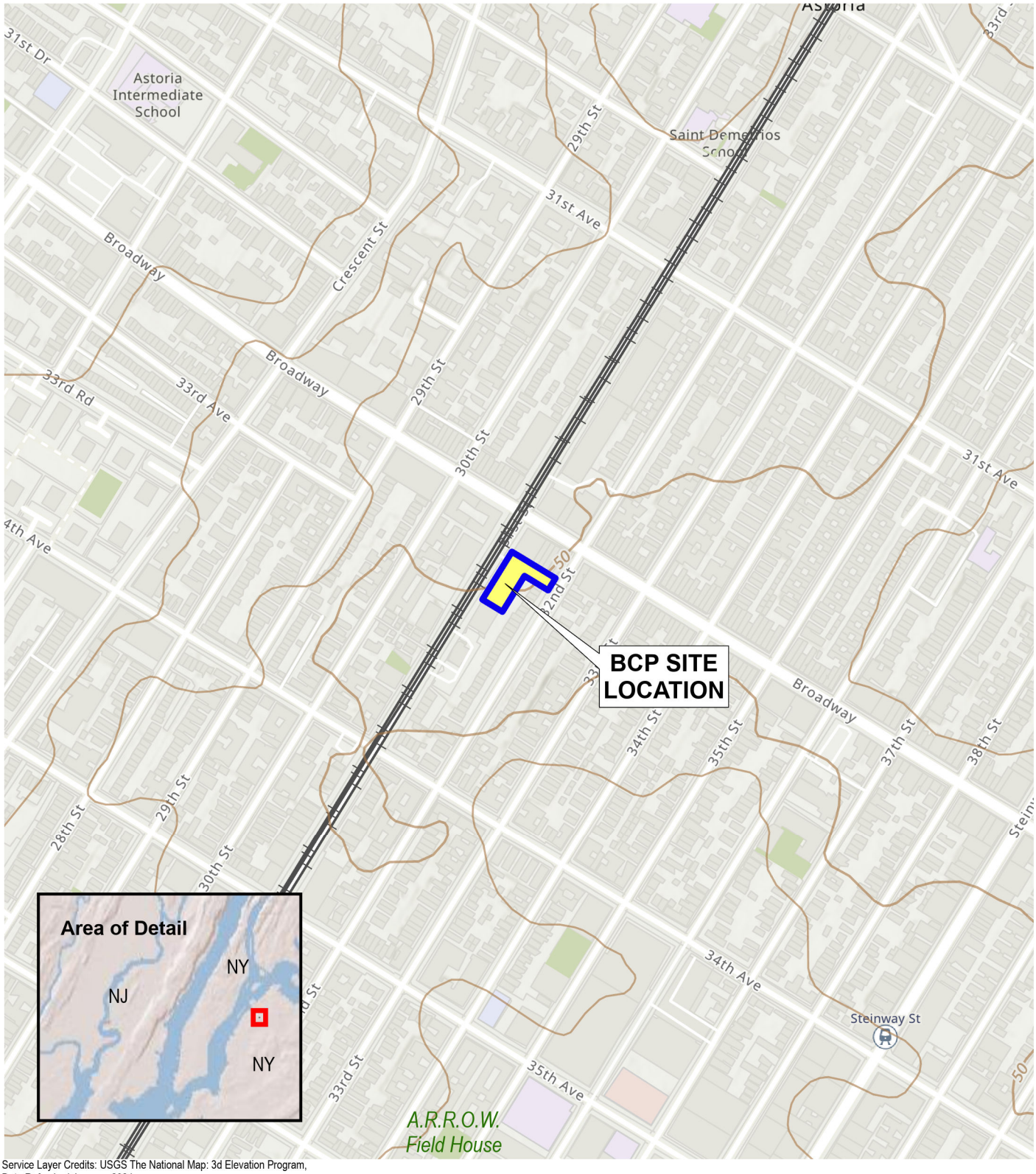
Activity	Time To Complete
Submittal of Draft RIWP	November 2025
RIWP Comments Received	December 2025
Revised RIWP Submitted to NYSDEC	January 2026
Distribute Fact Sheet/RIWP Public Comment Period Is Initiated	January 2026
RIWP Approved	February 2026
Implement RIWP	February-March 2026
Draft RIR Submitted to NYSDEC	April 2026
Draft Remedial Action Work Plan (RAWP) Submitted to NYSDEC	May 2026
NYSDEC/NYSDOH Issues RIR comments	June 2026
Revised RIR Submitted to NYSDEC	July 2026
NYSDEC Approves RIR	July 2026
45-day Public Comment Period for RAWP	July-August 2026
NYSDEC Approves RAWP and Issues Decision Document	September 2026
Issue Remedial/Construction Notice Fact Sheet	December 2026
Begin Redevelopment (Construction) with Implementation of RAWP	January 2027
Execution of Environmental Easement	July 2027
Draft Site Management Plan (SMP) Submitted to NYSDEC	September 2027
Draft Final Engineering Report and Fact Sheet	October 2027
Certificate of Completion and Fact Sheet	December 2027
Completion of Building (first occupancy)	December 2029

7.0 CERTIFICATION

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

Deborah Shapiro		12/15/2025
Name	*Signature*	*Date*

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed January, 2024

akrf

440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

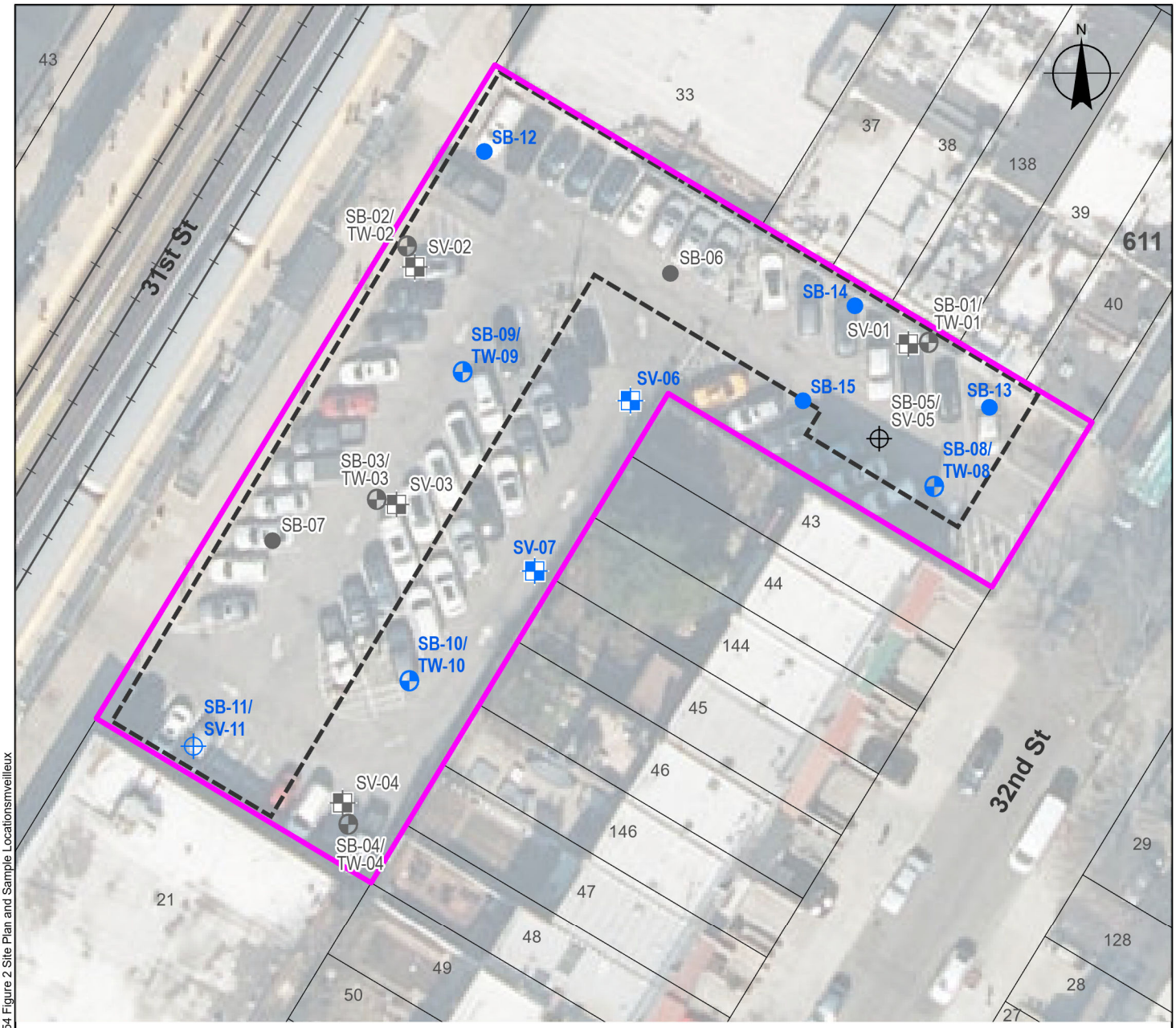
BCP SITE LOCATION

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
1

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\BCP App Figures.aprx10/17/2025 7:37 AM240854 Fig 1 Site Locationmveilleux



LEGEND

- BCP SITE BOUNDARY
- 25 — LOT BOUNDARY AND TAX LOT NUMBER
- 611 — BLOCK NUMBER
- PROPOSED BUILDING
- 2022 PHASE II SOIL BORING
- 2022 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2022 PHASE II SOIL VAPOR POINT
- 2022 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL BORING
- 2024 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2024 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL VAPOR POINT

0 20 40
SCALE IN FEET

Aerial Source:
2022 New York State ITS GIS Orthoimagery

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440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

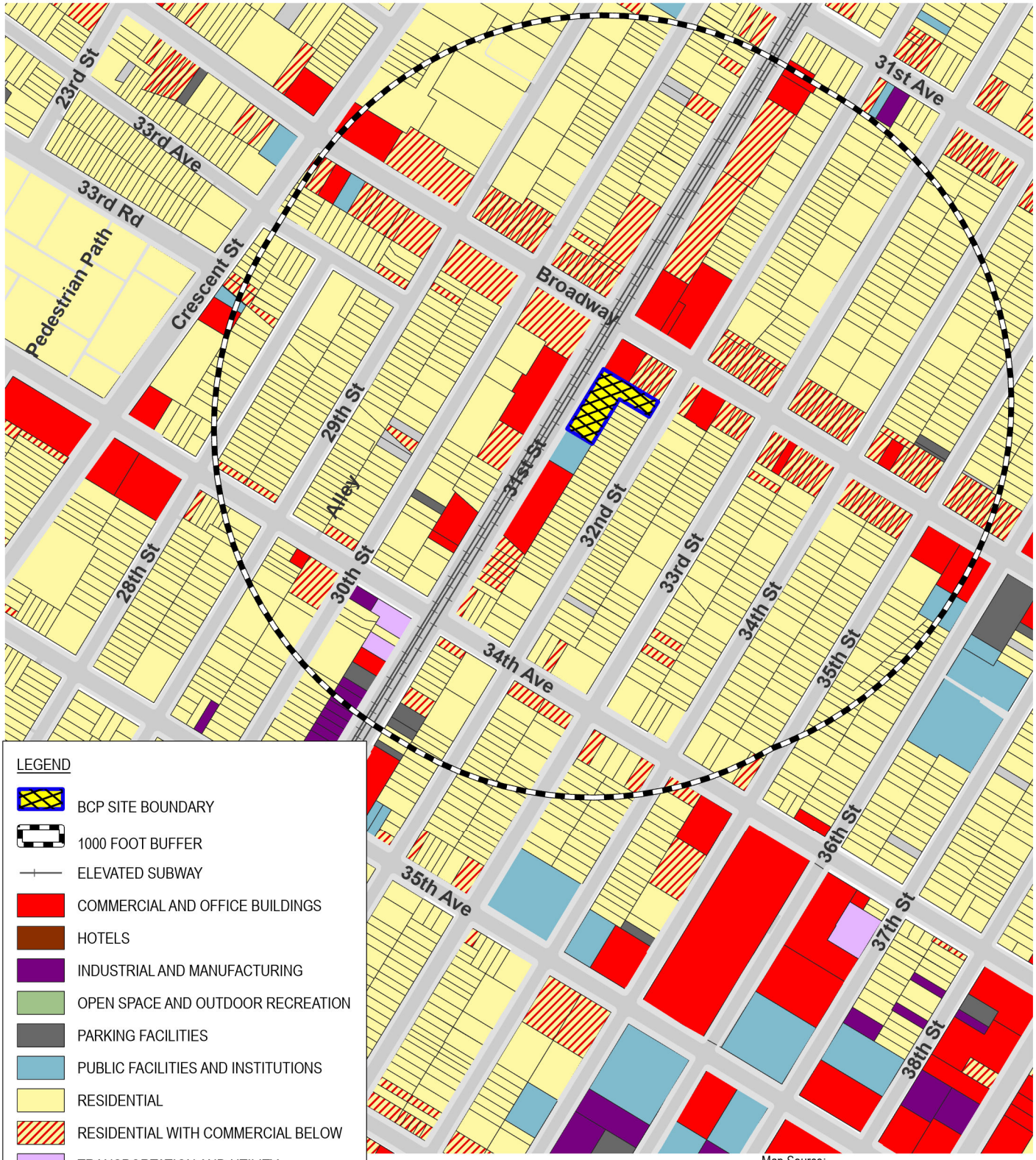
SITE PLAN AND SAMPLE LOCATIONS

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
2

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARI\SAR\BCP App Figures.aprx10/17/2025 7:36 AM 240854 Figure 2 Site Plan and Sample Locationsmveilleux



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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SCALE IN FEET

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AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\BCP App Surrounding Land Use Figure.aprx10/17/2025 7:43 AMFig 3 Surrounding Land Usemveilleux

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440 Park Avenue South, New York, NY 10016

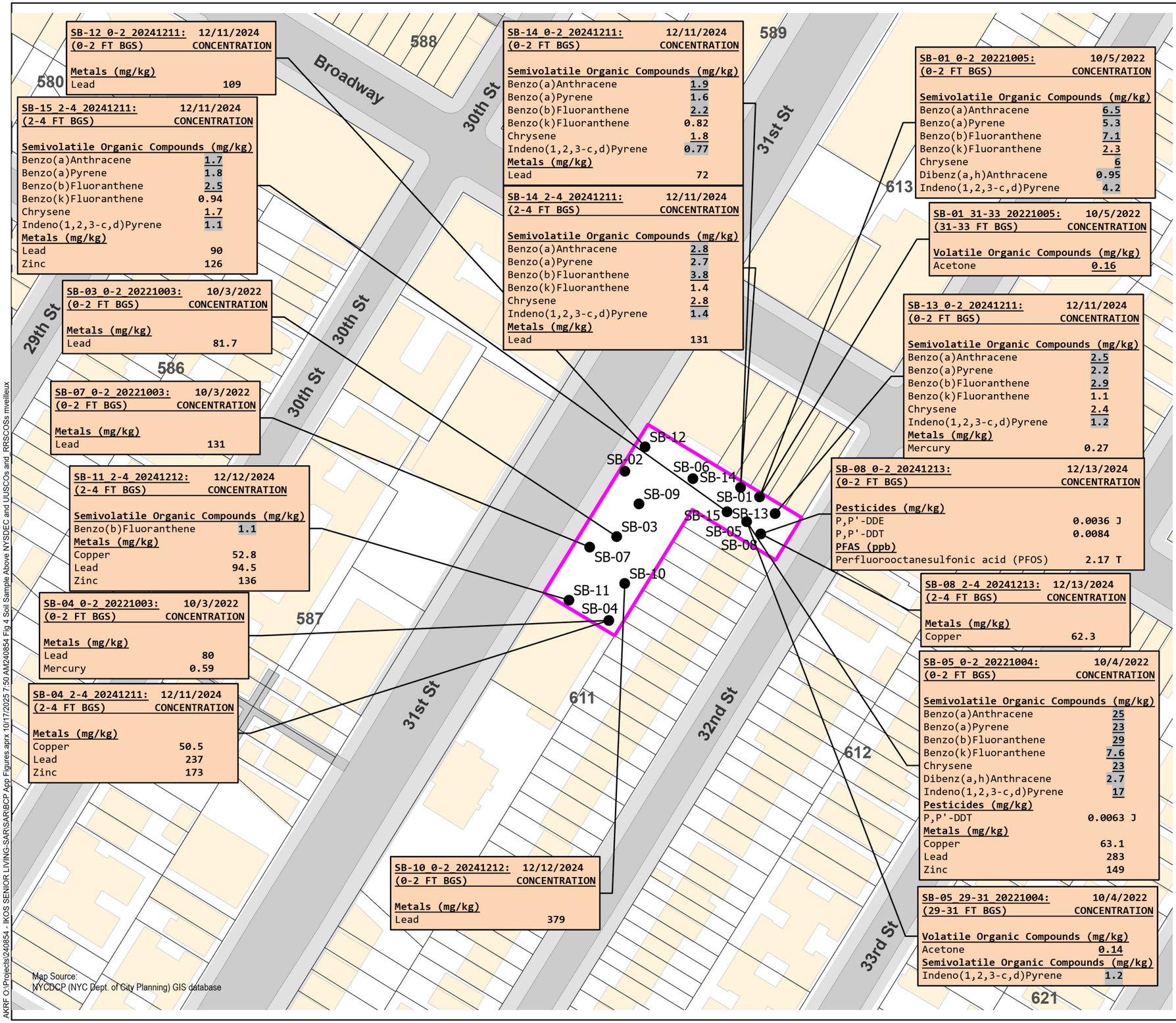
32-11 31st Street
Queens, New York

SURROUNDING LAND USE

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
3



LEGEND

- SOIL SAMPLE LOCATION
- BCP SITE BOUNDARY
- 20 LOT BOUNDARY AND TAX LOT NUMBER
- 2389 BLOCK NUMBER

Part 375 Soil Cleanup Objectives (SCOs): SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are presented in underline font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are shaded

mg/kg: milligrams per kilogram = parts per million (ppm)
J: The concentration given is an estimated value.
T: Indicates that a quality control parameter has exceeded laboratory limits

	UUGV ppb	RRGV ppb	UUSCO mg/kg	RRSCO mg/kg	PGWSCO mg/kg
Metals					
Copper			270	50	1720
Lead			400	63	450
Mercury			0.18	0.81	0.73
Zinc			10000	109	2480
Pesticides					
P,P'-DDE			8.9	0.0033	17
P,P'-DDT			7.9	0.0033	136
PFAS					
Perfluorooctanesulfonic acid (PFOS)	0.88	44			
Semivolatile Organic Compounds					
Benzo(a)Anthracene			1	1	1
Benzo(a)Pyrene			1	1	22
Benzo(b)Fluoranthene			1	1	1.7
Benzo(k)Fluoranthene			3.9	0.8	1.7
Chrysene			3.9	1	1
Dibenz(a,h)Anthracene			0.33	0.33	1000
Indeno(1,2,3-c,d)Pyrene			0.5	0.5	8.2
Volatile Organic Compounds					
Acetone			100	0.05	0.05

0 50 100 200
SCALE IN FEET

Sample ID — Sample Date

SB-12 0-2 20241211: 12/11/2024
(0-2 FT BGS) CONCENTRATION
Metals (mg/kg)
Lead 109

Analyte/Compound — Concentration

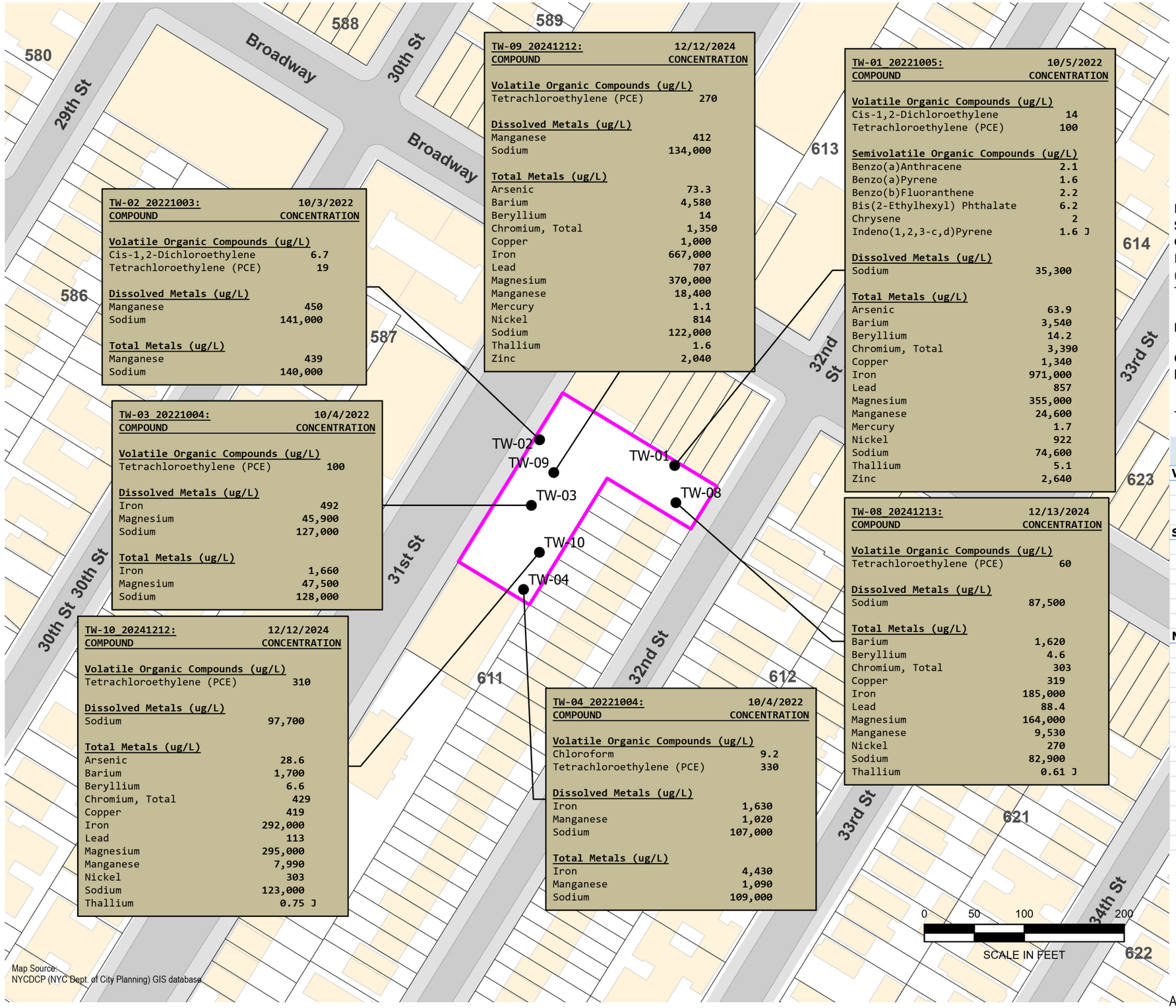
akrf
440 Park Avenue South, New York, NY 10016

SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PGWSCOS

32-11 31st Street
Queens, New York

DATE
10/17/2025
PROJECT NO.
240854
FIGURE
4

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\BCP App Figures.aprx 10/17/2025 7:50 AM240854 Fig 4 Soil Sample Above NYSDEC and UUSCOs and RRSCOs mveilleux



TW-02 20221003: 10/3/2022

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Cis-1,2-Dichloroethylene	6.7
Tetrachloroethylene (PCE)	19
Dissolved Metals (ug/L)	
Manganese	450
Sodium	141,000
Total Metals (ug/L)	
Manganese	439
Sodium	140,000

TW-03 20221004: 10/4/2022

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Tetrachloroethylene (PCE)	100
Dissolved Metals (ug/L)	
Iron	492
Magnesium	45,900
Sodium	127,000
Total Metals (ug/L)	
Iron	1,660
Magnesium	47,500
Sodium	128,000

TW-10 20241212: 12/12/2024

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Tetrachloroethylene (PCE)	310
Dissolved Metals (ug/L)	
Sodium	97,700
Total Metals (ug/L)	
Arsenic	28.6
Barium	1,700
Beryllium	6.6
Chromium, Total	429
Copper	419
Iron	292,000
Lead	113
Magnesium	295,000
Manganese	7,990
Nickel	303
Sodium	123,000
Thallium	0.75 J

TW-09 20241212: 12/12/2024

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Tetrachloroethylene (PCE)	270
Dissolved Metals (ug/L)	
Manganese	412
Sodium	134,000
Total Metals (ug/L)	
Arsenic	73.3
Barium	4,580
Beryllium	14
Chromium, Total	1,350
Copper	1,000
Iron	667,000
Lead	707
Magnesium	370,000
Manganese	18,400
Mercury	1.1
Nickel	814
Sodium	122,000
Thallium	1.6
Zinc	2,040

TW-04 20221004: 10/4/2022

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Chloroform	9.2
Tetrachloroethylene (PCE)	330
Dissolved Metals (ug/L)	
Iron	1,630
Manganese	1,020
Sodium	107,000
Total Metals (ug/L)	
Iron	4,430
Manganese	1,090
Sodium	109,000

TW-01 20221005: 10/5/2022

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Cis-1,2-Dichloroethylene	14
Tetrachloroethylene (PCE)	100
Semivolatile Organic Compounds (ug/L)	
Benzo(a)Anthracene	2.1
Benzo(a)Pyrene	1.6
Benzo(b)Fluoranthene	2.2
Bis(2-Ethylhexyl) Phthalate	6.2
Chrysene	2
Indeno(1,2,3-c,d)Pyrene	1.6 J
Dissolved Metals (ug/L)	
Sodium	35,300
Total Metals (ug/L)	
Arsenic	63.9
Barium	3,540
Beryllium	14.2
Chromium, Total	3,390
Copper	1,340
Iron	971,000
Lead	857
Magnesium	355,000
Manganese	24,600
Mercury	1.7
Nickel	922
Sodium	74,600
Thallium	5.1
Zinc	2,640

TW-08 20241213: 12/13/2024

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Tetrachloroethylene (PCE)	60
Dissolved Metals (ug/L)	
Sodium	87,500
Total Metals (ug/L)	
Barium	1,620
Beryllium	4.6
Chromium, Total	303
Copper	319
Iron	185,000
Lead	88.4
Magnesium	164,000
Manganese	9,530
Nickel	270
Sodium	82,900
Thallium	0.61 J

LEGEND

- 2389 BLOCK NUMBER
- 20 LOT BOUNDARY AND TAX LOT NUMBER
- BCP SITE BOUNDARY
- GROUNDWATER SAMPLE LOCATION

NYSDEC TOGS Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs):
New York State Department of Environmental Conservation (NYSDEC)
Technical and Operational Guidance Series (TOGS) (1.1.1):

µg/L: micrograms per Liter = parts per billion (ppb)

Only Exceedances of NYSDEC AWQSGVs are shown in bold font.

J: The reported value is estimated.

	NYSDEC AWQSGVs ug/l
Volatile Organic Compounds	
Chloroform	7
Cis-1,2-Dichloroethylene	5
Tetrachloroethylene (PCE)	5
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.002
Benzo(a)Pyrene	0
Benzo(b)Fluoranthene	0.002
Bis(2-Ethylhexyl) Phthalate	5
Chrysene	0.002
Indeno(1,2,3-c,d)Pyrene	0.002
Metals	
Arsenic	25
Barium	1,000
Beryllium	3
Chromium, Total	50
Copper	200
Iron	300
Lead	25
Magnesium	35,000
Manganese	300
Mercury	0.7
Nickel	100
Sodium	20,000
Thallium	0.5
Zinc	2,000

Sample ID — Sample Date

TW-02 20221003: 10/3/2022

COMPOUND	CONCENTRATION
Volatile Organic Compounds (ug/L)	
Cis-1,2-Dichloroethylene	6.7
Tetrachloroethylene (PCE)	19

Analyte/Compound — Concentration

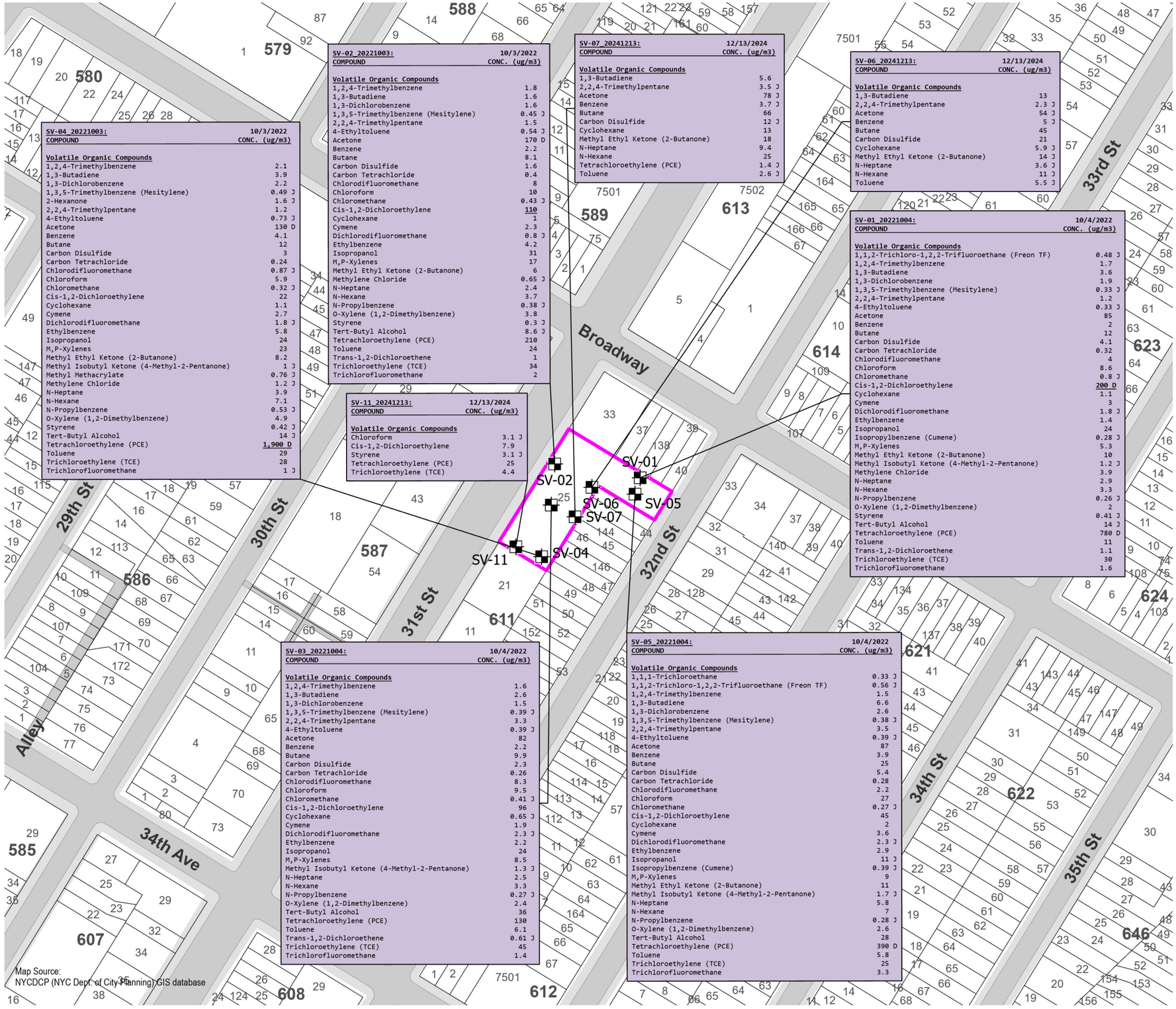
akrf
440 Park Avenue South, New York, NY 10016

GROUNDWATER SAMPLE CONCENTRATIONS ABOVE NYSDEC AWQSGVS

32-11 31st Street
Queens, New York

DATE 10/17/2025
PROJECT NO. 240854
FIGURE 5

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\BCP App Figures.aprx 10/17/2025 9:17 AM240854 Fig 5 Groundwater Sample Above NYSDEC AWQSGVs mvelleux



SV-04_20221003: 10/3/2022

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	2.1
1,3-Butadiene	3.9
1,3-Dichlorobenzene	2.2
1,3,5-Trimethylbenzene (Mesitylene)	0.49 J
2-Hexanone	1.6 J
2,2,4-Trimethylpentane	1.2
4-Ethyltoluene	0.73 J
Acetone	130 D
Benzene	4.1
Butane	12
Carbon Disulfide	3
Carbon Tetrachloride	0.24
Chlorodifluoromethane	0.87 J
Chloroform	5.9
Chloromethane	0.32 J
Cis-1,2-Dichloroethylene	22
Cyclohexane	1.1
Cymene	2.7
Dichlorodifluoromethane	1.8 J
Ethylbenzene	5.8
Isopropanol	24
M,P-Xylenes	23
Methyl Ethyl Ketone (2-Butanone)	8.2
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1 J
Methyl Methacrylate	0.76 J
Methylene Chloride	1.2 J
N-Heptane	3.9
N-Hexane	7.1
N-Propylbenzene	0.53 J
O-Xylene (1,2-Dimethylbenzene)	4.9
Styrene	0.42 J
Tert-Butyl Alcohol	14 J
Tetrachloroethylene (PCE)	**1,900 D**
Toluene	29
Trichloroethylene (TCE)	28
Trichlorofluoromethane	1 J

SV-02_20221003: 10/3/2022

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	1.8
1,3-Butadiene	1.6
1,3-Dichlorobenzene	1.6
1,3,5-Trimethylbenzene (Mesitylene)	0.45 J
2,2,4-Trimethylpentane	1.5
4-Ethyltoluene	0.54 J
Acetone	170 D
Benzene	2.2
Butane	8.1
Carbon Disulfide	1.6
Carbon Tetrachloride	0.4
Chlorodifluoromethane	8
Chloroform	10
Chloromethane	0.43 J
Cis-1,2-Dichloroethylene	**110**
Cyclohexane	1
Cymene	2.3
Dichlorodifluoromethane	0.8 J
Ethylbenzene	4.2
Isopropanol	31
M,P-Xylenes	17
Methyl Ethyl Ketone (2-Butanone)	6
Methylene Chloride	0.65 J
N-Heptane	2.4
N-Hexane	3.7
N-Propylbenzene	0.38 J
O-Xylene (1,2-Dimethylbenzene)	3.8
Styrene	0.3 J
Tert-Butyl Alcohol	8.6 J
Tetrachloroethylene (PCE)	210
Toluene	24
Trans-1,2-Dichloroethene	1
Trichloroethylene (TCE)	34
Trichlorofluoromethane	2

SV-11_20241213: 12/13/2024

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
Chloroform	3.1 J
Cis-1,2-Dichloroethylene	7.9
Styrene	3.1 J
Tetrachloroethylene (PCE)	25
Trichloroethylene (TCE)	4.4

SV-07_20241213: 12/13/2024

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,3-Butadiene	5.6
2,2,4-Trimethylpentane	3.5 J
Acetone	78 J
Benzene	3.7 J
Butane	66
Carbon Disulfide	12 J
Cyclohexane	13
Methyl Ethyl Ketone (2-Butanone)	18
N-Heptane	9.4
N-Hexane	25
Tetrachloroethylene (PCE)	1.4 J
Toluene	2.6 J

SV-06_20241213: 12/13/2024

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,3-Butadiene	13
2,2,4-Trimethylpentane	2.3 J
Acetone	54 J
Benzene	5 J
Butane	45
Carbon Disulfide	21
Cyclohexane	5.9 J
Methyl Ethyl Ketone (2-Butanone)	14 J
N-Heptane	3.6 J
N-Hexane	11 J
Toluene	5.5 J

SV-01_20221004: 10/4/2022

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.48 J
1,2,4-Trimethylbenzene	1.7
1,3-Butadiene	3.6
1,3-Dichlorobenzene	1.9
1,3,5-Trimethylbenzene (Mesitylene)	0.33 J
2,2,4-Trimethylpentane	1.2
4-Ethyltoluene	0.33 J
Acetone	85
Benzene	2
Butane	12
Carbon Disulfide	4.1
Carbon Tetrachloride	0.32
Chlorodifluoromethane	4
Chloroform	8.6
Chloromethane	0.8 J
Cis-1,2-Dichloroethylene	**200 D**
Cyclohexane	1.1
Cymene	3
Dichlorodifluoromethane	1.8 J
Ethylbenzene	1.4
Isopropanol	24
Isopropylbenzene (Cumene)	0.28 J
M,P-Xylenes	5.3
Methyl Ethyl Ketone (2-Butanone)	10
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.2 J
Methylene Chloride	3.9
N-Heptane	2.9
N-Hexane	3.3
N-Propylbenzene	0.26 J
O-Xylene (1,2-Dimethylbenzene)	2
Styrene	0.41 J
Tert-Butyl Alcohol	14 J
Tetrachloroethylene (PCE)	780 D
Toluene	11
Trans-1,2-Dichloroethene	1.1
Trichloroethylene (TCE)	30
Trichlorofluoromethane	1.6

SV-03_20221004: 10/4/2022

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	1.6
1,3-Butadiene	2.6
1,3-Dichlorobenzene	1.5
1,3,5-Trimethylbenzene (Mesitylene)	0.39 J
2,2,4-Trimethylpentane	3.3
4-Ethyltoluene	0.39 J
Acetone	82
Benzene	2.2
Butane	9.9
Carbon Disulfide	2.3
Carbon Tetrachloride	0.26
Chlorodifluoromethane	8.3
Chloroform	9.5
Chloromethane	0.41 J
Cis-1,2-Dichloroethylene	96
Cyclohexane	0.65 J
Cymene	1.9
Dichlorodifluoromethane	2.3 J
Ethylbenzene	2.2
Isopropanol	24
M,P-Xylenes	8.5
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 J
N-Heptane	2.5
N-Hexane	3.3
N-Propylbenzene	0.27 J
O-Xylene (1,2-Dimethylbenzene)	2.4
Tert-Butyl Alcohol	36
Tetrachloroethylene (PCE)	130
Toluene	6.1
Trans-1,2-Dichloroethene	0.61 J
Trichloroethylene (TCE)	45
Trichlorofluoromethane	1.4

SV-05_20221004: 10/4/2022

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
1,1,1-Trichloroethane	0.33 J
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.56 J
1,2,4-Trimethylbenzene	1.5
1,3-Butadiene	6.6
1,3-Dichlorobenzene	2.6
1,3,5-Trimethylbenzene (Mesitylene)	0.38 J
2,2,4-Trimethylpentane	3.5
4-Ethyltoluene	0.39 J
Acetone	87
Benzene	3.9
Butane	25
Carbon Disulfide	5.4
Carbon Tetrachloride	0.28
Chlorodifluoromethane	2.2
Chloroform	27
Chloromethane	0.27 J
Cis-1,2-Dichloroethylene	45
Cyclohexane	2
Cymene	3.6
Dichlorodifluoromethane	2.3 J
Ethylbenzene	2.9
Isopropanol	11 J
Isopropylbenzene (Cumene)	0.39 J
M,P-Xylenes	9
Methyl Ethyl Ketone (2-Butanone)	11
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.7 J
N-Heptane	5.8
N-Hexane	7
N-Propylbenzene	0.28 J
O-Xylene (1,2-Dimethylbenzene)	2.6
Tert-Butyl Alcohol	28
Tetrachloroethylene (PCE)	390 D
Toluene	5.8
Trichloroethylene (TCE)	25
Trichlorofluoromethane	3.3

N

LEGEND

- BCP SITE BOUNDARY
- SOIL VAPOR SAMPLE LOCATION
- 2389 BLOCK NUMBER
- 20 LOT BOUNDARY AND TAX LOT NUMBER

SOIL VAPOR

Detections that exceed the NYSDOH Soil Vapor/ Indoor Air Decision Matrix Values that require mitigation regardless of indoor air concentration are **underlined**.

µg/m³- micrograms per cubic meter

J: The reported value is estimated.
D: Analyte concentration obtained from dilution.

Sample ID — Sample Date

SV-11_20241213: 12/13/2024

COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
Chloroform	3.1 J
Cis-1,2-Dichloroethylene	7.9

Analyte/Compound — Concentration

0 75 150 300

SCALE IN FEET

akrf
440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

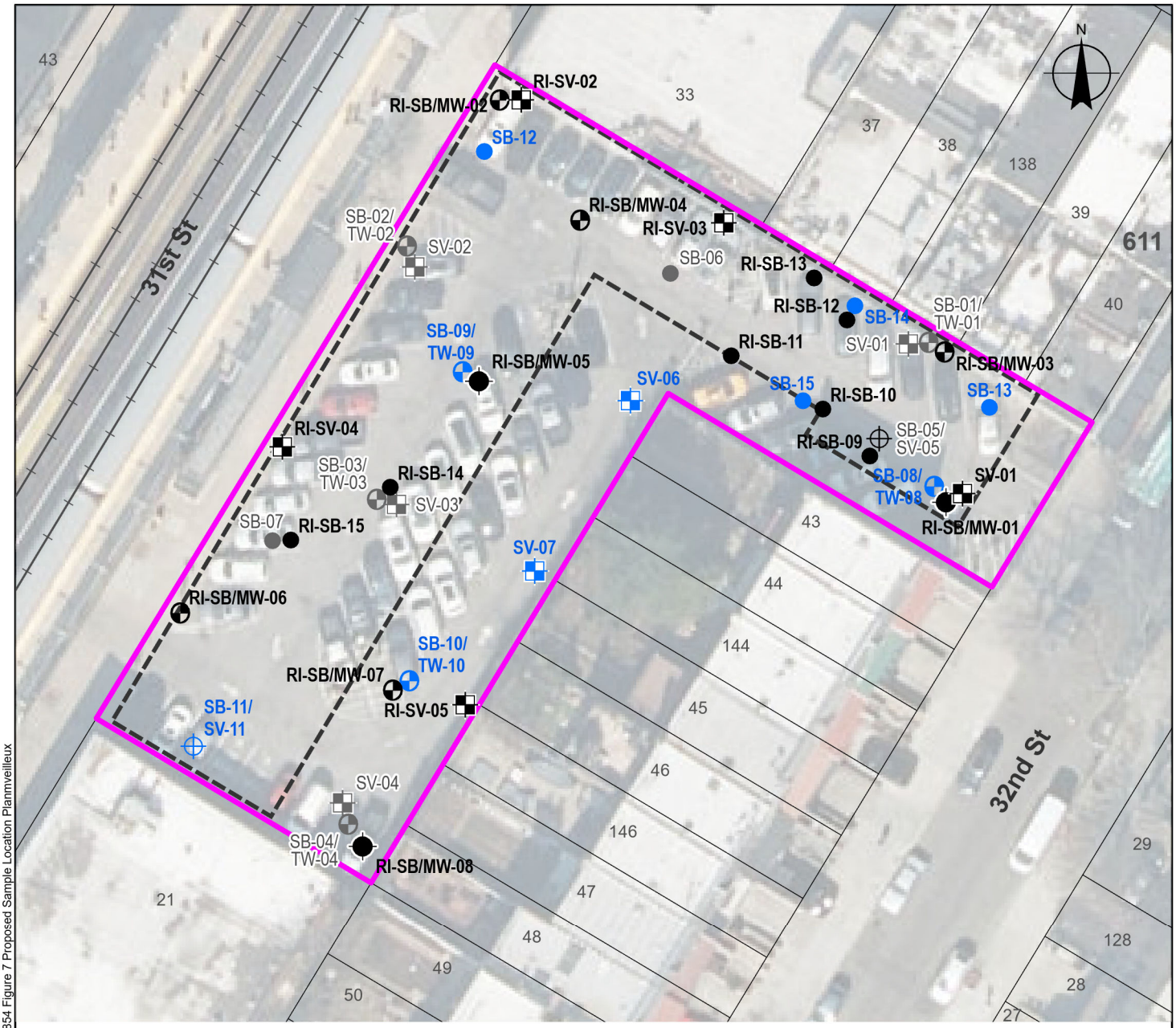
SOIL VAPOR DETECTIONS

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
6

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARI\SAR\BCP App Figure 6.aprx 10/17/2025 9:22 AM240854 Fig 6 Soil Vapor Detections mveilleux



LEGEND

- BCP SITE BOUNDARY
- 25 — LOT BOUNDARY AND TAX LOT NUMBER
- 611 — BLOCK NUMBER
- PROPOSED BUILDING
- 2022 PHASE II SOIL BORING
- 2022 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2022 PHASE II SOIL VAPOR POINT
- 2022 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL BORING
- 2024 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2024 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL VAPOR POINT
- PROPOSED RI SOIL BORING
- PROPOSED RI SOIL BORING/MONITORING WELL
- PROPOSED RI SOIL BORING/NESTED MONITORING WELL
- PROPOSED RI SOIL VAPOR POINT

0 20 40
SCALE IN FEET

Aerial Source:
2022 New York State ITS GIS Orthoimagery

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARISAR\BCP App Figures.aprx10/17/2025 12:00 PM 240854 Figure 7 Proposed Sample Location Planmvelleux

akrf
440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

PROPOSED SAMPLE LOCATION PLAN

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
7

APPENDIX A
QUALITY ASSURANCE PROJECT PLAN

IKOS SENIOR LIVING

32-11 31ST STREET
QUEENS, NEW YORK

Quality Assurance Project Plan

NYSDEC BCP Site No.: C241290
AKRF Project Number: 240854

Prepared For:

New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor
Albany, New York 12233

Prepared On Behalf Of:

Ikos Senior Living LLC
48-02 25th Avenue, Suite 400
Astoria, NY 11103

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, New York 10016
212-696-0670

OCTOBER 2025

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Table 1 – Laboratory Analytical Methods for Analysis Groups
Table 2 – Field Sample and QA/QC Sample Quantities
Table 3 – Remedial Investigation Sample Nomenclature

FIGURES

Figure 1 – Site Location
Figure 2 – Proposed Sample Location Plan

ATTACHMENTS

Attachment A – Resumes for QA/QC Officer, Project Manager, and Field Team Leader

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) describes the protocols and procedures that will be followed during implementation of the Remedial Investigation Work Plan (RIWP) for the property located at 32-11 31st Street in the Astoria section of Queens, New York, hereafter referred to as the "Site." The Site is identified by the City of New York as Borough of Queens, Block 611, Lot 25. A Site location map is provided on Figure 1. A Site plan and proposed sample locations are shown on Figure 2. The objective of this QAPP is to provide for Quality Assurance (QA) and maintain Quality Control (QC) of environmental investigative and sampling activities conducted under the New York State Department of Environmental Conservation (NYSDEC) oversight in the Brownfield Cleanup Program (BCP) (BCP Site No. C241290). Adherence to this QAPP will ensure that defensible data will be obtained during environmental work at the Site.

2.0 PROJECT TEAM

The project team will be drawn from AKRF professional and technical personnel, and AKRF's subcontractors. All field personnel and subcontractors will have completed a 40-hour training course and updated 8-hour refresher course that meet the Occupational Safety and Health Administration (OSHA) requirements of 29 CFR Part 1910. The following sections describe the key project personnel and their responsibilities.

2.1 Project Director

Ms. Deborah Shapiro, QEP, will serve as the project director and will be responsible for adherence to the QAPP including quality assurance/quality control (QA/QC). Mr. Marc Godick will also serve as a QA/QC officer. The project director will review the procedures with all personnel prior to commencing any fieldwork and will conduct periodic Site visits to assess implementation of the procedures. The project director will also be responsible for reviewing the Data Usability Summary Reports (DUSRs) prepared by a third-party data validator for soil, groundwater, and soil vapor analytical results. Ms. Shapiro and Mr. Godick's resumes are included in Attachment A.

2.2 Project Manager

The project manager will be responsible for directing and coordinating all elements of the RIWP. The project manager will prepare reports and participate in meetings with the Site owner/Volunteer, and/or the NYSDEC. Adrianna Bosco will serve as the project manager for the RIWP. Benjamin Hess will serve as the alternate project manager for the RIWP. Ms. Bosco's and Mr. Hess's resumes are included in Attachment A.

2.3 Field Team Leader, Field Technician, Site Safety Officer (SSO), and Alternates

The field team leader will be responsible for supervising the daily sampling and health and safety activities in the field and will ensure adherence to the work plan and Health and Safety Plan (HASP), included as Appendix B of the RIWP. The field team leader will also act as the field technician and Site Safety Officer (SSO) and will report to the project manager or project manager alternate on a regular basis regarding daily progress and any deviations from the work plan. The field team leader will be a qualified and responsible person able to act professionally and promptly during environmental work at the Site. Mackenzie Miller will be the field team leader. The field team leader alternate is Chad Walters of AKRF. Ms. Miller and Mr. Walters' resumes are included in Attachment A.

2.4 Laboratory Quality Assurance/Quality Control (QA/QC) Officer

The laboratory QA/QC officer will be responsible for quality control procedures and checks in the laboratory and ensuring adherence to laboratory protocols. The QA/QC officer will track the movement of samples from the time they are checked in at the laboratory to the time that analytical results are issued, and will conduct a final check on the analytical calculations and sign off on the laboratory reports. The laboratory QA/QC officer will be Carl Ambruster of Eurofins Edison (within Eurofins Environment Testing Northeast LLC), the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory being employed for all environmental sampling at the Site.

2.5 Thirty-Party Data Validator

The third-party data validator will be responsible for reviewing the final data packages for soil, groundwater, and soil vapor and preparing a DUSR that will provide performance information

with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the laboratory analyses for the investigation. The third-party data validator will be Lori Beyer of L.A.B. Validation Corporation of East Northport, New York.

3.0 DATA QUALITY OBJECTIVES

The objectives for the sampling include:

- During the Remedial Investigation (RI) soil, groundwater, and soil vapor samples will be collected from soil borings, permanent groundwater monitoring wells, and temporary soil vapor points, respectively.
- Samples will be collected to further define and characterize the nature and extent of on-site contamination and assist with determining the appropriate remedial action.

Who will use the data?

- The collected data will be used by NYSDEC, NYSDOH, the Volunteer, and AKRF as part of the Site's enrollment in the BCP.

What types of data are needed?

- Soil samples will be collected from soil borings advanced across the Site. Samples will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, polychlorinated biphenyls (PCBs) by EPA Method 8082, pesticides by EPA Method 8081, target analyte list (TAL) metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, per- and polyfluorinated compounds (PFAS) by Modified EPA Method 1633A, and 1,4-dioxane by EPA Method 8270, using Category B deliverables.
- Groundwater samples will be collected from permanent monitoring wells to be installed as part of the RI, and analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS by EPA Method 1633A, and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM) using Category B deliverables.
- Soil vapor samples will be collected from temporary soil vapor points. All soil vapor samples will be analyzed for VOCs by Method TO-15 using Category B deliverables.

How much data are needed?

- Approximately 65 soil samples will be collected from 15 borings.
- Fourteen groundwater samples will be collected from eight permanent monitoring wells.
- Five soil vapor samples will be collected from temporary vapor points.

Where, when, and how should the data be collected/generated?

- Soil samples will be collected from the 15 borings outlined in the RIWP and at the approximate locations shown on Figure 2. Borings will be advanced using a Geoprobe® Direct-Push Probe (DPP) or Rotosonic drill rig. Soil samples will be inspected by AKRF field personnel for evidence of contamination (e.g., odors, staining, etc.), screened for the presence of VOCs with a calibrated photoionization detector (PID) with an 11.7 electron Volt (eV) lamp, and logged using the modified Burmister soil classification system. Soil samples will be placed in laboratory-supplied containers by AKRF personnel and shipped to the laboratory via a courier with chain-of-custody (COC) documentation in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory.
- Groundwater samples will be collected in accordance with EPA low-flow sampling protocols approximately one to two weeks following monitoring well development. Samples will be collected by AKRF personnel using a submersible bladder pump with high-density polyethylene (HDPE)

tubing. During sampling, water quality parameters will be recorded on log sheets until the parameters have stabilized within ±10% and turbidity is below 50 nephelometric turbidity units (NTUs). Groundwater samples slated for laboratory analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory.

- Soil vapor sampling will be performed in accordance with the guidelines provided in the NYSDOH document entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," (October 2006, revised 2017)." The soil vapor samples will be collected over a 2-hour time period using a 6-Liter, batch-certified SUMMA® canister equipped with a vacuum gauge and flow regulator set at a maximum rate of 0.2 liter per minute. After two hours, the flow controller valve will be closed, the final vacuum noted, and the canister placed in a shipping carton for delivery to the laboratory.

Who will collect and generate the data?

- AKRF, and any subcontractor, will be responsible for performing the sampling. All samples will be analyzed by Eurofins Edison or Eurofins Burlington (subcontracted by AKRF), NYSDOH-certified laboratories. AKRF will be responsible for collecting, reviewing, assessing, and disseminating validated data. Third-party data validation and the preparation of a DUSR will be prepared by Ms. Lori Beyer of L.A.B. Validation Corporation.

How will the data be reported?

- The data will be reported in the Remedial Investigation Report (RIR), and as EQuIS-compatible electronic data deliverables (EDDs) submitted to NYSDEC.

How will the data be archived?

- All hard-copy data will be maintained at AKRF offices for a minimum of one year. Field logbooks and forms/sampling logs will be scanned and all electronic data will be archived on the AKRF corporate server.

4.0 STANDARD OPERATING PROCEDURES (SOPS)

The following sections describe the SOPs for the remedial activities included in the RIWP. During these activities, safety monitoring will be performed as described in the HASP, included as Appendix B of the RIWP.

4.1 Decontamination of Sampling Equipment

All sampling equipment (augers, drilling rods, split spoon samplers, probe rods, pumps, etc.) will be either dedicated or decontaminated between sampling locations. Decontamination will be conducted on plastic sheeting (or equivalent) that is bermed to prevent discharge to the ground. The decontamination procedure will be as follows:

1. Scrub using tap water/Alconox® mixture and bristle brush.
2. Rinse with tap water.
3. Scrub again with tap water/Alconox® mixture and bristle brush.
4. Rinse with tap water.
5. Rinse with distilled water.
6. Air-dry the equipment, if possible.

4.2 Management of Investigation-Derived Waste (IDW)

IDW will be containerized in New York State Department of Transportation (NYSDOT)-approved 55-gallon drums. The drums will be sealed at the end of each work day and labeled with the date, the excavation grid(s), the type of waste (i.e., drill cuttings), and the name and phone number of an AKRF point-of-contact. All IDW exhibiting field evidence of contamination will be disposed of or treated according to applicable local, state, and federal regulations.

5.0 SAMPLING AND LABORATORY PROCEDURES

5.1 Soil Sampling

Soil sampling will be conducted according to the following procedures:

- Characterize the sample according to the modified Burmister soil classification system.
- Field screen the sample for evidence of contamination (e.g., odors, staining, etc.) using visual and olfactory methods and screen for VOCs using a PID equipped with a 11.7 eV lamp.
- A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.
    - stainless steel spoon
    - stainless steel bowl
    - steel hand auger or shovel without any coatings
- Collect an aliquot of soil from each proposed sample location, place in laboratory-supplied glassware, label the sample in accordance with Section 4.6.1, and place in an ice-filled cooler for shipment to the laboratory. Samples analyzed for the emerging contaminants, per- and polyfluorinated compounds (PFAS), should be contained in a separate cooler and the sample containers should be labeled with ballpoint pen, not permanent marker.
- Complete the proper chain of custody (COC) paperwork and seal the cooler.
- Record sample location, sample depth, and sample observations (evidence of contamination, PID readings, soil classification, etc.) in field log book and boring log data sheet, if applicable.
- Decontaminate any soil sampling equipment between sample locations as described in Section 3.1 of this QAPP. Standard two-step decontamination using detergent (Alconox) and clean, PFAS-free water will be performed for sampling equipment.

5.2 Groundwater Sampling

Groundwater sampling will be conducted according to the following procedures:

- Field screen the sample for evidence of contamination (e.g., odors, staining, etc.) using visual and olfactory methods and screen the well headspace for VOCs using a PID equipped with a 11.7 eV lamp.
- A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.
    - stainless steel inertia pump with HDPE tubing
    - peristaltic pump equipped with HDPE tubing and silicone tubing
    - stainless steel bailer with stainless steel ball
    - bladder pump (identified as PFAS-free) with HDPE tubing [a low-density polyethylene (LDPE) bladder will be used as no industry-approved HDPE alternative currently exists]
- Collect the groundwater sample from each proposed sample location in laboratory-supplied glassware, label the sample in accordance with Section 4.6.1, and place in an ice-filled cooler for shipment to the laboratory. Samples analyzed for the emerging contaminants, PFAS,

should be contained in a separate cooler and the sample containers should be labeled with ballpoint pen, not permanent marker.

- Complete the proper COC paperwork and seal the cooler.
- Record sample location, sample depth, and sample observations (evidence of contamination, PID readings, free phase liquid, etc.) in field log book and boring log data sheet, if applicable.
- Decontaminate any groundwater sampling equipment between sample locations as described in Section 3.1 of this QAPP. Standard two-step decontamination using detergent (Alconox) and clean, PFAS-free water will be performed for sampling equipment.

5.3 Soil Vapor Sampling

Soil vapor sampling will be conducted according to the following procedures:

- Field screen the sample for evidence of contamination (e.g., odors, etc.) using olfactory methods and screen the purged vapors for VOCs using a PID equipped with an 11.7 eV lamp.
- Collect the soil vapor samples from each proposed sample locations in laboratory-supplied SUMMA® canisters, label the sample in accordance with Section 4.6.1, and place in shipment container for shipment to the laboratory.
- Complete the proper COC paperwork and seal the shipment container.
- Record sample location, sample depth, and sample observations (odors, PID readings, etc.) in field log book and boring log data sheet, if applicable.

5.4 Laboratory Methods

Table 1 summarizes the laboratory methods that will be used to analyze field samples and the sample container type, preservation, and applicable holding times. Eurofins of Edison, New Jersey, a NYSDOH ELAP-certified laboratory subcontracted to AKRF, will be used for all chemical analyses in accordance with the Division of Environmental Remediation (DER)-10 2.1(b) and 2.1(f) with Category B Deliverables.

Table 1
Laboratory Analytical Methods for Analysis Groups

Matrix	Analysis	EPA Method	Bottle Type	Preservative	Hold Time
Soil and Soil QA/QC	Volatile Organic Compounds (VOCs)	8260C	EnCore® samplers (3) and 2 oz. plastic jar	≤ 4 °C	48 hours to extract; 14 days to analyze
	Semivolatile Organic Compounds (SVOCs)	8270D	8 oz. Glass Jar	≤ 4 °C	14 days to extract; 40 days to analyze
	1,4-Dioxane	8270D; 0.1 mg/kg RL	4 oz. Glass Jar	≤ 4 °C	14 days to extract; 40 days to analyze
	Total Analyte List (TAL) Metals, and Hexavalent Chromium	6000/7000 Series, 6010C, and 7196A	8 oz. Glass Jar	≤ 4 °C	6 months holding time; Mercury 28 days holding time; Hexavalent chromium 30 days to extract, 7 days to analyze
	Pesticides	8081B	8 oz. Glass Jar	≤ 4 °C	14 days to extract; 40 days to analyze
	Polychlorinated Biphenyls (PCBs)	8082A	8 oz. Glass Jar	≤ 4 °C	14 days to extract; 40 days to analyze
	Per- and Polyfluorinated Compounds (PFAS)	1633A	4 oz. HDPE Container	≤ 4 °C	90 days to extract; 28 days to analyze
Groundwater and Groundwater QA/QC	VOCs	8260C	5 40 mL Glass Vials	HCl to pH < 2 and ≤ 4 °C	48 hours to extract; 14 days to analyze
	SVOCs	8270D	2,000 mL Amber Jar	≤ 4 °C	7 days to extract; 40 days to analyze
	1,4-Dioxane	8270D plus Selective Ion Monitoring (SIM); 0.35 µg/L RL	1 L Amber Jar	≤ 4 °C	7 days to extract; 40 days to analyze
	TAL Metals	6000/7000 Series	2,000 mL Amber Jar	HNO_3 to pH < 2	6 months for metals; 28 days for mercury; 24 hours for hex. chromium
	Pesticides	8081B	2,000 mL Amber Jar	≤ 4 °C	7 days to extract; 40 days to analyze
	PCBs	8082A	2,000 mL Amber Jar	≤ 4 °C	7 days to extract; 40 days to analyze
	Per- and Polyfluorinated Compounds (PFAS)	1633A	3 x 250 mL Polypropylene Bottles	≤ 4 °C, Trizma	14 days to analyze
Soil Vapor	VOCs	TO-15	6L SUMMA® Canister	None	14 days

Notes:
QA/QC samples will be analyzed for the same parameters as the parent sample, with the exception of the trip blank(s), which will be analyzed for VOCs by EPA Method 8260C only.
EPA – Environmental Protection Agency
mg/kg – milligrams per kilogram (parts per million)
µg/L – parts per billion
ng/L – parts per trillion

5.5 Quality Control (QC) Sampling

In addition to the laboratory analysis of the soil and groundwater samples, additional analysis will be included for QC measures, as required by the Category B sampling techniques. These samples will include a field blank, trip blank, matrix spike/matrix spike duplicate (MS/MSD), and blind duplicate samples at a frequency of one sample per 20 field samples collected. QC samples will be analyzed for the same parameters as the accompanying samples, with the exception of any trip blanks, which will be analyzed for the VOC list only. Additionally, one equipment blank will be collected during each day of groundwater sampling. The QA/QC samples are summarized in Table 2 below:

Table 2
Field Sample and QA/QC Sample Quantities

Sample Type	Parameters	EPA Method[1]	Field Samples	QA/QC Samples				
				Duplicate[2]	MS/MSD[2]	Field Blank[2]	Trip Blank[2]	Equipment Blank[3]
Soil	VOCs	EPA 8260C	65 (estimated)	1/20 (4)	1/20 (4)	1/20 (4)	4 (Laboratory-Supplied)	NA
	SVOCs (+1,4-Dx), TAL Metals, Hex. Chromium, PCBs, Pesticides, and PFAS	EPA 8270D, 6010C/7471B, 8082A, 8081B, and 1633A	65 (estimated)	1/20 (4)	1/20 (4)	1/20 (4)	NA	NA
Groundwater	VOCs	EPA 8260C	14	1/20 (1)	1/20 (1)	1/20 (1)	1 (Laboratory-Supplied)	NA
	SVOCs (+1,4-Dx), Total/Dissolved, TAL Metals, PCBs, Pesticides, and PFAS	EPA 8270D, 6010C/7471B, 8082A, 8081B, and 1633A	8	1/20 (1)	1/20 (1)	1/20 (1)	NA	1 per day for PFAS analysis only
Soil Vapor	VOCs	TO-15	5	NA	NA	NA	NA	NA

Notes:
MS/MSD - matrix spike/matrix spike duplicate
NA – Not Applicable
[1] – NYSDEC July 2005 ASP Category B deliverables
[2] – One MS/MSD, blind duplicate, field blank, and trip blank sample per 20 field samples per media
[3] – One equipment blank will be collected per day of groundwater sampling for PFAS analysis only

5.6 Sample Handling

5.6.1 Sample Identification

All samples will be consistently identified in all field documentation, chain-of-custody (COC) documents, and laboratory reports. Soil, groundwater, and soil vapor samples collected during the RI will be identified with "RI-" and "SB-" for soil borings "MW-" for groundwater monitoring wells, and "SV-" for soil vapor points, and the soil boring,

groundwater monitoring well number, or soil vapor point sample number. All samples will be amended with the collection date at the end of the sample name in a year, month, day (YYYYMMDD) format. Blind duplicate sample nomenclature will consist of the sample type, followed by an "X"; MS/MSD samples nomenclature will consist of the parent sample name only, but triplicate sample volume will be collected and the COC comment section will explain that the additional volume is for running the MS/MSD; and trip and field blanks will consist of "TB-" and "FB-", respectively, followed by "S" for soil and "GW" for groundwater, and a sequential number of the trip/field blanks collected. Special characters, including primes/apostrophes ('), will not be used for sample nomenclature. Table 3 provides examples of the sampling identification scheme for samples collected during the RI.

Table 3
Remedial Investigation Sample Nomenclature

Sample Description	Sample Designation
Groundwater sample collected from groundwater monitoring well RI-MW-03 on January 30, 2026	RI-MW-03_20260130
Groundwater sample collected from intermediate-screened interval at monitoring well RI-MW-05 on January 30, 2026	RI-MW-05I_20260130
Blind duplicate sample of groundwater sample collected from groundwater monitoring well RI-MW-03 on January 30, 2026	RI-MW-X_20260130
Field blank collected during the RI on January 7, 2026 with the soil samples	RI-FB-S_20260107
Soil sample collected from soil boring RI-SB-05 between 0 and 2 feet below grade on January 7, 2026	RI-SB-05_0-2_20260107
Second blind duplicate soil sample collected from soil boring RI-SB-05 between 0 and 2 feet below grade on January 7, 2026	RI-SB-X2_0-2_20260107
Soil vapor sample collected from temporary soil vapor point RI-SV-02 on January 10, 2026	RI-SV-02_20260110

Sample Labeling and Shipping

All sample containers will be provided with labels containing the following information:

- Project identification, including Site name and Site address
- Sample identification
- Date and time of collection
- Analysis(es) to be performed
- Sampler's initials

Once the samples are collected and labeled, they will be placed in chilled coolers and stored in a cool area away from direct sunlight to await shipment to the laboratory. All samples will be shipped to the laboratory at least twice per week. At the start and end of each workday, field personnel will add ice to the cooler(s) as needed.

The samples will be prepared for shipment by placing each sample in laboratory-supplied glassware, then wrapping each container in bubble wrap to prevent breakage, and adding freezer packs and/or fresh ice in sealable plastic bags. The COC form will be properly completed by the sampler in ink, and all sample shipment transactions will be

documented with signatures, and the date and time of custody transfer. Samples will be shipped overnight (e.g., Federal Express) or transported by a laboratory courier. All coolers shipped to the laboratory will be sealed with mailing tape and a COC seal to ensure that the samples remain under strict COC protocol.

Sample Custody

Field personnel will be responsible for maintaining the sample coolers in a secured location until they are picked up and/or sent to the laboratory. The record of possession of samples from the time they are obtained in the field to the time they are delivered to the laboratory or shipped off-site will be documented on COC forms. The COC forms will contain the following information: project name; names of sampling personnel; sample number; date and time of collection and matrix; and signatures of individuals involved in sample transfer, and the dates and times of transfers. Laboratory personnel will note the condition of the custody seal and sample containers at sample check-in.

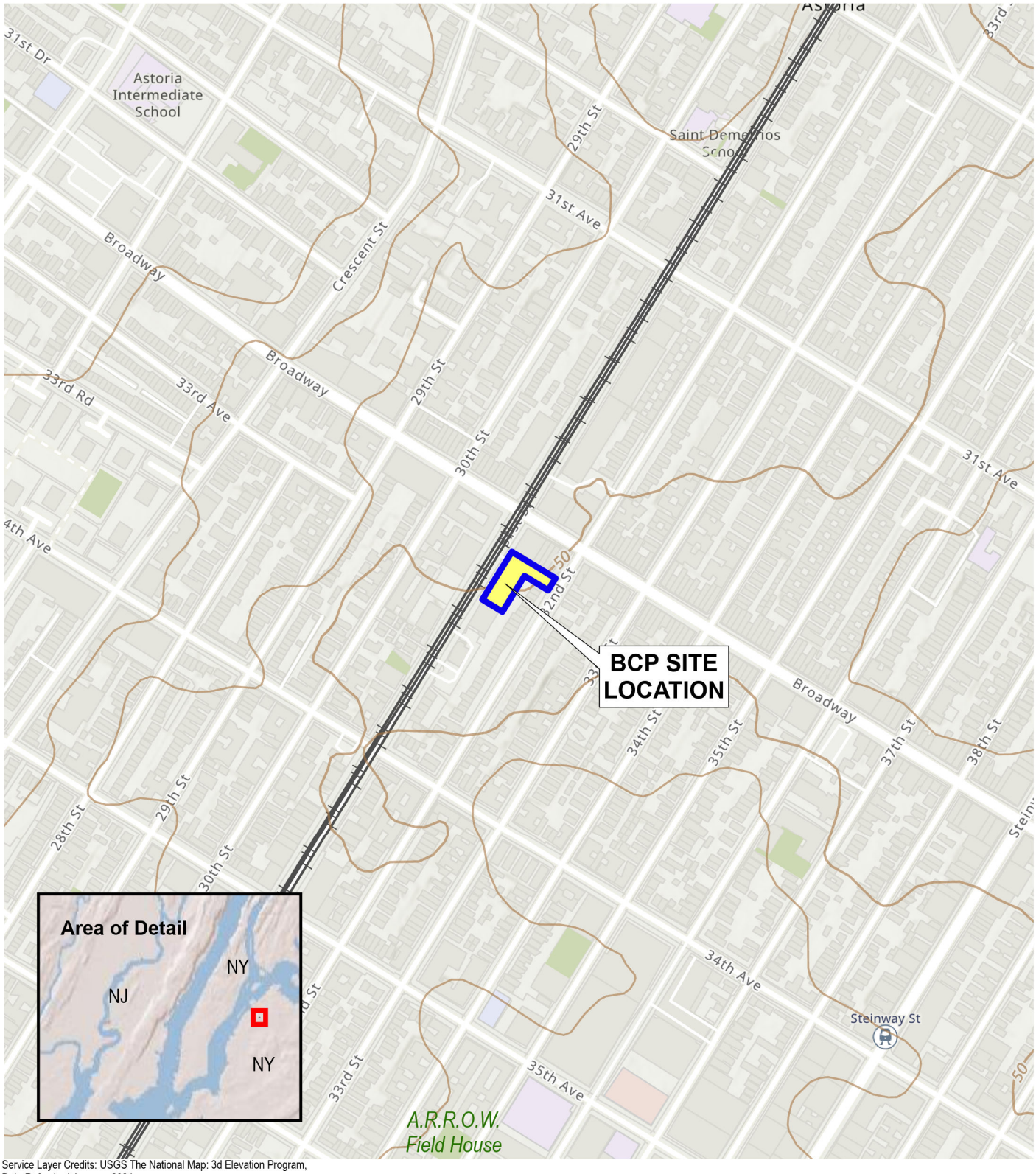
5.7 Field Instrumentation

Field personnel will be trained in the proper operation of all field instruments at the start of the field program. Instruction manuals for the equipment will be on file at the Site for referencing proper operation, maintenance, and calibration procedures. The equipment will be calibrated according to manufacturer specifications at the start of each day of fieldwork. If an instrument fails calibration, the project manager or QA/QC officer will be contacted immediately to obtain a replacement instrument. A calibration log will be maintained to record the date of each calibration, any failure to calibrate and corrective actions taken. The PID will be equipped with an 11.7 eV lamp and will be calibrated each day using 100 parts per million (ppm) isobutylene standard gas in accordance with the manufacturer's standards.

5.8 Quality Assurance (QA)

All soil, groundwater, soil vapor, and ambient air laboratory analytical data will be reviewed by a third-party validator and a Data Usability Summary Report (DUSR) will be prepared to document the usability and validity of the data. The RIR will include a detailed description of endpoint sampling activities, data summary tables, concentration map showing sample locations and concentrations, DUSR, and laboratory reports.

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed January, 2024

akrf

440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

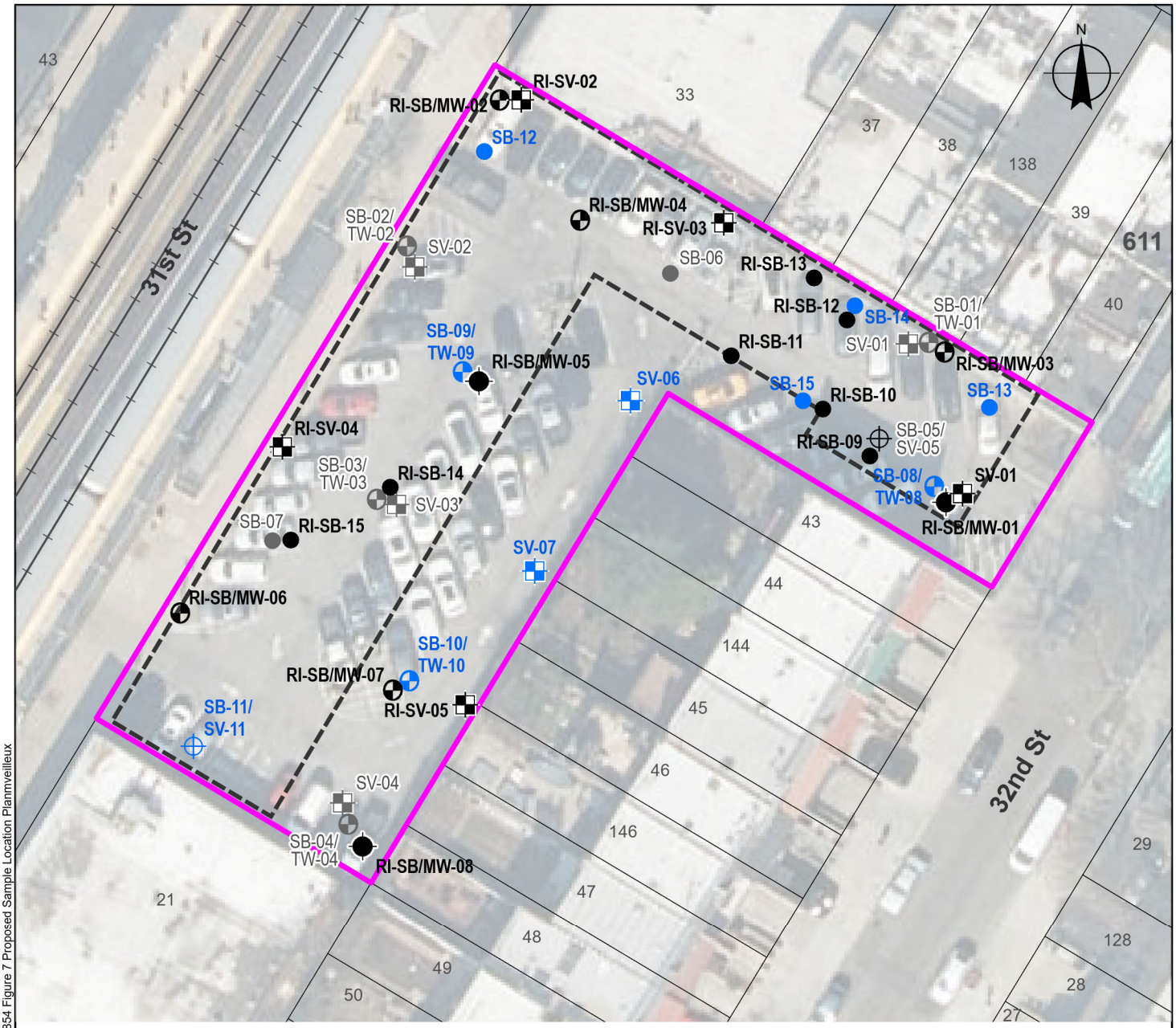
BCP SITE LOCATION

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
1

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\BCP App Figures.aprx10/17/2025 7:37 AM240854 Fig 1 Site Locationmveilleux



LEGEND

- BCP SITE BOUNDARY
- 25 LOT BOUNDARY AND TAX LOT NUMBER
- 611 BLOCK NUMBER
- PROPOSED BUILDING
- 2022 PHASE II SOIL BORING
- 2022 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2022 PHASE II SOIL VAPOR POINT
- 2022 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL BORING
- 2024 PHASE II SOIL BORING/SOIL VAPOR POINT
- 2024 PHASE II SOIL BORING/TEMPORARY WELL
- 2024 PHASE II SOIL VAPOR POINT
- PROPOSED RI SOIL BORING
- PROPOSED RI SOIL BORING/MONITORING WELL
- PROPOSED RI SOIL BORING/NESTED MONITORING WELL
- PROPOSED RI SOIL VAPOR POINT

0 20 40
SCALE IN FEET

Aerial Source:
2022 New York State ITS GIS Orthoimagery

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARISAR\BCP App Figures.aprx10/17/2025 12:00 PM 240854 Figure 7 Proposed Sample Location Planmvelleux

akrf
440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

PROPOSED SAMPLE LOCATION PLAN

DATE
10/17/2025

PROJECT NO.
240854

FIGURE
2

ATTACHMENT A
RESUMES OF QA/QC OFFICER, PROJECT MANAGER/ALTERNATE, AND FIELD TEAM LEADER/FIELD TECHNICIAN/SITE SAFETY OFFICER/ALTERNATE

APPENDIX B

HEALTH AND SAFETY PLAN

IKOS SENIOR LIVING

32-11 31ST STREET
QUEENS, NEW YORK

Health and Safety Plan

NYSDEC BCP Site No: C241290
AKRF Project Number: 240854

Prepared For:

New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor
Albany, New York 12233

Prepared On Behalf Of:

Ikos Senior Living LLC
48-02 25th Avenue, Suite 400
Astoria, NY 11103

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, New York 10016
212-696-0670

OCTOBER 2025

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FIGURES

Figure 1 – Hospital Location Map

ATTACHMENTS

Attachment A – Potential Health Effects from On-Site Contaminants
Attachment B – Report Forms
Attachment C – Emergency Hand Signals

1.0 INTRODUCTION

This environmental Health and Safety Plan (HASP) has been developed for the implementation of a Remedial Investigation (RI) Work Plan (RIWP) by AKRF, Inc. (AKRF) personnel and its subcontractors at the Ikos Senior Living site located at 32-11 31st Street, in the Astoria section of Queens, NY, hereafter referred to as the "Site." The Site is identified by the City of New York as Borough of Queens, Block 611, Lot 25.

Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures. The Site location and topography of the Site and surrounding area are shown on Figure 1. The Site is abutted to the north by commercial uses (restaurants, a bar, retail, and offices), followed by Broadway; to the south by residential units and the Cretans Association Omonia, Inc. Cultural Facility, followed by office space; to the east by residential units and 32nd Street; and to the west by 31st Street and an elevated NYC subway station, followed by commercial/retail and residential units. The greater surrounding area includes primarily commercial, retail, residential, and transit uses.

Two Subsurface (Phase II) Investigations were conducted by AKRF in October 2022 and December 2024, and documented in a Draft Remedial Investigation Report dated January 2025. The 2022 investigation was conducted in accordance with a New York City Department of Environmental Protection (NYCDEP)-approved Phase II Work Plan. The 2024 investigation was conducted in accordance with a New York City Mayor's Office of Environmental Remediation (OER)-approved Phase II Work Plan. The previous investigations identified elevated levels of polycyclic aromatic hydrocarbons (PAHs), metals, pesticides, and perfluorooctanesulfonic acid (PFOS) in soil; chlorinated solvent-related volatile organic compounds (VOCs), PAHs, and metals in groundwater; and chlorinated solvent-related and petroleum-related VOCs in soil vapor. This RIWP describes the procedures to be used to further define the nature and extent of contamination at the Site. The data compiled from the RI, as described in the RIWP, will be used to prepare a RI Report (RIR).

This HASP does not discuss routine health and safety issues common to general construction and excavation, including, but not, limited to slips, trips, falls, shoring, and other physical hazards. All AKRF employees are directed that all work must be performed in accordance with the AKRF's Generic HASP and all Occupation Safety and Health Administration (OSHA)-applicable regulations for the work activities required for the project. All project personnel are furthermore directed that they are not permitted to enter Permit Required Confined Spaces (as defined by OSHA). For issues unrelated to contaminated materials, all non-AKRF employees are to be bound by all applicable OSHA regulations as well as any more stringent requirements specified by their employer in their corporate HASP or otherwise. AKRF is not responsible for providing oversight for issues unrelated to contaminated materials for non-employees. This oversight shall be the responsibility of the employer of that worker or other official designated by that employer.

2.0 HEALTH AND SAFETY GUIDELINES AND PROCEDURES

2.1 Hazard Evaluation

2.1.1 Hazards of Concern

Hazards of concern include: organic and inorganic chemicals, and heat and/or cold stress.

2.1.2 Physical Characteristics

Physical characteristics of the hazards of concern include solid, aqueous, and vapor states.

2.1.3 Hazardous Materials

The Site-specific hazardous materials that may be encountered during SRI implementation include: historical fill material, solvent-related VOCs, SVOCs, petroleum, polychlorinated biphenyls (PCBs), and/or metals.

2.1.4 Chemicals of Concern

Chemical	REL/PEL/STEL	Health Hazards
Benzene	REL: 0.1 ppm N STEL: 1 ppm PEL: 1 ppm O STEL: 5 ppm	Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen].
Chromium	REL: 0.5 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, skin; lung fibrosis (histologic).
Copper	REL: 1 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, nose, pharynx; nasal septum perforation; metallic taste; dermatitis; In Animals: lung, liver, kidney damage; anemia.
DDD, DDE, & DDT	REL: 0.5 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen].
Ethylbenzene	REL: 100 ppm N STEL: 125 ppm PEL: 100 ppm	Irritation eyes, nose, respiratory system; headache, lassitude (weakness, exhaustion), dizziness, confusion, malaise (vague feeling of discomfort), drowsiness, unsteady gait; narcosis; defatting dermatitis; possible liver injury; reproductive effects.
Fuel Oils	REL: 100 mg/m^3	Irritation eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid).

Chemical	REL/PEL/STEL	Health Hazards
Lead	REL: 0.050 mg/m^3 PEL:0.050 mg/m^3	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension.
Mercury	REL: 0.05 mg/m^3 REL C: 0.1 mg/m^3 PEL: 0.1 mg/m^3	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria.
Methylene Chloride	PEL: 25 ppm O STEL: 125 ppm	Irritation eyes, skin; lassitude (weakness, exhaustion), drowsiness, dizziness; numb, tingle limbs; nausea; [potential occupational carcinogen].
PAHs	REL: 0.1 mg/m^3 PEL: 0.2 mg/m^3	Effects reported from occupational exposure to PAHs include chronic bronchitis, chronic cough irritation, bronchogenic cancer, dermatitis, cutaneous photosensitization, and pilosebaceous reactions. Reported health effects associated with chronic exposure to coal tar and its by-products (e.g., PAHs): Skin: erythema, burns, and warts on sun-exposed areas with progression to cancer. The toxic effects of coal tar are enhanced by exposure to ultraviolet light. Eyes: irritation and photosensitivity. Respiratory system: cough, bronchitis, and bronchogenic cancer. Gastrointestinal system: leukoplakia, buccal-pharyngeal cancer, and cancer of the lip. Hematopoietic system: leukemia (inconclusive) and lymphoma. Genitourinary system: hematuria and kidney and bladder cancers.
PCBs	REL: 0.001 mg/m^3 PEL: 0.5 mg/m^3	Irritation eyes, chloracne; liver damage; reproductive effects; [potential occupational carcinogen].
Tetrachloroethylene	PEL: 100 ppm PEL C: 200 ppm; max peak: 300 ppm	Irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen].
Toluene	REL: 100 ppm N STEL: 150 ppm PEL: 200 ppm PEL C: 300 ppm; 10-min max peak: 500 ppm	Irritation eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage.
Trichloroethylene	PEL: 100 ppm PEL C: 200 ppm; 5-min max peak: 300 ppm	Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen].

Chemical	REL/PEL/STEL	Health Hazards
Xylene	REL: 100 ppm N STEL: 150 ppm PEL: 100 ppm	Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis.
Zinc	REL: 5 mg/m^3 REL C: 15 mg/m^3 N STEL: 10 mg/m^3 PEL: 5 mg/m^3 (ZnO fume); 15 mg/m^3 (ZnO dust)	Chills, elevated body temperature, myalgia, cough, fatigue, chest pain, stomach cramps, nausea, anemia, changes in cholesterol levels, and vomiting.
Notes: REL: Recommended exposure limit (NIOSH) PEL: Permissable exposure limits (OSHA) STEL: Short-term exposure limit N: NIOSH O: OSHA C: Ceiling		

The potential health effects from these known and suspected on-site contaminants are provided in Attachment A.

2.2 Designated Personnel

AKRF will appoint one of its on-site personnel as the Site Safety Officer (SSO). This individual will be responsible for the implementation of the HASP. The SSO will work under the direction of a Qualified Environmental Professional (QEP) and will be experienced in the implementation of air monitoring and hazardous materials sampling programs. Health and safety training required for the SSO and all field personnel are outlined in Section 2.3 of this HASP.

2.3 Training

All personnel who enter the work area while intrusive activities are being performed will have completed a 40-hour training course that meets OSHA requirements of 29 CFR Part 1910, Occupational Safety and Health Standards. In addition, all personnel will have up-to-date 8-hour refresher training. The training will allow personnel to recognize and understand the potential hazards to health and safety. All field personnel must attend a training program, whose purpose is to:

- Make them aware of the potential hazards they may encounter;
- Provide the knowledge and skills necessary for them to perform the work with minimal risk to health and safety;
- Make them aware of the purpose and limitations of safety equipment; and
- Ensure that they can safely avoid or escape from emergencies.

Each member of the field crew will be instructed in these objectives before work begins. A Site safety meeting will be conducted at the start of the project work. Additional meetings shall be conducted, as necessary, for new personnel working at the Site.

2.4 Medical Surveillance Program

All AKRF and subcontractor personnel performing field work involving subsurface disturbance at the Site are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120 (f). A physician's medical release for work will be confirmed by the SSO before an employee can begin Site activities. The medical release shall consider the type of work

to be performed and the required personal protective equipment (PPE). The medical examination will, at a minimum, be provided annually and upon termination of hazardous waste Site work.

2.5 Site Work Zones

During any activities involving subsurface disturbance, the work area must be divided into various zones to prevent the spread of any contamination, ensure that proper PPE is donned, and provide an area for decontamination.

The Exclusion Zone is defined as the area where exposure to impacted media could be encountered. The Contamination Reduction Zone (CRZ) is the area where decontamination procedures take place and is located next to the Exclusion Zone. The Support is the zone area where support facilities such as vehicles, fire extinguisher, and first aid supplies are located. The emergency staging area (part of the Support Zone) is the area where all workers on-site would assemble in the event of an emergency. A summary of these areas is provided below. These zones may be changed by the SSO, depending on that day's activities. All field personnel will be informed of the location of these zones before work begins. The exclusion zone and CRZ are 10 and 25 feet from the drill rig during the SRI, respectively. Control measures such as caution tape and/or traffic cones will be placed around the perimeter of the work area when needed.

2.6 Personal Protection Equipment (PPE)

The PPE required for various kinds of investigation tasks are based on 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response, Appendix B, "General Description and Discussion of the Levels of Protection and Protective Gear."

AKRF field personnel and other site personnel shall wear, at a minimum, Level D PPE. The protection will be based on the air monitoring described in Section 2.6.

Level D PPE includes donning of the following during drilling and sampling:

- Steel Toed Boots
- Hard Hat
- Work Gloves
- Safety Glasses
- Ear Plugs
- Nitrile Gloves
- Tyvek Suit [if non-aqueous phase liquid (NAPL) is present]

If PID readings exceed 5 ppm in the breathing zone, personnel will don Level C PPE, which includes Level D PPE and a half- or full-face respirator with a dual organic and particulate cartridge.

2.7 General Work Practices

To protect the health and safety of the field personnel, field personnel will adhere to the guidelines listed below during activities involving subsurface disturbance:

- Eating, drinking, chewing gum or tobacco, and smoking are prohibited, except in designated areas on the Site. These areas will be designated by the SSO.
- Workers must wash their hands thoroughly on leaving the work area and before eating, drinking, or any other such activity.
- The workers should shower as soon as possible after leaving the Site. Contact with contaminated or suspected surfaces should be avoided.

- The buddy system should always be used; each buddy should watch for signs of fatigue, exposure, and heat/cold stress.

3.0 EMERGENCY PROCEDURES AND EMERGENCY RESPONSE PLAN

The field crew will be equipped with emergency equipment, such as a first aid kit and disposable eye washes. In the case of a medical emergency, the SSO will determine the nature of the emergency and he/she will have someone call for an ambulance, if needed. If the nature of the injury is not serious, i.e., the person can be moved without expert emergency medical personnel, he/she should be taken to a hospital by on-site personnel. Directions to the hospital are provided below, and a Hospital Location Map showing the more direct route to the hospital is included as Figure 1.

3.1 Hospital Information

Hospital Name:	Mount Sinai Queens
Phone Number:	(718) 932-1000
Address:	3019 Crescent Street at, 30th Road, Astoria, NY 11102
Directions:	1. Turn RIGHT out of the Site onto 30th Avenue towards Broadway. 2. Continue STRAIGHT on 30th Avenue. 2. Turn LEFT onto 31st Street. 3. Turn LEFT onto Crescent Street. The emergency room will be on the LEFT at the intersection of Crescent Street and 30th Road.

3.2 Emergency Contacts

Company	Individual Name	Title	Contact Number
AKRF	Deborah Shapiro	Project Director, QEP	(646) 388-9544
	Adrianna Bosco	Project Manager	Office: (646) 388-9576 Cell: (914) 874-3358
	Benjamin Hess	Alternate Project Manager	Office: (212) 696-0670 Cell: (732) 273-4992
	Mackenzie Miller	Field Team Leader/Site Safety Officer (SSO)	(631) 357-9404
	Chad Walters	Alternate Field Team Leader/SSO	(646) 388-9752
Ikos Senior Living LLC	Alexa Mendel	Volunteer's Representative	Office: (929) 463-7686
Ambulance, Fire Department & Police Department	-	-	911
NYSDEC Spill Hotline	-	-	800-457-7362

4.0 APPROVAL & ACKNOWLEDGMENTS OF HASP

4.1 Approval

Signed: _____ Date: _____

AKRF Project Manager

Signed: _____ Date: _____

AKRF Health and Safety Officer

Below is an affidavit that must be signed by all workers who enter the site. A copy of the HASP must be on-site at all times and will be kept by the SSO.

4.2 Affidavit

I have read the Health and Safety Plan (HASP) for the project located at the Ikos Senior Living site located at 32-11 31st Street, Astoria, New York. I agree to conduct all on-site work in accordance with the requirements set forth in this HASP and understand that failure to comply with this HASP could lead to my removal from the site.

Signed: _____ Company: _____ Date: _____
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FIGURE



Service Layer Credits: ESRI World Street Map 2021

Mount Sinai Queens
3019 Crescent Street at, 30th Road
Astoria, NY 11102
(718) 932-1000

LEGEND

- PROJECT SITE BOUNDARY
- ROUTE TO HOSPITAL
- HOSPITAL LOCATION

0 500 1,000
SCALE IN FEET

akrf
440 Park Avenue South, New York, NY 10016

32-11 31st Street
Queens, New York

HOSPITAL ROUTE MAP

DATE
10/17/2025
PROJECT NO.
240854
FIGURE
1

©2025 AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SAR\SAR\240854 Hospital Route Map.mxd 10/17/2025 2:26:07 PM mvelleux

ATTACHMENT A

POTENTIAL HEALTH EFFECTS FROM ON-SITE CONTAMINANTS

Benzene - ToxFAQs™

CAS # 71-43-2

This fact sheet answers the most frequently asked health questions (FAQs) about benzene. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHTLIGHTS: Benzene is a widely used chemical formed from both natural processes and human activities. Breathing benzene can cause drowsiness, dizziness, and unconsciousness; long-term benzene exposure causes effects on the bone marrow and can cause anemia and leukemia. Benzene has been found in at least 1,000 of the 1,684 National Priority List (NPL) sites identified by the Environmental Protection Agency (EPA).

What is benzene?

Benzene is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable and is formed from both natural processes and human activities.

Benzene is widely used in the United States; it ranks in the top 20 chemicals for production volume. Some industries use benzene to make other chemicals which are used to make plastics, resins, and nylon and other synthetic fibers. Benzene is also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Natural sources of benzene include emissions from volcanoes and forest fires. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

What happens to benzene when it enters the environment?

- Industrial processes are the main source of benzene in the environment.
- Benzene can pass into the air from water and soil.
- It reacts with other chemicals in the air and breaks down within a few days.
- Benzene in the air can attach to rain or snow and be carried back down to the ground.
- It breaks down more slowly in water and soil, and can pass through the soil into underground water.
- Benzene does not build up in plants or animals.

How might I be exposed to benzene?

- Outdoor air contains low levels of benzene from tobacco smoke, automobile service stations, exhaust from motor vehicles, and industrial emissions.
- Vapors (or gases) from products that contain benzene, such as glues, paints, furniture wax, and detergents, can also be a source of exposure.
- Air around hazardous waste sites or gas stations will contain higher levels of benzene.
- Working in industries that make or use benzene.

How can benzene affect my health?

Breathing very high levels of benzene can result in death, while high levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. Eating or drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, rapid heart rate, and death.

The major effect of benzene from long-term exposure is on the blood. Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection. Some women who breathed high levels of benzene for many months had irregular menstrual periods and a decrease in the size of their ovaries, but we do not know for certain that benzene caused the effects. It is not known whether benzene will affect fertility in men.

Benzene

CAS # 71-43-2

How likely is benzene to cause cancer?

Long-term exposure to high levels of benzene in the air can cause leukemia, particularly acute myelogenous leukemia, often referred to as AML. This is a cancer of the bloodforming organs. The Department of Health and Human Services (DHHS) has determined that benzene is a known carcinogen. The International Agency for Research on Cancer (IARC) and the EPA have determined that benzene is carcinogenic to humans.

How can benzene affect children?

Children can be affected by benzene exposure in the same ways as adults. It is not known if children are more susceptible to benzene poisoning than adults.

Benzene can pass from the mother's blood to a fetus. Animal studies have shown low birth weights, delayed bone formation, and bone marrow damage when pregnant animals breathed benzene.

How can families reduce the risks of exposure to benzene?

Benzene exposure can be reduced by limiting contact with gasoline and cigarette smoke. Families are encouraged not to smoke in their house, in enclosed environments, or near their children.

Is there a medical test to determine whether I've been exposed to benzene?

Several tests can show if you have been exposed to benzene. There is a test for measuring benzene in the breath; this test must be done shortly after exposure. Benzene can also be measured in the blood; however, since benzene disappears rapidly from the blood, this test is only useful for recent exposures.

In the body, benzene is converted to products called metabolites. Certain metabolites can be measured in the urine. The metabolite S-phenylmercapturic acid in urine is a sensitive indicator of benzene exposure. However, this test must be done shortly after exposure and is not a reliable indicator of how much benzene you have been exposed to, since the metabolites may be present in urine from other sources.

Has the federal government made recommendations to protect human health?

The EPA has set the maximum permissible level of benzene in drinking water at 5 parts benzene per billion parts of water (5 ppb).

The Occupational Safety and Health Administration (OSHA) has set limits of 1 part benzene per million parts of workplace air (1 ppm) for 8 hour shifts and 40 hour work weeks.

References

Agency for Toxic Substances and Disease Registry (ATSDR) 2007. Toxicological Profile for Benzene (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

CHROMIUM

CAS # 7440-47-3

Division of Toxicology and Environmental Medicine ToxFAQs™ September 2008

This fact sheet answers the most frequently asked health questions (FAQs) about chromium. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to chromium occurs from ingesting contaminated food or drinking water or breathing contaminated workplace air. Chromium(VI) at high levels can damage the nose and cause cancer. Ingesting high levels of chromium(VI) may result in anemia or damage to the stomach or intestines. Chromium(III) is an essential nutrient. Chromium has been found in at least 1,127 of the 1,669 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is chromium?

Chromium is a naturally occurring element found in rocks, animals, plants, and soil. It can exist in several different forms. Depending on the form it takes, it can be a liquid, solid, or gas. The most common forms are chromium(0), chromium(III), and chromium(VI). No taste or odor is associated with chromium compounds.

The metal chromium, which is the chromium(0) form, is used for making steel. Chromium(VI) and chromium(III) are used for chrome plating, dyes and pigments, leather tanning, and wood preserving.

What happens to chromium when it enters the environment?

❑ Chromium can be found in air, soil, and water after release from the manufacture, use, and disposal of chromium-based products, and during the manufacturing process.
❑ Chromium does not usually remain in the atmosphere, but is deposited into the soil and water .
❑ Chromium can easily change from one form to another in water and soil, depending on the conditions present.
❑ Fish do not accumulate much chromium in their bodies from water.

How might I be exposed to chromium?

❑ Eating food containing chromium(III).
❑ Breathing contaminated workplace air or skin contact during use in the workplace.
❑ Drinking contaminated well water.
❑ Living near uncontrolled hazardous waste sites containing chromium or industries that use chromium.

How can chromium affect my health?

Chromium(III) is an essential nutrient that helps the body use sugar, protein, and fat.

Breathing high levels of chromium(VI) can cause irritation to the lining of the nose, nose ulcers, runny nose, and breathing problems, such as asthma, cough, shortness of breath, or wheezing. The concentrations of chromium in air that can cause these effects may be different for different types of chromium compounds, with effects occurring at much lower concentrations for chromium(VI) compared to chromium(III).

The main health problems seen in animals following ingestion of chromium(VI) compounds are irritation and ulcers in the stomach and small intestine and anemia. Chromium(III) compounds are much less toxic and do not appear to cause these problems.

Sperm damage and damage to the male reproductive system have also been seen in laboratory animals exposed to chromium(VI).

Skin contact with certain chromium(VI) compounds can cause skin ulcers. Some people are extremely sensitive to chromium(VI) or chromium(III). Allergic reactions consisting of severe redness and swelling of the skin have been noted.

How likely is chromium to cause cancer?

The Department of Health and Human Services (DHHS), the International Agency for Reseach on Cancer (IARC), and the EPA have determined that chromium(VI) compounds are known human carcinogens. In workers, inhalation of chromium(VI) has been shown to cause lung cancer. Chromium(VI) also causes lung cancer in animals. An increase in stomach tumors was observed in humans and animals exposed to chromium(VI) in drinking water.

How can chromium affect children?

It is likely that health effects seen in children exposed to high amounts of chromium will be similar to the effects seen in adults.

We do not know if exposure to chromium will result in birth defects or other developmental effects in people. Some developmental effects have been observed in animals exposed to chromium(VI).

How can families reduce the risks of exposure to chromium?

❑ Children should avoid playing in soils near uncontrolled hazardous waste sites where chromium may have been discarded.

❑ Chromium is a component of tobacco smoke. Avoid smoking in enclosed spaces like inside the home or car in order to limit exposure to children and other family members.

❑ Although chromium(III) is an essential nutrient, you should avoid excessive use of dietary supplements containing chromium.

Is there a medical test to determine whether I've been exposed to chromium?

Since chromium(III) is an essential element and naturally occurs in food, there will always be some level of chromium in your body. Chromium can be measured in hair, urine, and blood.

Higher than normal levels of chromium in blood or urine may indicate that a person has been exposed to chromium. However , increases in blood and urine chromium levels cannot be used to predict the kind of health effects that might develop from that exposure.

Has the federal government made recommendations to protect human health?

The EPA has determined that exposure to chromium in drinking water at concentrations of 1 mg/L for up to 10 days is not expected to cause any adverse effects in a child.

The FDA has determined that the chromium concentration in bottled drinking water should not exceed 1 mg/L.

The Occupational Health and Safety Administration (OSHA) has limited workers' exposure to an average of 0.0005 mg/m ^{3} chromium(VI), 0.5 mg/m ^{3} chromium(III), and 1.0 mg/m ^{3} chromium(0) for an 8-hour workday, 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2008. Toxicological Profile for Chromium (Draft for Public Comment). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmenta l quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

COPPER

CAS # 7440-50-8

Division of Toxicology ToxFAQs™ September 2002

This fact sheet answers the most frequently asked health questions (FAQs) about copper. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Copper is a reddish metal that occurs naturally in the environment. It also occurs naturally in plants and animals. Low levels of copper are essential for maintaining good health. High levels can cause harmful effects such as irritation of the nose, mouth and eyes, vomiting, diarrhea, stomach crumps, and nausea. Copper has been found in at least 884 of the 1,613 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is copper?

Copper is a reddish metal that occurs naturally in rocks, soil, water, and air. Copper also occurs naturally in plants and animals.

Metallic copper can be easily molded or shaped. Metallic copper can be found in the U.S. penny, electrical wiring, and some water pipes. Metallic copper is also found in mixtures (called alloys) with other metals such as brass and bronze. Copper is also found as part of other compounds forming salts. Copper salts occur naturally, but are also manufactured. The most common copper salt is copper sulfate. Most copper compounds are blue-green in color. Copper compounds are commonly used in agriculture to treat plant diseases like mildew, for water treatment and, as preservatives for wood, leather, and fabrics.

What happens to copper when it enters the environment?

❑ Copper can enter the environment from the mining of copper and other metals and from factories that make or use metallic copper or copper compounds.

❑ It can also enter the environment through domestic waste water, combustion of fossil fuels and wastes, wood production, phosphate fertilizer production, and natural sources (e.g., windblown dust from soils, volcanoes, decaying vegetation, forest fires, and sea spray).

❑ Copper in soil strongly attaches to organic material and minerals.

❑ Copper that dissolves in water becomes rapidly bound to particles suspended in the water.

❑ Copper does not typically enter groundwater.

❑ Copper carried by particles emitted from smelters and ore processing plants is carried back to the ground by gravity or in rain or snow.

❑ Copper does not break down in the environment.

How might I be exposed to copper?

❑ Breathing air, drinking water, eating food, and by skin contact with soil, water, or other copper-containing substances.

❑ Some copper in the environment can be taken up by plants and animals.

❑ Higher exposure may occur if your water is corrosive and you have copper plumbing and brass water fixtures. ❑ You may be exposed to higher amounts of copper if you drink water or swim in lakes or reservoirs recently treated with copper to control algae or receive cooling water from a power plant that may have high amounts of dissolved copper.

❑ Using some garden products (e.g., fungicides) to control plant diseases.

❑ Living near bronze and brass production facilities may expose you to higher copper levels in soil.

❑ You may breathe copper-containing dust or have skin contact if you work in the industry of mining copper or

processing the ore. You may breathe high levels if you grind or weld copper metal.

How can copper affect my health?

Copper is essential for good health, but high amounts can be harmful. Long-term exposure to copper dust can irritate your nose, mouth, and eyes, and cause headaches, dizziness, nausea, and diarrhea.

Drinking water with higher than normal levels of copper may cause vomiting, diarrhea, stomach cramps, and nausea. Intentionally high intakes of copper can cause liver and kidney damage and even death.

How likely is copper to cause cancer?

We do not know whether copper can cause cancer in humans. The EPA has determined that copper is not classifiable as to carcinogenicity.

How can copper affect children?

Exposure to high levels of copper will result in the same type of effects in children and adults. Studies in animals suggest that the young children may have more severe effects than adults; we do not know if this would also be true in humans. There is a very small percentage of infants and children who are unusually sensitive to copper.

We do not know if copper can cause birth defects or other developmental effects in humans. Studies in animals suggest that ingestion of high levels of copper may cause a decrease in fetal growth.

How can families reduce the risk of exposure to copper?

❑ The greatest potential source of copper exposure is through drinking water, especially in water that is first drawn in the morning after sitting in copper pipes and brass faucets overnight.

❑ To reduce exposure, run the water for at least 15-30 seconds before using it.

❑ If you are exposed to copper at work, you may carry copper home on your skin, clothes, or tools. You can avoid this by showering, and changing clothing before leaving work, and your work clothes should be kept separate from other clothes and laundered separately.

Is there a medical test to show whether I've been exposed to copper?

Copper is normally found in all tissues of the body, blood, urine, feces, hair, and nails. High levels of copper in these samples can show that you have been exposed to higher than normal levels of copper. Tests to measure copper levels in the body are not routinely available at the doctor's office because they require special equipment. These tests cannot tell the extent of exposure or whether you will experience harmful effects.

Has the federal government made recommendations to protect human health?

The EPA has determined that drinking water should not contain more than 1.3 milligrams of copper per liter of water (1.3 mg/L).

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.1 mg per cubic meter (0.1 mg/m^3) of copper fumes (vapor generated from heating copper) and 1 mg/m^3 of copper dusts (fine metallic copper particles) and mists (aerosol of soluble copper) in workroom air during an 8-hour work shift, 40-hour workweek.

The Food and Nutrition Board of the Institute of Medicine recommends dietary allowances (RDAs) of 340 micrograms (340 µg) of copper per day for children aged 1-3 years, 440 µg/day for children aged 4-8 years, 700 µg/day for children aged 9-13 years, 890 µg/day for children aged 14-18 years, and 900 µg/day for adults.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2002. Toxicological Profile for Copper (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

DDT, DDE, and DDD - ToxFAQs™

What are DDT, DDE, and DDD?

DDT (dichlorodiphenyltrichloroethane) is a man-made chemical that does not occur naturally in the environment. It is a white, crystalline solid with no odor or taste. DDE (dichlorodiphenyldichloroethylene) and DDD (dichlorodiphenyldichloroethane) are chemicals similar to DDT that can form when DDT breaks down.

DDT is a pesticide that was once widely used to control insects in agriculture and insects that carry diseases such as malaria. Its use was banned in 1972 because of damage to wildlife but is still used in a limited number of countries where diseases such as malaria are a major health problem. DDE has no commercial use. DDD was also used to kill pests, but its use has also been banned. One form of DDD has been used to treat cancer of the adrenal gland.

What happens to DDT, DDE, and DDD in the environment?

DDT can get into the environment when it is used as a pesticide. DDE and DDD form when DDT breaks down. These chemicals can evaporate into the air from water and moist soil and may then be carried to locations very far from the original source. They can be removed from the air by rain and snow or be broken down by sunlight. DDT, DDE, and DDD stick strongly to the soil and are not likely to move into the groundwater. Microorganisms in the soil slowly break down DDT (it can take anywhere from 2 to 15 years to break down half of the DDT). DDT does not dissolve easily in water and is mostly found in the sediment on the bottom of bodies of water. DDT, DDE, and DDD can build up in plants and animals.

How can I be exposed to DDT, DDE, and DDD?

Most people are not likely to be exposed to DDT, DDE, or DDD. The most common way to be exposed to small amounts of these chemicals is from eating contaminated food such as meat, fish, poultry, and dairy products. If you live near a hazardous waste site, you might be exposed to DDT, DDE, and DDD from contaminated air, dirt, or water.

Since DDT was banned in 1972, exposure to DDT, DDE, and DDD has decreased dramatically. Small amounts may still be found in some food.

How can DDT, DDE, and DDD affect my health?

People who accidentally swallowed large amounts of DDT had tremors, headaches, nausea, and seizures. These effects went away after the exposure stopped. No effects were seen in volunteers who took a small daily dose of DDT by capsule for 18 months. Studies have shown that women with high amounts of DDE in their blood were more likely to have a premature baby or a baby with a wheeze. Exposure to DDT may also increase chances of developing Type II diabetes mellitus in some groups of people.

Animal studies generally used higher amounts of DDT, DDE, and DDD than you would likely be exposed to in the United States. In studies where animals were fed DDT, DDE, or DDD, harmful effects were seen on their nervous system, liver, and reproductive system (including decreased fertility).

DDT, DDE, and DDD

Can DDT, DDE, and DDD cause cancer?

Studies have shown that people with higher levels of DDT in their blood have an increased risk of developing liver cancer. Liver cancer was also seen in animals that were fed DDT over a long period of time.

The U.S. Department of Health and Human Services (DHHS) has determined that DDT may reasonably be anticipated to be a human carcinogen (causing cancer in people).

The U.S. Environmental Protection Agency (EPA) has classified DDT, DDE, and DDD as probable human carcinogens.

The International Agency for Research on Cancer (IARC) determined DDT may possibly cause cancer in humans.

Can I get a medical test to check for DDT, DDE, and DDD?

Tests are available to measure levels of DDT, DDE, and DDD in the blood, hair, and breast milk.

These tests cannot predict whether you will have health problems from the exposure to DDT, DDE, and DDD. Doctor's offices do not routinely offer these tests.

How can I protect myself and my family from DDT, DDE, and DDD?

Most people don't need to take any special steps to avoid DDT, DDE, and DDD in their daily lives. Washing fruits and vegetable that come from foreign countries will remove most DDT if any is present. Children should avoid playing in dirt or water near hazardous waste sites to avoid coming in contact with these chemicals.

Follow health advisories that tell you about consumption of fish and wildlife caught in contaminated areas.

For more information:

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at https://wwwn.cdc.gov/dcs/ContactUs/Form

Go to ATSDR's Toxicological Profile for DDT, DDE, and DDD: https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=81&tid=20

Go to ATSDR's Toxic Substances Portal: https://wwwn.cdc.gov/TSP/index.aspx

Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ETHYLBENZENE
CAS # 100-41-4

Agency for Toxic Substances and Disease Registry ToxFAQs **June 1999**

This fact sheet answers the most frequently asked health questions (FAQs) about ethylbenzene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Ethylbenzene is a colorless liquid found in a number of products including gasoline and paints. Breathing very high levels can cause dizziness and throat and eye irritation. Ethylbenzene has been found in at least 731 of the 1,467 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is ethylbenzene?

(Pronounced ĕth′ əl bĕn′ zēn′)

Ethylbenzene is a colorless, flammable liquid that smells like gasoline. It is found in natural products such as coal tar and petroleum and is also found in manufactured products such as inks, insecticides, and paints.

Ethylbenzene is used primarily to make another chemical, styrene. Other uses include as a solvent, in fuels, and to make other chemicals.

What happens to ethylbenzene when it enters the environment?

- Ethylbenzene moves easily into the air from water and soil.
- It takes about 3 days for ethylbenzene to be broken down in air into other chemicals.
- Ethylbenzene may be released to water from industrial discharges or leaking underground storage tanks.
- In surface water, ethylbenzene breaks down by reacting with other chemicals found naturally in water.
- In soil, it is broken down by soil bacteria.

How might I be exposed to ethylbenzene?

- Breathing air containing ethylbenzene, particularly in areas near factories or highways.
- Drinking contaminated tap water.
- Working in an industry where ethylbenzene is used or made.
- Using products containing it, such as gasoline, carpet glues, varnishes, and paints.

How can ethylbenzene affect my health?

Limited information is available on the effects of ethylbenzene on people's health. The available information shows dizziness, throat and eye irritation, tightening of the chest, and a burning sensation in the eyes of people exposed to high levels of ethylbenzene in air.

Animals studies have shown effects on the nervous system, liver, kidneys, and eyes from breathing ethylbenzene in air.

How likely is ethylbenzene to cause cancer?

The EPA has determined that ethylbenzene is not classifiable as to human carcinogenicity.

ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html

No studies in people have shown that ethylbenzene exposure can result in cancer. Two available animal studies suggest that ethylbenzene may cause tumors.

How can ethylbenzene affect children?

Children may be exposed to ethylbenzene through inhalation of consumer products, including gasoline, paints, inks, pesticides, and carpet glue. We do not know whether children are more sensitive to the effects of ethylbenzene than adults.

It is not known whether ethylbenzene can affect the development of the human fetus. Animal studies have shown that when pregnant animals were exposed to ethylbenzene in air, their babies had an increased number of birth defects.

How can families reduce the risk of exposure to ethylbenzene?

Exposure to ethylbenzene vapors from household products and newly installed carpeting can be minimized by using adequate ventilation.

Household chemicals should be stored out of reach of children to prevent accidental poisoning. Always store household chemicals in their original containers; never store them in containers children would find attractive to eat or drink from, such as old soda bottles. Gasoline should be stored in a gasoline can with a locked cap.

Sometimes older children sniff household chemicals, including ethylbenzene, in an attempt to get high. Talk with your children about the dangers of sniffing chemicals.

Is there a medical test to show whether I've been exposed to ethylbenzene?

Ethylbenzene is found in the blood, urine, breath, and some body tissues of exposed people. The most common way to test for ethylbenzene is in the urine. This test measures substances formed by the breakdown of ethylbenzene. This test needs to be done within a few hours after exposure occurs, because the substances leave the body very quickly.

These tests can show you were exposed to ethylbenzene, but cannot predict the kind of health effects that might occur.

Has the federal government made recommendations to protect human health?

The EPA has set a maximum contaminant level of 0.7 milligrams of ethylbenzene per liter of drinking water (0.7 mg/L).

The EPA requires that spills or accidental releases into the environment of 1,000 pounds or more of ethylbenzene be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) has set an occupational exposure limit of 100 parts of ethylbenzene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for ethylbenzene. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

FUEL OILS

CAS # 8008-20-6, 70892-10-3, 68476-30-2, 68476-34-6, 68476-31-3

This fact sheet answers the most frequently asked health questions (FAQs) about fuel oils. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Fuel oils are liquid mixtures produced from petroleum, and their use mostly involves burning them as fuels. Drinking or breathing fuel oils may cause nausea or nervous system effects. However, exposure under normal use conditions is not likely to be harmful. Fuel oils have been found in at least 26 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are fuel oils?

(Pronounced fyo͞o′əl oilz)

Fuel oils are a variety of yellowish to light brown liquid mixtures that come from crude petroleum. Some chemicals found in fuel oils may evaporate easily, while others may more easily dissolve in water.

Fuel oils are produced by different petroleum refining processes, depending on their intended uses. Fuel oils may be used as fuel for engines, lamps, heaters, furnaces, and stoves, or as solvents.

Some commonly found fuel oils include kerosene, diesel fuel, jet fuel, range oil, and home heating oil. These fuel oils differ from one another by their hydrocarbon compositions, boiling point ranges, chemical additives, and uses.

What happens to fuel oils when they enter the environment?

- Some chemicals found in fuel oils may evaporate into the air from open containers or contaminated soil or water.
- Some chemicals found in fuel oils may dissolve in water after spills to surface waters or leaks from underground storage tanks.
- Some chemicals found in fuel oils may stick to particles in water, which will eventually cause them to settle to the bottom sediment.
- Some of the chemicals found in fuel oils may be broken down slowly in air, water, and soil by sunlight or small organisms.
- Some of the chemicals found in fuel oils may build up significantly in plants and animals.

How might I be exposed to fuel oils?

- Using a home kerosene heater or stove, or using fuel oils at work.
- Breathing air in home or building basements that has been contaminated with fuel oil vapors entering from the soil.
- Drinking or swimming in water that has been contaminated with fuel oils from a spill or a leaking underground storage tank.
- Touching soil contaminated with fuel oils.
- Using fuel oils to wash paint or grease from skin or equipment.

How can fuel oils affect my health?

Little information is available about the health effects that may be caused by fuel oils. People who use kerosene

stoves for cooking do not seem to have any health problems related to their exposure.

Breathing some fuel oils for short periods may cause nausea, eye irritation, increased blood pressure, headache, lightheadedness, loss of appetite, poor coordination, and difficulty concentrating. Breathing diesel fuel vapors for long periods may cause kidney damage and lower your blood's ability to clot.

Drinking small amounts of kerosene may cause vomiting, diarrhea, coughing, stomach swelling and cramps, drowsiness, restlessness, painful breathing, irritability, and unconsciousness. Drinking large amounts of kerosene may cause convulsions, coma, or death. Skin contact with kerosene for short periods may cause itchy, red, sore, or peeling skin.

How likely are fuel oils to cause cancer?

The International Agency for Research on Cancer (IARC) has determined that some fuel oils (heavy) may possibly cause cancer in humans, but for other fuel oils (light) there is not enough information to make a determination. IARC has also determined that occupational exposures to fuel oils during petroleum refining are probably carcinogenic in humans.

Some studies with mice have suggested that repeated contact with fuel oils may cause liver or skin cancer. However, other mouse studies have found this not to be the case. No studies are available in other animals or in people on the carcinogenic effects of fuel oils.

Is there a medical test to show whether I've been exposed to fuel oils?

There is no medical test that shows if you have been exposed to fuel oils. Tests are available to determine if some of the chemicals commonly found in fuel oils are in your blood. However, the presence of these chemicals in blood may not necessarily mean that you have been exposed to fuel oils.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) and the Air Force Office of Safety and Health (AFOSH) have set a permissible exposure level (PEL) of 400 parts of petroleum distillates per million parts of air (400 ppm) for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends that average workplace air levels not exceed 350 milligrams of petroleum distillates per cubic meter of air (350 mg/m^3) for a 40-hour workweek.

The Department of Transportation (DOT) lists fuel oils as hazardous materials and, therefore, regulates their transportation.

Glossary

Carcinogenic: Able to cause cancer.

CAS: Chemical Abstracts Service.

Evaporate: To change into a vapor or a gas.

Hydrocarbon: Any compound made up of hydrogen and carbon.

Milligram (mg): One thousandth of a gram.

ppm: Parts per million.

Sediment: Mud and debris that have settled to the bottom of a body of water.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for fuel oils. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 404-498-0093. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Lead - ToxFAQs™

What is lead?

Lead is a metal found naturally in the earth's crust. It can be found in all parts of our environment, including air, water, and soil. Lead can combine with other chemicals to make different compounds.

Lead is used in the production of batteries, ammunition, and metal products (solder and pipes). Because of health concerns, the use of lead in paints, ceramic products, caulking, and pipe solder has been dramatically reduced. The use of lead as an additive to automobile gasoline was banned in 1996 in the United States.

What happens to lead in the environment?

- Lead is an element, so it does not break down.
- When lead is released into the air, it may be transported long distances before it lands and stays on the ground.
- Once on the ground, lead can often stick to soil particles.
- Lead in soil can get into groundwater, but the amount of lead that moves into groundwater will depend on the lead compound and soil type.

How can I be exposed to lead?

Lead can cause health problems in almost every organ and system in your body.

- Eating food or drinking water that contains lead.
- Drinking water from pipes that were soldered with lead can cause exposure.
- Spending time or living in homes with lead-based paints can result in exposure when the paint breaks down and forms dust, which can get on your hands, or into your mouth and nose and be swallowed.
- Spending time in areas where the soil is contaminated with lead.
- Working in a job where lead is used or participating in certain hobbies where lead is used, such as making stained glass.
- Using healthcare products from other countries, alternative treatments, or folk remedies.

How can lead affect my health?

The effects of lead are the same whether it enters the body by breathing it in or eating it. Lead can affect almost every organ and system in your body. The nervous system is the main target for lead poisoning in children and adults. Long-term exposure can result in decreased learning, memory, and attention, and weakness in fingers, wrists, or ankles. Lead exposure can cause anemia (low iron in the blood) and damage to the kidneys. It can also cause increases in blood pressure, particularly in middle-aged and older individuals. Exposure to high lead levels can severely damage the brain and kidneys and can cause death. In pregnant women, exposure to high levels of lead may cause a miscarriage. In men, it can cause damage to reproductive organs.

Lead

How can lead affect children?

Children are more vulnerable to lead poisoning than adults because their nervous system is still developing. Children can be exposed to lead in their environment and before birth from lead in their mother's body. At lower levels of exposure, lead can decrease mental development, especially learning, intelligence, and behavior. Physical growth may also be decreased. A child who swallows large amounts of lead may develop anemia, severe stomachache, muscle weakness, and brain damage. Exposure to lead during pregnancy can also result in premature births. Some effects of lead poisoning in a child may continue into adulthood.

Can lead cause cancer?

Several agencies and organizations both in the United States and internationally have reviewed studies and made an assessment about whether lead can cause cancer.

- The Department of Health and Human Services (HHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens (causing cancer in people).
- The U.S. Environmental Protection Agency (EPA) has classified lead as a probable human carcinogen.
- The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans, and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

Can I get a medical test to check for lead?

A blood test is available to measure the amount of lead in your blood. Blood tests are commonly used to screen children for lead poisoning. Your doctor can draw blood samples and send them to appropriate laboratories for analysis. If you think you or anyone in your family has been exposed to lead, contact your doctor, nurse, or poison control center.

How can I protect my family from lead exposure?

- Avoid exposure to sources of lead.
- Do not allow children to chew or mouth surfaces that may have been painted with lead-based paint.
- If your home contains lead-based paint (built before 1978), or if you live in an area contaminated with lead, wash children's hands and faces often to remove lead dusts and soil, and regularly clean the house to remove lead dust and lead tracked in soil.
- Certain water pipes may contain lead, so if you know that pipes have lead solder, you should avoid drinking from that source.
- Check for lead in some products such as toys and jewelry and avoid such products.
- Lead is sometimes in candies imported from other countries or traditional home remedies; find out if yours has any lead and avoid using these products or giving them to children.
- You can learn more about preventing lead poisoning here: https://www.cdc.gov/nceh/lead/faqs/lead-faqs.htm

Want more information?

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at https://wwwn.cdc.gov/dcs/ContactUs/Form

Go to ATSDR's Toxicological Profile for Lead

CDC Lead Poisoning Prevention Program https://www.cdc.gov/nceh/lead/default.htm

Environmental Protection Agency https://www.epa.gov/lead/protect-your-family-exposures-lead

Go to ATSDR's Toxic Substances Portal: https://wwwn.cdc.gov/TSP/index.aspx

If you have any more questions or concerns, you can also find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html

Mercury - ToxFAQs™

What is mercury?

Mercury is a naturally occurring element with a chemical symbol of Hg. Elemental mercury is a silver liquid at room temperature that can also evaporate into the air as a gas or become a solid at very low temperatures. It can combine with other substances to form solid compounds that are categorized into two groups: inorganic mercury salts and organic mercury compounds. Mercury and mercury compounds are odorless.

Mercury is used in a number of industries and products. It is primarily used in the manufacture of electronics, fluorescent-lighting, and production of chlorine-caustic soda. It is also used in dental products (fillings), although uses in dentistry are being phased-out. Other historical uses of mercury (batteries; thermometers and other scientific and medical devices; electronic switches and lighting applications; paints and pigments; fungicides and pesticides) have been eliminated or drastically reduced.

What happens to mercury in the environment?

Because mercury is a naturally occurring element, it can be found in the air, water, or soil. It can also be found in the environment due to industrial releases to air and water. Industrial releases to air have steadily decreased over the past few decades.

Mercury does not break down in the environment. In air, mercury may spread far from where it was released. Mercury seldom appears as a silver liquid in the environment. In water, mercury can evaporate into the air. In soil, it can adhere (stick) to soil and sediments (dirt deposits at the bottom of bodies of water). One type of organic mercury compound called methylmercury can build up in plants and fish.

How can I be exposed to mercury?

Most people are exposed to organic mercury compounds (typically methylmercury) in food (such as fish, seafood, rice) or to elemental mercury from dental fillings. Food is the most common form of exposure. Most people are not exposed to inorganic mercury salts. Industrial and dental workers who use mercury are primarily exposed to elemental mercury. Some cultures use mercury in traditional medicines or religious practices, although this is not recommended or approved for use in the United States.

How can mercury affect my health?

Mercury can affect the nervous system and kidneys. The health effects from exposure to mercury depend on a number of factors including the amount and form of mercury, route and length of exposure, and age.

All forms of mercury can affect the nervous system and the kidneys. Workers exposed to elemental mercury vapor and people who eat foods with high levels of methylmercury experienced tremors, incoordination, impaired vision, impaired learning and memory, and mood changes. Some children born in communities that ate food with high levels of organic mercury had learning, sensory, and movement problems. In people exposed to high levels of methylmercury in their diets, birth defects have occurred. Some humans and animals that ate mercury compounds had high blood pressure and alterations in their immune systems. Animals that breathed elemental mercury vapor or ate organic or inorganic mercury compounds in their diets showed nervous system effects and/or kidney damage. Animals that ate high levels of mercury compounds showed decreased fertility and/or birth defects.

Mercury

Can mercury cause cancer?

Rats that ate an inorganic mercury compound for a long period of time developed stomach or thyroid cancer. Rats and mice that ate organic mercury compounds for a long period of time developed kidney cancer.

The U.S. Department of Health and Human Services (DHHS) has not evaluated the potential of mercury or mercury compounds to cause cancer in people.

The U.S. Environmental Protection Agency (EPA) has determined that mercuric chloride (inorganic mercury salt) and methylmercury (organic mercury compound) are possible human carcinogens (cause cancer). The EPA did not classify the potential of elemental mercury to cause cancer in humans.

The International Agency for Research on Cancer (IARC) classified methylmercury compounds as possibly carcinogenic to humans. IARC designated inorganic mercury and elemental mercury as not classifiable for causing cancer in humans.

Can I get a medical test to check for mercury?

Mercury can be measured in your blood, urine, hair, or toenails. However, tests cannot determine which form of mercury you were exposed to. Tests also cannot predict whether you will have health problems. If you think you have been exposed to mercury, call your doctor, nurse, or poison control center.

How can I protect myself and my family from mercury?

People should avoid eating fish that contain high levels of methylmercury. This is particularly important for pregnant women and children. Follow your state's health advisories that tell you about whether it is okay to eat fish or wildlife caught in contaminated areas. Avoid all contact with spills of the liquid form of elemental mercury (the type of mercury found in old thermometers). If a spill occurs, refer to https://www.atsdr.cdc.gov/dontmesswithmercury for safe clean-up practices. Most people don't need to take any special steps to avoid exposure to inorganic mercury salts in their daily lives. Keep children from playing in areas near hazardous waste sites to avoid coming in contact with mercury.

For more information:

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at https://wwwn.cdc.gov/dcs/ContactUs/Form

Go to ATSDR's Toxicological Profile for mercury: https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=115&tid=24

Go to ATSDR's Toxic Substances Portal: https://wwwn.cdc.gov/TSP/index.aspx

Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

METHYLENE CHLORIDE
CAS # 75-09-2

Division of Toxicology ToxFAQs™ **February 2001**

This fact sheet answers the most frequently asked health questions (FAQs) about methylene chloride. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to methylene chloride occurs mostly from breathing contaminated air, but may also occur through skin contact or by drinking contaminated water. Breathing in large amounts of methylene chloride can damage the central nervous system. Contact of eyes or skin with methylene chloride can result in burns. Methylene chloride has been found in at least 882 of 1,569 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is methylene chloride?

Methylene chloride is a colorless liquid with a mild, sweet odor. Another name for it is dichloromethane. Methylene chloride does not occur naturally in the environment.

Methylene chloride is used as an industrial solvent and as a paint stripper. It may also be found in some aerosol and pesticide products and is used in the manufacture of photographic film.

What happens to methylene chloride when it enters the environment?

❑ Methylene chloride is mainly released to the environment in air. About half of the methylene chloride in air disappears in 53 to 127 days.

❑ Methylene chloride does not easily dissolve in water, but small amounts may be found in drinking water.

❑ We do not expect methylene chloride to build up in plants or animals.

How might I be exposed to methylene chloride?

❑ The most likely way to be exposed to methylene chloride is by breathing contaminated air.

❑ Breathing the vapors given off by products containing methylene chloride. Exposure to high levels of methylene chloride is likely if methylene chloride or a product containing it is used in a room with inadequate ventilation.

How can methylene chloride affect my health?

If you breathe in large amounts of methylene chloride you may feel unsteady, dizzy, and have nausea and a tingling or numbness of your finger and toes. A person breathing smaller amounts of methylene chloride may become less attentive and less accurate in tasks requiring hand-eye coordination. Skin contact with methylene chloride causes burning and redness of the skin.

How likely is methylene chloride to cause cancer?

We do not know if methylene chloride can cause cancer in humans. An increased cancer risk was seen in mice

breathing large amounts of methylene chloride for a long time.

The World Health Organization (WHO) has determined that methylene chloride may cause cancer in humans.

The Department of Health and Human Services (DHHS) has determined that methylene chloride can be reasonably anticipated to be a cancer-causing chemical.

The EPA has determined that methylene chloride is a probable cancer-causing agent in humans.

How can methylene chloride affect children?

It is likely that health effects seen in children exposed to high amounts of methylene chloride will be similar to the effects seen in adults. We do not know if methylene chloride can affect the ability of people to have children or if it causes birth defects. Some birth defects have been seen in animals inhaling very high levels of methylene chloride.

How can families reduce the risk of exposure to methylene chloride?

❏ Families may be exposed to methylene chloride while using products such as paint removers. Such products should always be used in well-ventilated areas and skin contact should be avoided.
❏ Children should not be allowed to remain near indoor paint removal activities.

Is there a medical test to show whether I've been exposed to methylene chloride?

❏ Several tests can measure exposure to methylene chloride. These tests are not routinely available in your doctor's office.
❏ Methylene chloride can be detected in the air you breathe out and in your blood. These tests are only useful for detecting exposures that have occurred within a few days.
❏ It is also possible to measure carboxyhemoglobin (a chemical formed in the blood as methylene chloride breaks down in the body) in the blood or formic acid (a breakdown product of methylene chloride) in the urine. These tests are not specific for methylene chloride.

Has the federal government made recommendations to protect human health?

❏ The EPA requires that releases of methylene chloride of 1,000 pounds or more be reported to the federal government.
❏ The EPA recommends that exposure of children to methylene chloride be limited to less than 10 milligrams per liter of drinking water (10 mg/L) for 1 day or 2 mg/L for 10 days.
❏ The Food and Drug Administration (FDA) has established limits on the amounts of methylene chloride that can remain after processing of spices, hops extract, and decaffeinated coffee.
❏ The Occupational Safety and Health Administration (OSHA) has set limits of 25 parts methylene chloride per million parts of workplace air (25 ppm) for 8-hour shifts and 40-hour work weeks.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological Profile for methylene chloride. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html . ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Polychlorinated Biphenyls - ToxFAQs™

This fact sheet answers the most frequently asked health questions (FAQs) about polychlorinated biphenyls. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Polychlorinated biphenyls (PCBs) are a mixture of individual chemicals which are no longer produced in the United States, but are still found in the environment. Health effects that have been associated with exposure to PCBs include acne-like skin conditions in adults and neurobehavioral and immunological changes in children. PCBs are known to cause cancer in animals. PCBs have been found in at least 500 of the 1,598 National Priorities List (NPL) sites identified by the Environmental Protection Agency (EPA).

What are polychlorinated biphenyls?

Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

What happens to PCBs when they enter the environment?

- PCBs entered the air, water, and soil during their manufacture, use, and disposal; from accidental spills and leaks during their transport; and from leaks or fires in products containing PCBs.
- PCBs can still be released to the environment from hazardous waste sites; illegal or improper disposal of industrial wastes and consumer products; leaks from old electrical transformers containing PCBs; and burning of some wastes in incinerators.
- PCBs do not readily break down in the environment and thus may remain there for very long periods of time. PCBs can travel long distances in the air and be deposited in areas far away from where they were released. In water, a small amount of PCBs may remain dissolved, but most stick to organic particles and bottom sediments. PCBs also bind strongly to soil.
- PCBs are taken up by small organisms and fish in water. They are also taken up by other animals that eat these aquatic animals as food. PCBs accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water.

How might I be exposed to PCBs?

- Using old fluorescent lighting fixtures and electrical devices and appliances, such as television sets and refrigerators, that were made 30 or more years ago. These items may leak small amounts of PCBs into the air when they get hot during operation, and could be a source of skin exposure.
- Eating contaminated food. The main dietary sources of PCBs are fish (especially sportfish caught in contaminated lakes or rivers), meat, and dairy products.
- Breathing air near hazardous waste sites and drinking contaminated well water.
- In the workplace during repair and maintenance of PCB transformers; accidents, fires or spills involving transformers, fluorescent lights, and other old electrical devices; and disposal of PCB materials.

How can PCBs affect my health?

The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs.

Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over

several weeks or months developed various kinds of health effects, including anemia; acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. PCBs are not known to cause birth defects.

How likely are PCBs to cause cancer?

Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. PCBs have been classified as probably carcinogenic, and carcinogenic to humans (group 1) by the Environmental Protection Agency (EPA) and International Agency for Research on Cancer (IARC), respectively.

How can PCBs affect children?

Women who were exposed to relatively high levels of PCBs in the workplace or ate large amounts of fish contaminated with PCBs had babies that weighed slightly less than babies from women who did not have these exposures. Babies born to women who ate PCB-contaminated fish also showed abnormal responses in tests of infant behavior. Some of these behaviors, such as problems with motor skills and a decrease in short-term memory, lasted for several years. Other studies suggest that the immune system was affected in children born to and nursed by mothers exposed to increased levels of PCBs. There are no reports of structural birth defects caused by exposure to PCBs or of health effects of PCBs in older children. The most likely way infants will be exposed to PCBs is from breast milk. Transplacental transfers of PCBs were also reported In most cases, the benefits of breast-feeding outweigh any risks from exposure to PCBs in mother's milk.

How can families reduce the risks of exposure to PCBs?

- You and your children may be exposed to PCBs by eating fish or wildlife caught from contaminated locations. Certain states, Native American tribes, and U.S. territories have issued advisories to warn people about PCB-contaminated fish and fish-eating wildlife. You can reduce your family's exposure to PCBs by obeying these advisories.
- Children should be told not play with old appliances, electrical equipment, or transformers, since they may contain PCBs.
- Children should be discouraged from playing in the dirt near hazardous waste sites and in areas where there was a transformer fire. Children should also be discouraged from eating dirt and putting dirty hands, toys or other objects in their mouths, and should wash hands frequently.
- If you are exposed to PCBs in the workplace it is possible to carry them home on your clothes, body, or tools. If this is the case, you should shower and change clothing before leaving work, and your work clothes should be kept separate from other clothes and laundered separately.

Is there a medical test to show whether I've been exposed to PCBs?

Tests exist to measure levels of PCBs in your blood, body fat, and breast milk, but these are not routinely conducted. Most people normally have low levels of PCBs in their body because nearly everyone has been environmentally exposed to PCBs. The tests can show if your PCB levels are elevated, which would indicate past exposure to above-normal levels of PCBs, but cannot determine when or how long you were exposed or whether you will develop health effects.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 0.0005 milligrams of PCBs per liter of drinking water (0.0005 mg/L). Discharges, spills or accidental releases of 1 pound or more of PCBs into the environment must be reported to the EPA. The Food and Drug Administration (FDA) requires that infant foods, eggs, milk and other dairy products, fish and shellfish, poultry and red meat contain no more than 0.2-3 parts of PCBs per million parts (0.2-3 ppm) of food. Many states have established fish and wildlife consumption advisories for PCBs.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological profile for polychlorinated biphenyls (PCBs). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636.

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Polycyclic Aromatic Hydrocarbons (PAHs) - ToxFAQs™

This fact sheet answers the most frequently asked health questions (FAQs) about polycyclic aromatic hydrocarbons (PAHs). For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to polycyclic aromatic hydrocarbons usually occurs by breathing air contaminated by wild fires or coal tar, or by eating foods that have been grilled. PAHs have been found in at least 600 of the 1,430 National Priorities List (NPL) sites identified by the Environmental Protection Agency (EPA).

What are polycyclic aromatic hydrocarbons?

(Pronounced pŏl′ĭ-sī′klĭk ăr′ə-măt′ĭk hī′drə-kar′bənz)

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

What happens to PAHs when they enter the environment?

- PAHs enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust.
- PAHs can occur in air attached to dust particles.
- Some PAH particles can readily evaporate into the air from soil or surface waters.
- PAHs can break down by reacting with sunlight and other chemicals in the air, over a period of days to weeks.
- PAHs enter water through discharges from industrial and wastewater treatment plants.
- Most PAHs do not dissolve easily in water. They stick to solid particles and settle to the bottoms of lakes or rivers.
- Microorganisms can break down PAHs in soil or water after a period of weeks to months.
- In soils, PAHs are most likely to stick tightly to particles; certain PAHs move through soil to contaminate underground water.
- PAH contents of plants and animals may be much higher than PAH contents of soil or water in which they live.

How might I be exposed to PAHs?

- Breathing air containing PAHs in the workplace of coking, coal-tar, and asphalt production plants; smokehouses; and municipal trash incineration facilities.
- Breathing air containing PAHs from cigarette smoke, wood smoke, vehicle exhausts, asphalt roads, or agricultural burn smoke.
- Coming in contact with air, water, or soil near hazardous waste sites.
- Eating grilled or charred meats; contaminated cereals, flour, bread, vegetables, fruits, meats; and processed or pickled foods.
- Drinking contaminated water or cow's milk.
- Nursing infants of mothers living near hazardous waste sites may be exposed to PAHs through their mother's milk.

Polycyclic Aromatic Hydrocarbons

How can PAHs affect my health?

Mice that were fed high levels of one PAH during pregnancy had difficulty reproducing and so did their offspring. These offspring also had higher rates of birth defects and lower body weights. It is not known whether these effects occur in people.

Animal studies have also shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure. But these effects have not been seen in people.

How likely are PAHs to cause cancer?

The Department of Health and Human Services (DHHS) has determined that some PAHs may reasonably be expected to be carcinogens.

Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).

Is there a medical test to show whether I've been exposed to PAHs?

In the body, PAHs are changed into chemicals that can attach to substances within the body. There are special tests that can detect PAHs attached to these substances in body tissues or blood. However, these tests cannot tell whether any health effects will occur or find out the extent or source of your exposure to the PAHs. The tests aren't usually available in your doctor's office because special equipment is needed to conduct them.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m^3). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is 5 mg/m^3 averaged over an 8-hour exposure period.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels for coal tar products not exceed 0.1 mg/m^3 for a 10-hour workday, within a 40-hour workweek. There are other limits for workplace exposure for things that contain PAHs, such as coal, coal tar, and mineral oil.

Glossary

Carcinogen: A substance that can cause cancer.

Ingest: Take food or drink into your body.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for polycyclic aromatic hydrocarbons. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636.

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Tetrachloroethylene - ToxFAQs™

CAS # 127-18-4

This fact sheet answers the most frequently asked health questions (FAQs) about tetrachloroethylene. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Tetrachloroethylene is a manufactured chemical used for dry cleaning and metal degreasing and in the aerospace industry. Exposure to very high concentrations of tetrachloroethylene can cause dizziness headaches, sleepiness, incoordination confusion, nausea, unconsciousness, and even death. Tetrachloroethylene has been found in at least 949 of the 1,854 National Priorities List sites identified by U.S. Environmental Protection Agency (EPA).

What is tetrachloroethylene?

Tetrachloroethylene is a nonflammable colorless liquid. Other names for tetrachloroethylene include perchloroethylene, PCE, perc, tetrachloroethene, and perchlor. Most people can smell tetrachloroethylene when it is present in the air at a level of 1 part in 1 million parts of air (1 ppm) or more.

Tetrachloroethylene is used as a dry cleaning agent and metal degreasing solvent. It is also used as a starting material (building block) for making other chemicals and is used in some consumer products.

What happens to tetrachloroethylene when it enters the environment?

- Tetrachloroethylene can be released into air, water, and soil at places where it is produced or used.
- Tetrachloroethylene breaks down very slowly in the air and so it can be transported long distances in the air. Half of the amount in the air will degrade in approximately 100 days.
- Tetrachloroethylene evaporates quickly from water into air. It is generally slow to break down in water.
- Tetrachloroethylene may evaporate quickly from shallow soils or may filter through the soil and into the groundwater below. It is generally slow to break down in soil.

How might I be exposed to tetrachloroethylene?

- When you bring clothes from the dry cleaners, they will release small amounts of tetrachloroethylene into the air.
- When you drink water containing tetrachloroethylene, you are exposed to it. You might also be exposed to tetrachloroethylene that is released into the air during showering and bathing.
- People residing near contaminated sites or dry cleaning locations may be exposed to higher levels than the general population.
- People working in the dry cleaning industries or using metal degreasing products may be exposed to elevated levels of tetrachloroethylene.

How can tetrachloroethylene affect my health?

Breathing high levels of tetrachloroethylene for a brief period may cause dizziness or drowsiness, headache, and incoordination; higher levels may cause unconsciousness and even death.

Exposure for longer periods to low levels of tetrachloroethylene may cause changes in mood, memory, attention, reaction time, and vision.

Studies in animals exposed to tetrachloroethylene have shown liver and kidney effects, and changes in brain chemistry, but we do not know what these findings mean for humans.

Tetrachloroethylene

CAS # 127-18-4

How likely is tetrachloroethylene to cause cancer?

Studies in humans suggest that exposure to tetrachloroethylene might lead to a higher risk of getting bladder cancer, multiple myeloma, or non-Hodgkin's lymphoma.

In animals, tetrachloroethylene has been shown to cause cancers of the liver, kidney, and blood system.

The Department of Health and Human Services (DHHS) considers tetrachloroethylene to be reasonably anticipated to be a human carcinogen. EPA considers tetrachloroethylene likely to be carcinogenic to humans by all routes of exposure. The International Agency for Research on Cancer (IARC) considers tetrachloroethylene probably carcinogenic to humans.

How can tetrachloroethylene affect children?

It is not known whether children are more susceptible than adults to the effects of tetrachloroethylene.

A few studies in humans have suggested that exposure to tetrachloroethylene increased the numbers of babies with birth defects, but these studies were not large enough to clearly answer the question. Studies in animals exposed by inhalation or stomach tube have not shown clear evidence of specific birth defects.

How can families reduce the risk of exposure to tetrachloroethylene?

- Tetrachloroethylene has been found in low levels in some food. You can minimize the risk of your family's exposure by peeling and thoroughly washing fruits and vegetables before cooking.
- Use bottled water if you have concerns about the presence of tetrachloroethylene in your tap water. You may also contact local drinking water authorities and follow their advice.
- Prevent children from playing in dirt or eating dirt if you live near a waste site that has tetrachloroethylene.
- Tetrachloroethylene is widely used as a scouring solvent that removes oils from fabrics, as a carrier solvent, as a fabric finish or water repellant, and as a metal degreaser/cleaner. Follow instructions on product labels to minimize exposure to tetrachloroethylene.

Is there a medical test to determine whether I've been exposed to tetrachloroethylene?

Tetrachloroethylene and its breakdown products (metabolites) can be measured in blood and urine. However, the detection of tetrachloroethylene or its metabolites cannot predict the kind of health effects that might develop from that exposure. Because tetrachloroethylene and its metabolites leave the body fairly rapidly, the tests need to be conducted within days after exposure.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set an 8-hour time weighted average permissible exposure limit of 100 ppm, an acceptable ceiling exposure limit of 200 ppm, and a maximum peak of 300 ppm (not to be exceeded for more than 5 minutes of any 3-hour period).

The National Institute for Occupational Safety and Health (NIOSH) recommends that workplace exposure to tetrachloroethylene be minimized due to concerns about its carcinogenicity.

Reference

This ToxFAQs™ information is taken from the 2019 Toxicological Profile for Tetrachloroethylene produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ on the web: www.atsdr.cdc.gov/ToxFAQs

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Toluene - ToxFAQs™

What is toluene?

Toluene is a clear, colorless liquid with a distinctive smell. It occurs naturally in crude oil and in the tolú tree. Toluene is produced in the process of making gasoline and other fuels from crude oil and in making coke from coal.

Toluene is a good solvent (a substance that can dissolve other substances). It is used in making paints, paint thinners, fingernail polish, lacquers, adhesives, and rubber and in some printing and leather tanning processes. Toluene is also used in the manufacture of other chemicals, nylon, and plastics. It is also added to gasoline along with benzene and xylene to improve octane ratings.

What happens to toluene in the environment?

Toluene can enter the air from car exhaust or when materials that contain it (such as paints or fingernail polish) are used. It can get into surface waters (like lakes and streams), groundwater, or soil if solvents or petroleum products are accidently spilled, or from leaking underground storage tanks at gasoline stations and other facilities. When toluene-containing products are placed in landfills or waste disposal sites, toluene can enter the soil or water near the waste site.

Toluene does not usually stay in the environment long. In surface water or soil, it will readily evaporate into the air or be degraded by bacteria. In the air, toluene rapidly breaks down by reacting with other chemicals or oxygen in the air. Below the surface, microorganisms will break down toluene.

How can I be exposed to toluene?

You may be exposed to toluene by breathing contaminated air or touching products that contain this chemical. Car exhaust contains toluene; therefore, if you spend time in or near vehicles or traffic, you may be exposed to this chemical. People who work with gasoline, paint, or dyes may be exposed to higher levels of toluene than most people.

Toluene is not frequently detected in drinking water or food. People that abuse (inhale) certain products such as glue or paint thinner can be exposed to toluene.

How can toluene affect my health?

Toluene may affect the nervous system. Low to moderate levels can cause headaches, dizziness, tiredness, confusion, weakness, drunken-type actions, memory loss, nausea, and loss of appetite. These symptoms usually disappear when exposure stops.

Toluene can be found in gasoline products, paints, stain removers, and fingernail polish. Breathing toluene can cause headaches, dizziness, and nausea.

Long-term daily exposure to toluene in the workplace may cause some hearing and color vision loss. Repeatedly breathing toluene from glue or paint thinners may permanently damage the brain.

Exposure to high levels of toluene during pregnancy, such as those associated with solvent abuse, may lead to developmental effects, such as reduced mental abilities and growth in children.

In animal studies, the effects of toluene were similar to those seen in humans. In addition, it was found that animals that drank toluene also had decreased immune responses.

Toluene

Can toluene cause cancer?

Studies in workers and animals exposed to toluene generally show that toluene does not cause cancer.

The U.S. Department of Health and Human Services (DHHS) has not evaluated the carcinogenicity (ability to cause cancer) of toluene.

The U.S. Environmental Protection Agency (EPA) has determined that there is inadequate information to assess the carcinogenicity of toluene.

The International Agency for Research on Cancer (IARC) has determined that toluene is not classifiable as to its carcinogenicity in humans.

Can I get a medical test to check for toluene?

Toluene and its breakdown products can be measured in blood and urine. These tests are only useful if done within several days after exposure. These tests cannot predict whether you will have health problem from exposure to toluene.

How can I protect myself and my family from toluene?

To reduce exposure to toluene, you should use products that contain it (such as paints, nail polish, glues, inks, and stain removers) in well-ventilated areas. When not in use, these products should be tightly covered to prevent evaporation into the air and, if possible, stored in a shed or an outside location. Always store household chemicals in their original labeled containers.

Have your tap water tested if you are concerned it may have toluene and, if necessary, take steps to protect yourself. Keep children from eating or playing in the dirt if you live near a waste site.

Sometimes, older children sniff household chemicals in an attempt to get high. Talk with children about the dangers of sniffing chemicals.

For more information:

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at https://wwwn.cdc.gov/dcs/ContactUs/Form

Go to ATSDR's Toxicological Profile for Toluene: https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=161&tid=29

Go to ATSDR's Toxic Substances Portal: https://wwwn.cdc.gov/TSP/index.aspx

Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html

Trichloroethylene - ToxFAQs™

CAS # 79-01-6

This fact sheet answers the most frequently asked health questions (FAQs) about trichloroethylene. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Trichloroethylene is used as a solvent for cleaning metal parts. Exposure to very high concentrations of trichloroethylene can cause dizziness headaches, sleepiness, incoordination, confusion, nausea, unconsciousness, and even death. Trichloroethylene has been found in at least 1,051 of the 1,854 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is trichloroethylene?

Trichloroethylene is a colorless, volatile liquid. Liquid trichloroethylene evaporates quickly into the air. It is nonflammable and has a sweet odor.

The two major uses of trichloroethylene are as a solvent to remove grease from metal parts and as a chemical that is used to make other chemicals, especially the refrigerant, HFC-134a.

What happens to trichloroethylene when it enters the environment?

- Trichloroethylene can be released to air, water, and soil at places where it is produced or used.
- Trichloroethylene is broken down quickly in air.
- Trichloroethylene breaks down very slowly in soil and water and is removed mostly through evaporation to air.
- It is expected to remain in groundwater for long time since it is not able to evaporate.
- Trichloroethylene does not build up significantly in plants or animals.

How might I be exposed to trichloroethylene?

- Breathing trichloroethylene in contaminated air.
- Drinking contaminated water.
- Workers at facilities using this substance for metal degreasing are exposed to higher levels of trichloroethylene.
- If you live near such a facility or near a hazardous waste site containing trichloroethylene, you may also have higher exposure to this substance.

How can trichloroethylene affect my health?

Trichloroethylene was once used as an anesthetic for surgery. Exposure to moderate amounts of trichloroethylene may cause headaches, dizziness, and sleepiness; large amounts may cause coma and even death. Eating or breathing high levels of trichloroethylene may damage some of the nerves in the face. Exposure to high levels can also result in changes in the rhythm of the heartbeat, liver damage, and evidence of kidney damage. Skin contact with concentrated solutions of trichloroethylene can cause skin rashes. There is some evidence exposure to trichloroethylene in the work place may cause scleroderma (a systemic autoimmune disease) in some people. Some men occupationally-exposed to trichloroethylene and other chemicals showed decreases in sex drive, sperm quality, and reproductive hormone levels.

How likely is trichloroethylene to cause cancer?

There is strong evidence that trichloroethylene can cause kidney cancer in people and some evidence for trichloroethylene-induced liver cancer and malignant lymphoma. Lifetime exposure to trichloroethylene resulted in increased liver cancer in mice and increased kidney cancer and testicular cancer in rats.

The Department of Health and Human Services (DHHS) considers trichloroethylene to be a known human carcinogen. The International Agency for Research on Cancer (IARC) classified trichloroethylene as carcinogenic to humans. The EPA has characterized trichloroethylene as carcinogenic to humans by all routes of exposure.

Trichloroethylene

CAS # 79-01-6

How can trichloroethylene affect children?

It is not known whether children are more susceptible than adults to the effects of trichloroethylene.

Some human studies indicate that trichloroethylene may cause developmental effects such as spontaneous abortion, congenital heart defects, central nervous system defects, and small birth weight. However, these people were exposed to other chemicals as well.

In some animal studies, exposure to trichloroethylene during development caused decreases in body weight, increases in heart defects, changes to the developing nervous system, and effects on the immune system.

How can families reduce the risk of exposure to trichloroethylene?

- Avoid drinking water from sources that are known to be contaminated with trichloroethylene. Use bottled water if you have concerns about the presence of chemicals in your tap water. You may also contact local drinking water authorities and follow their advice.
- Prevent children from playing in dirt or eating dirt if you live near a waste site that has trichloroethylene.
- Trichloroethylene is used in many industrial products. Follow instructions on product labels to minimize exposure to trichloroethylene.

Is there a medical test to determine whether I've been exposed to trichloroethylene?

Trichloroethylene and its breakdown products (metabolites) can be measured in blood and urine. However, the detection of trichloroethylene or its metabolites cannot predict the kind of health effects that might develop from that exposure. Because trichloroethylene and its metabolites leave the body fairly rapidly, the tests need to be conducted within days after exposure.

Has the federal government made recommendations to protect human health?

The EPA set a maximum contaminant goal (MCL) of 0.005 milligrams per liter (mg/L; 5 ppb) as a national primary drinking standard for trichloroethylene.

The Occupational Safety and Health Administration (OSHA) set a permissible exposure limit (PEL) of 100 ppm for trichloroethylene in air averaged over an 8-hour work day, an acceptable ceiling concentration of 200 ppm provided the 8 hour PEL is not exceeded, and an acceptable maximum peak of 300 ppm for a maximum duration of 5 minutes in any 2 hours.

The National Institute for Occupational Safety and Health (NIOSH) considers trichloroethylene to be a potential occupational carcinogen and established a recommended exposure limit (REL) of 2 ppm (as a 60-minute ceiling) during its use as an anesthetic agent and 25 ppm (as a 10-hour TWA) during all other exposures.

Reference

This ToxFAQs™ information is taken from the 2019 Toxicological Profile for Trichloroethylene produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ on the web: www.atsdr.cdc.gov/ToxFAQs

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ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

XYLENE
CAS # 1330-20-7

This fact sheet answers the most frequently asked health questions (FAQs) about xylene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to xylene occurs in the workplace and when you use paint, gasoline, paint thinners and other products that contain it. People who breathe high levels may have dizziness, confusion, and a change in their sense of balance. This substance has been found in at least 658 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is xylene?

(Pronounced zī′lēn)

Xylene is a colorless, sweet-smelling liquid that catches on fire easily. It occurs naturally in petroleum and coal tar and is formed during forest fires. You can smell xylene in air at 0.08–3.7 parts of xylene per million parts of air (ppm) and begin to taste it in water at 0.53–1.8 ppm.

Chemical industries produce xylene from petroleum. It's one of the top 30 chemicals produced in the United States in terms of volume.

Xylene is used as a solvent and in the printing, rubber, and leather industries. It is also used as a cleaning agent, a thinner for paint, and in paints and varnishes. It is found in small amounts in airplane fuel and gasoline.

What happens to xylene when it enters the environment?

- Xylene has been found in waste sites and landfills when discarded as used solvent, or in varnish, paint, or paint thinners.
- It evaporates quickly from the soil and surface water into the air.
- In the air, it is broken down by sunlight into other less harmful chemicals.
- It is broken down by microorganisms in soil and water.
- Only a small amount of it builds up in fish, shellfish, plants, and animals living in xylene-contaminated water.

How might I be exposed to xylene?

- Breathing xylene in workplace air or in automobile exhaust.
- Breathing contaminated air.
- Touching gasoline, paint, paint removers, varnish, shellac, and rust preventatives that contain it.
- Breathing cigarette smoke that has small amounts of xylene in it.
- Drinking contaminated water or breathing air near waste sites and landfills that contain xylene.
- The amount of xylene in food is likely to be low.

How can xylene affect my health?

Xylene affects the brain. High levels from exposure for short periods (14 days or less) or long periods (more than 1 year) can cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Exposure of

people to high levels of xylene for short periods can also cause irritation of the skin, eyes, nose, and throat; difficulty in breathing; problems with the lungs; delayed reaction time; memory difficulties; stomach discomfort; and possibly changes in the liver and kidneys. It can cause unconsciousness and even death at very high levels.

Studies of unborn animals indicate that high concentrations of xylene may cause increased numbers of deaths, and delayed growth and development. In many instances, these same concentrations also cause damage to the mothers. We do not know if xylene harms the unborn child if the mother is exposed to low levels of xylene during pregnancy.

How likely is xylene to cause cancer?

The International Agency for Research on Cancer (IARC) has determined that xylene is not classifiable as to its carcinogenicity in humans.

Human and animal studies have not shown xylene to be carcinogenic, but these studies are not conclusive and do not provide enough information to conclude that xylene does not cause cancer.

Is there a medical test to show whether I've been exposed to xylene?

Laboratory tests can detect xylene or its breakdown products in exhaled air, blood, or urine. There is a high degree of agreement between the levels of exposure to xylene and the levels of xylene breakdown products in the urine. However, a urine sample must be provided very soon after exposure ends because xylene quickly leaves the body. These tests are not routinely available at your doctor's office.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 10 ppm of xylene in drinking water.

The EPA requires that spills or accidental releases of xylenes into the environment of 1,000 pounds or more must be reported.

The Occupational Safety and Health Administration (OSHA) has set a maximum level of 100 ppm xylene in workplace air for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) and the American Conference of Governmental Industrial Hygienists (ACGIH) also recommend exposure limits of 100 ppm in workplace air.

NIOSH has recommended that 900 ppm of xylene be considered immediately dangerous to life or health. This is the exposure level of a chemical that is likely to cause permanent health problems or death.

Glossary

Evaporate: To change from a liquid into a vapor or a gas.

Carcinogenic: Having the ability to cause cancer.

CAS: Chemical Abstracts Service.

ppm: Parts per million.

Solvent: A liquid that can dissolve other substances.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for xylenes (update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 404-498-0093. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ZINC
CAS # 7440-66-6

Division of Toxicology ToxFAQs™ **August 2005**

This fact sheet answers the most frequently asked health questions (FAQs) about zinc. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Zinc is a naturally occurring element. Exposure to high levels of zinc occurs mostly from eating food, drinking water, or breathing workplace air that is contaminated. Low levels of zinc are essential for maintaining good health. Exposure to large amounts of zinc can be harmful. It can cause stomach cramps, anemia, and changes in cholesterol levels. Zinc has been found in at least 985 of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is zinc?

Zinc is one of the most common elements in the earth's crust. It is found in air, soil, and water, and is present in all foods. Pure zinc is a bluish-white shiny metal.

Zinc has many commercial uses as coatings to prevent rust, in dry cell batteries, and mixed with other metals to make alloys like brass, and bronze. A zinc and copper alloy is used to make pennies in the United States.

Zinc combines with other elements to form zinc compounds. Common zinc compounds found at hazardous waste sites include zinc chloride, zinc oxide, zinc sulfate, and zinc sulfide. Zinc compounds are widely used in industry to make paint, rubber, dyes, wood preservatives, and ointments.

What happens to zinc when it enters the environment?

❏ Some is released into the environment by natural processes, but most comes from human activities like mining, steel production, coal burning, and burning of waste.
❏ It attaches to soil, sediments, and dust particles in the air.
❏ Rain and snow remove zinc dust particles from the air.
❏ Depending on the type of soil, some zinc compounds can move into the groundwater and into lakes, streams, and rivers.
❏ Most of the zinc in soil stays bound to soil particles and does not dissolve in water.
❏ It builds up in fish and other organisms, but it does not build up in plants.

How might I be exposed to zinc?

❏ Ingesting small amounts present in your food and water.
❏ Drinking contaminated water or a beverage that has been stored in metal containers or flows through pipes that have been coated with zinc to resist rust.
❏ Eating too many dietary supplements that contain zinc.
❏ Working on any of the following jobs: construction, painting, automobile mechanics, mining, smelting, and welding; manufacture of brass, bronze, or other zinc-containing alloys; manufacture of galvanized metals; and manufacture of machine parts, rubber, paint, linoleum, oilcloths, batteries, some kind of glass, ceramics, and dyes.

How can zinc affect my health?

Zinc is an essential element in our diet. Too little zinc can cause problems, but too much zinc is also harmful.

Harmful effects generally begin at levels 10-15 times higher than the amount needed for good health. Large doses taken by mouth even for a short time can cause stomach cramps, nausea, and vomiting. Taken longer, it can cause anemia and decrease the levels of your good cholesterol. We do not know if high levels of zinc affect reproduction in humans. Rats that were fed large amounts of zinc became infertile.

Inhaling large amounts of zinc (as dusts or fumes) can cause a specific short-term disease called metal fume fever. We do not know the long-term effects of breathing high levels of zinc.

Putting low levels of zinc acetate and zinc chloride on the skin of rabbits, guinea pigs, and mice caused skin irritation. Skin irritation will probably occur in people.

How likely is zinc to cause cancer?

The Department of Health and Human Services (DHHS) and the International Agency for Research on Cancer (IARC) have not classified zinc for carcinogenicity. Based on incomplete information from human and animal studies, the EPA has determined that zinc is not classifiable as to its human carcinogenicity.

How can zinc affect children?

Zinc is essential for proper growth and development of young children. It is likely that children exposed to very high levels of zinc will have similar effects as adults. We do not know whether children are more susceptible to the effects of excessive intake of zinc than the adults.

We do not know if excess zinc can cause developmental effects in humans. Animal studies have found decreased weight in the offspring of animals that ingested very high amounts of zinc.

How can families reduce the risks of exposure to zinc?

❑ Children living near waste sites that contain zinc may be exposed to higher levels of zinc through breathing contaminated air, drinking contaminated drinking water, touching or eating contaminated soil.

❑ Discourage your children from eating soil or putting their hands in their mouths and teach them to wash their hands frequently and before eating.

❑ If you use medicines or vitamin supplements containing zinc, make sure you use them appropriately and keep them out of the reach of children.

Is there a medical test to determine whether I've been exposed to zinc?

There are tests available to measure zinc in your blood, urine, hair, saliva, and feces. These tests are not usually done in the doctor's office because they require special equipment. High levels of zinc in the feces can mean high recent zinc exposure. High levels of zinc in the blood can mean high zinc consumption and/or high exposure. Tests to measure zinc in hair may provide information on long-term zinc exposure; however, the relationship between levels in your hair and the amount of zinc you were exposed to is not clear.

Has the federal government made recommendations to protect human health?

The EPA recommends that drinking water should contain no more than 5 milligrams per liter of water (5 mg/L) because of taste. The EPA requires that any release of 1,000 pounds (or in some cases 5,000 pounds) into the environment be reported to the agency.

To protect workers, the Occupational Safety and Health Administration (OSHA) has set an average limit of 1 mg/m^3 for zinc chloride fumes and 5 mg/m^3 for zinc oxide (dusts and fumes) in workplace air during an 8-hour workday, 40-hour workweek.

Similarly, the National Institute for Occupational Safety and Health (NIOSH) has set the same standards for up to a 10-hour workday over a 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for Zinc (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATTACHMENT B

REPORT FORMS

WEEKLY SAFETY REPORT FORM

Week Ending: _____ Project Name/Number: _____

Report Date: _____ Project Manager Name: _____

Summary of any violations of procedures occurring that week:

_____

_____

_____

Summary of any job related injuries, illnesses, or near misses that week:

_____

_____

_____

_____

Summary of air monitoring data that week (include and sample analyses, action levels exceeded, and actions taken):

_____

_____

_____

Comments:

_____

_____

_____

Name: _____ Company: _____

Signature: _____ Title: _____

INCIDENT REPORT FORM

Date of Report: _____

Injured: _____

Employer: _____

Site: _____ Site Location: _____

Report Prepared By: _____ _____
Signature Title

ACCIDENT/INCIDENT CATEGORY (check all that applies)

___Injury	___ Illness	___ Near Miss
__ Property Damage	___ Fire	___ Chemical Exposure
__ On-site Equipment	___ Motor Vehicle	___ Electrical
__ Mechanical	___ Spill	___ Other

DATE AND TIME OF ACCIDENT/INCIDENT: Narrative report of Accident/Incident: Identify: 1) actions leading to or contributing to the accident/incident; 2) the accident/incident occurrence; and 3) actions following the accident/incident.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

WITNESS TO ACCIDENT/INCIDENT:

Name:	_____	Company:	_____
Address:	_____	Address:	_____
Phone No.:	_____	Phone No.:	_____
Name:	_____	Company:	_____
Address:	_____	Address:	_____
Phone No.:	_____	Phone No.:	_____

INJURED - ILL:

Name: _____ SSN: _____

Address: _____ Age: _____

Length of Service: _____ Time on Present Job: _____

Time/Classification: _____

SEVERITY OF INJURY OR ILLNESS:

____ Disabling ___ Non-disabling ___ Fatality

____ Medical Treatment ___ First Aid Only

ESTIMATED NUMBER OF DAYS AWAY FROM JOB: _____

NATURE OF INJURY OR ILLNESS: _____

_____

_____

_____

CLASSIFICATION OF INJURY:

__ Abrasions	_____ Dislocations	____ Punctures
__ Bites	_____ Faint/Dizziness	____ Radiation Burns
__ Blisters	_____ Fractures	____ Respiratory Allergy
__ Bruises	_____ Frostbite	____ Sprains
__ Chemical Burns	_____ Heat Burns	____ Toxic Resp. Exposure
__ Cold Exposure	_____ Heat Exhaustion	____ Toxic Ingestion
__ Concussion	_____ Heat Stroke	____ Dermal Allergy
__ Lacerations		

Part of Body Affected: _____

Degree of Disability: _____

Date Medical Care was Received: _____

Where Medical Care was Received: _____

Address (if off-site): _____

(If two or more injuries, record on separate sheets)

PROPERTY DAMAGE:

Description of Damage: _____

_____

Cost of Damage: $ _____

ACCIDENT/INCIDENT LOCATION: _____

ACCIDENT/INCIDENT ANALYSIS: Causative agent most directly related to accident/incident (Object, substance, material, machinery, equipment, conditions)

_____

_____

_____

_____

Was weather a factor?:_____

_____

Unsafe mechanical/physical/environmental condition at time of accident/incident (Be specific):

_____

_____

_____

Personal factors (Attitude, knowledge or skill, reaction time, fatigue):

_____

_____

ON-SITE ACCIDENTS/INCIDENTS:

Level of personal protection equipment required in Site Safety Plan:

_____

_____

Modifications:

_____

Was injured using required equipment?:

_____

_____

If not, how did actual equipment use differ from plan?:

_____

_____

ACTION TAKEN TO PREVENT RECURRENCE: (Be specific. What has or will be done? When will it be done? Who is the responsible party to insure that the correction is made?

_____

_____

_____

_____

_____

ACCIDENT/INCIDENT REPORT REVIEWED BY:

_____ _____

SSO Name Printed SSO Signature

OTHERS PARTICIPATING IN INVESTIGATION:

_____ _____

Signature Title

_____ _____

Signature Title

_____ _____

Signature Title

ACCIDENT/INCIDENT FOLLOW-UP: Date: _____

Outcome of accident/incident: _____

_____

_____

_____

Physician's recommendations: _____

_____

_____

_____

Date injured returned to work: _____

Follow-up performed by:

_____ _____

Signature Title

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

ATTACHMENT C

EMERGENCY HAND SIGNALS

EMERGENCY SIGNALS

In most cases, field personnel will carry portable radios for communication. If this is the case, a transmission that indicates an emergency will take priority over all other transmissions. All other site radios will yield the frequency to the emergency transmissions.

Where radio communications is not available, the following air-horn and/or hand signals will be used:

EMERGENCY HAND SIGNALS

OUT OF AIR, CAN'T BREATHE!



Hand gripping throat

LEAVE AREA IMMEDIATELY, NO DEBATE!

(No Picture) Grip partner's wrist or place both hands around waist

NEED ASSISTANCE!



Hands on top of head

OKAY! – I'M ALL RIGHT!

- I UNDERSTAND!



Thumbs up

NO! - NEGATIVE!



Thumbs down

APPENDIX C
COMMUNITY AIR MONITORING PLAN

IKOS SENIOR LIVING

32-11 31ST STREET
QUEENS, NEW YORK

Community Air Monitoring Plan

NYSDEC BCP Site No: C241290
AKRF Project Number: 240854

Prepared For:

New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor
Albany, New York 12233

Prepared On Behalf Of:

Ikos Senior Living LLC
48-02 25th Avenue, Suite 400
Astoria, NY 11103

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, New York 10016
212-696-0670

OCTOBER 2025

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TABLES

Table 1 – Work Zone Air Monitoring Action Levels

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been developed for the implementation of a Remedial Investigation (RI) Work Plan (RIWP) by AKRF, Inc. (AKRF) personnel and its subcontractors at the Ikos Senior Living site located at 32-11 31st Street, in the Astoria section of Queens, NY, hereafter referred to as the "Site." The Site is identified by the City of New York as Borough of Queens, Block 611, Lot 25.

Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures. The Site is abutted to the north by commercial uses (restaurants, a bar, retail, and offices), followed by Broadway; to the south by residential units and the Cretans Association Omonia, Inc. Cultural Facility, followed by office space; to the east by residential units and 32nd Street; and to the west by 31st Street and an elevated NYC subway station, followed by commercial/retail and residential units. The greater surrounding area includes primarily commercial, retail, residential, and transit uses.

Two Subsurface (Phase II) Investigations were conducted by AKRF in October 2022 and December 2024, and documented in a Draft Remedial Investigation Report dated January 2025. The 2022 investigation was conducted in accordance with a New York City Department of Environmental Protection (NYCDEP)-approved Phase II Work Plan. The 2024 investigation was conducted in accordance with a New York City Mayor's Office of Environmental Remediation (OER)-approved Phase II Work Plan. The previous investigations identified elevated levels of polycyclic aromatic hydrocarbons (PAHs), metals, pesticides, and perfluorooctanesulfonic acid (PFOS) in soil; chlorinated solvent-related volatile organic compounds (VOCs), PAHs, and metals in groundwater; and chlorinated solvent-related and petroleum-related VOCs in soil vapor. This RIWP describes the procedures to be used to further define the nature and extent of contamination at the Site. The data compiled from the RI, as described in the RIWP, will be used to prepare a RI Report (RIR).

2.0 AIR MONITORING PROGRAM

The purpose of the air monitoring program is to identify any exposure of the field personnel and the community to potential environmental hazards in the soil and groundwater. Air Monitoring will be conducted in accordance with the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (NYSDEC) guidance. Results of the air monitoring will be used to determine the appropriate response action, if needed. Field personnel will be trained in the proper operation of all field instruments at the start of the field program. The equipment will be calibrated according to manufacturer specifications at the start of each day of fieldwork. If an instrument fails calibration, the project manager will be contacted immediately to obtain a replacement instrument and arrange for repairs.

2.1 Work Zone Air Monitoring

2.1.1 Volatile Organic Compound (VOC) Monitoring

Continuous monitoring for VOCs will be conducted using roving hand-held equipment during all ground-intrusive activities, including soil boring advancement and groundwater monitoring well installation. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored continuously at the downwind perimeter of the exclusion zone. Monitoring will be conducted with a photoionization detector (PID) equipped with a 11.7 electron Volt (eV) lamp capable of calculating 15-minute running average concentrations. More frequent intervals of monitoring will be conducted if required as determined by the SSO. All PID readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Instantaneous readings will also be recorded.

2.1.2 Airborne Particulate Monitoring

A DustTrak® or equivalent would be used to measure real-time concentrations of total particulates 10 micrometers or less (PM10). Measurements for particulates will be taken prior to commencement of the work and during the work in areas where contaminated soil would be disturbed. The action levels listed in Table 1 are based on 15-minute averages of the monitoring data. The measurements will be made at the breathing height of the workers and as close to their location as practicable. The Site Safety Officer (SSO) will set up the equipment and confirm that it is working properly. His/her qualified designee may oversee the air measurements during the day. The initial measurement for the day will be performed before the start of work and will establish background levels. The final measurement for the day will be performed after the end of work. The action levels for particulates and VOCs and required responses are listed in Table 1.

Table 1
Work Zone Action Levels and Required Responses

Monitoring	Action Level[1]	Response Action
Particulate	Less than 0.125 mg/m^3 above background	**Level D or D-Modified** (Requires coveralls and steel toe boots) (As applicable: Chemical resistant gloves, chemical resistant boot covers, hard hat, safety glasses, face shield, or escape mask)
	Between 0.125 mg/m^3 and 0.150 mg/m^3 above background	**Level C** (Requires full face or half face respirator, hooded chemical resistant two piece Tyvek suit or overalls, chemical resistant inner and outer gloves, chemical resistant boot covers, steel toe and shank boots) (As applicable: hard hat, face shield, or escape mask) Apply dust suppression measures. Resume work or upgrade.
	Greater than 0.150 mg/m^3 above background	Stop work. Apply additional dust suppression measures. Resume work when less than 0.150 mg/m^3 and maintain Level C.
Volatile Organic Compound (VOC)	Less than 5 ppm in breathing zone	**Level D or D-Modified**
	Between 5 and 50 ppm	**Level C**
	More than 50 ppm	Stop work. Resume work when source of vapors is abated and readings are less than 50 ppm above background.

Notes:
[1] - 15-minute time-weighted average
parts per million = ppm
milligrams per cubic meter = mg/m^3

2.2 Perimeter Community Air Monitoring

Fixed air monitoring stations will be set up at the upwind and downwind perimeters of the exclusion zone during all ground intrusive activities and will continuously log VOC and particulate levels. Each fixed monitoring station will be fully enclosed and equipped with the following:

- A PID equipped with a 11.7 eV lamp capable of calculating 15-minute running average VOC concentrations;
- A TSI 8530 DustTrak II or equivalent dust monitor capable of measuring the concentration of airborne respirable particulates less than 10 micrometers in size (PM10) and calculating 15-minute running average particulate concentrations; and
- A Netronix™ Thiamus™ ICU-820 or equivalent Global System for Mobile Communication (GSM)/Global Positioning System (GPS) device capable of recording air monitoring and location data.
- Each monitoring station will be capable of sending e-mail alerts to the SSO to indicate an exceedance of action levels. Additionally, the SSO will conduct an inspection of the monitoring stations on at least an hourly basis. Upon completion of Site activities, all air monitoring data will be available to download via the iEnvironet® website. All air monitoring data recorded at the fixed monitoring stations will be available for NYSDOH and NYSDEC review and will be included in the RIR.

2.2.1 Perimeter Community Air Monitoring Action Levels

VOC Action Levels

The following actions will be taken based on organic vapor levels measured:

If total organic vapor levels exceed 5 parts per million (ppm) above background for the 15-minute average at the exclusion zone perimeter, work activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work activities will resume with continued monitoring.

If total organic vapor levels at the downwind perimeter of the exclusion zone persist at levels in excess of 5 ppm above background, but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the hot zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet – is below 5 ppm above background for the 15-minute average.

If the total organic vapor level is above 25 ppm at the perimeter of the exclusion zone, activities will be shutdown.

Particulate Action Levels

The following actions will be taken based on particulate levels measured:

If the downwind particulate concentrations are greater than 0.1 milligrams per cubic meter (mg/m^3) above background (upwind concentrations), and no other obvious source is apparent, then it will be assumed that the elevated particulate concentrations are a result of site activities. In such instances, dust suppression measures will be implemented and monitoring will be continued. Work will be allowed to continue with dust suppression if downwind particulate levels do not exceed 0.15 mg/m^3 above the background (upwind concentration) and provided that no visible dust is migrating from the work area.

If particulate levels persist at 0.15 mg/m^3 above the background, work must be stopped until dust suppression measures bring particulate levels to below 0.15 mg/m^3 above background.

2.3 Major Vapor Emission Response Plan

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work Site, or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted or vapor controls must be implemented.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the exclusion zone, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If either of the following criteria is exceeded in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be implemented:

- Sustained organic vapor levels approaching 1 ppm above background for a period of more than 30 minutes; or
- Organic vapor levels greater than 5 ppm above background for any time period.

Upon activation, the following activities shall be undertaken as part of the Major Vapor Emission Response Plan:

- The NYSDEC, NYSDOH, and local police authorities will be immediately contacted by the SSO and advised of the situation;
- Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Site Health and Safety Officer; and
- All Emergency contacts will go into effect as appropriate.
- All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review.

2.4 Reporting

CAMP summary reports will be prepared and submitted to NYSDEC and NYSDOH for review as part of the daily reports. In the event there is an action level exceedance or complaint, NYSDEC and NYSDOH will be notified within 24 hours (same day to the extent possible) of the exceedance or complaint. The notification will include a description of the exceedance or complaint, the cause of the exceedance, and any corrective actions taken. All recorded CAMP data will be included in the RIR.

APPENDIX D
PREVIOUS ENVIRONMENTAL REPORTS

Environmental, Planning, and Engineering Consultants
440 Park Avenue South
7th Floor
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191
www.akrf.com

June 16, 2021

Mr. Emanuel Kokinakis
Development Manager
Mega Development LLC
48-02 25th Avenue, Suite 400
Astoria, New York 11103

Re: **Phase I Environmental Site Assessment**
31-07 31st Street
Astoria, New York
AKRF Project Number 210124

Dear Mr. Kokinakis:

AKRF, Inc. (AKRF) is pleased to submit this Phase I Environmental Site Assessment Report for the above-referenced Property. This report includes the findings of a reconnaissance of the Property, an evaluation of readily available historical information and selected environmental databases and electronic records. AKRF met the requirements of the American Society for Testing and Materials (ASTM) as established by ASTM Standard E1527-13 unless noted otherwise in Section 9.0: "Limitations and Data Gaps".

We appreciate the opportunity to provide you with our services. If you should have any questions, please do not hesitate to contact Deborah at 646-388-9544.

Sincerely,
AKRF, Inc.

Deborah Shapiro, QEP
Sr. Vice President

EXECUTIVE SUMMARY

AKRF, Inc. (AKRF) was retained by Mega Development LLC to prepare a Phase I Environmental Site Assessment (ESA) of 31-07 31st Street, located in Astoria, Queens (the "Property"). The Property was identified as Queens Tax Block 611, Lot 25. The Property was generally bounded by commercial units to the north, residential/institutional units to the south, commercial/residential units and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1). The Property consisted of an existing 20,880 square-foot municipal parking facility.

The greater surrounding area was primarily commercial/retail with some residential and transit uses. The objective of this assessment was to identify any potential environmental concerns associated with the Property resulting from past or current usage of the Property or neighboring properties.

This Phase I Environmental Site Assessment was performed in conformance with ASTM Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice*. Any exceptions to, or deletions from, the Standard and/or data gaps are described in Section 9.0. The term "Recognized Environmental Condition" (REC) means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The Standard also includes definitions of Historic REC (HREC), Controlled REC (CREC), and *De Minimis* Condition. A *De Minimis* Condition is defined as an environmental concern that is not a threat to human health or the environment and would not be subject to enforcement action.

A Tier 1 Vapor Encroachment Screen was also conducted in accordance with ASTM Standard E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. The term "Vapor Encroachment Condition" (VEC) means the presence or likely presence of vapors from chemicals of concern (COC) in the subsurface of a property caused by the release of vapors on or near the property.

A summary of the assessment findings is presented below:

Recognized Environmental Conditions (RECs)/Vapor Encroachment Conditions (VECs)

- One groundwater monitoring well was observed on 31st Street sidewalk west-adjacent of the Property.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry cleaning uses in the surrounding area.

Business Environmental Risks (including items outside the scope of ASTM E1527-13 such as asbestos containing material [ACM], lead-based paint [LBP] and/or polychlorinated biphenyls [PCBs] in building materials or fill/debris)

- Buried demolition debris from former on-site structures could contain ACM, LBP, PCBs and/or underground storage tanks.

De minimus

- Three five-gallon containers of orphan waste were located on the southeaster-most corner of the Property. Two of the three containers were labeled as kerosene and lacquer; the third container was unmarked. These containers should be removed from the Property and properly disposed of in accordance with federal, state, and local requirements.

Recommendations

- A subsurface (Phase II) investigation should be conducted at the Property to investigate the identified RECs/VECs.

- During any future subsurface disturbance, excavated soil should be handled and disposed of in accordance with all applicable regulatory requirements, with testing as required. Any evidence of a petroleum spill must be reported to the NYSDEC and addressed in accordance with applicable requirements. If any tanks are encountered, they should be properly assessed, closed, and removed in accordance with federal, state, and local regulations. Transportation of material leaving the Property for off-site disposal should be in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc.
- If dewatering is required during future construction activities, water must be discharged in accordance with the New York City Department of Environmental Protection (NYCDEP) requirements.
- Any activities with the potential to disturb LBP must be performed in accordance with applicable requirements (including federal Occupational Safety and Health Administration regulation 29 CFR 1926.62 - Lead Exposure in Construction) and NYC Local Laws regarding tenant notification, contractor licensing, abatement procedures, etc. Additional requirements, even if no disturbance is planned (e.g., tenant notification, inspections, contractor licensing, and abatement) apply to occupied residential buildings.
- Unless there is labeling or test data that indicates that fluorescent lights and other electrical equipment are not mercury- and/or PCB-containing, if disposal is required, it should be performed in accordance with applicable federal, state, and local regulations and guidelines.
- Any suspect ACM- containing material and/or LBP encountered during excavation should be properly characterized, managed and disposed of in accordance with applicable regulations.

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Figure 1 - Property Location

Figure 2 - Property Detail

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Appendix B - Historical Sanborn Maps

Appendix C - City Directories

Appendix D - Regulatory Records Review

Appendix E - Local Records and FOILs

Appendix F – User Questionnaire

1.0 INTRODUCTION

AKRF, Inc. (AKRF) was retained by Mega Development LLC (User or Client) to prepare a Phase I Environmental Site Assessment (ESA) of 31-07 31st Street, located in Astoria, Queens (the "Property"). The Property was identified as Queens Tax Block 611, Lot 25. The Property was generally bounded by commercial units to the north, residential/commercial units to the south, commercial/residential units and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1). The Property consisted of an existing approximately 0.5-acre municipal parking facility (as shown on Figure 2).

The objective of this assessment was to identify any potential environmental concerns associated with the Property resulting from past or current usage of the Property or surrounding properties.

The scope of services for this assessment was in conformance with ASTM Standard E1527-13 (*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice)* and ASTM Standard E2600-15 (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*). Any exceptions to, or deletions from, this practice are described in Section 9.0. The scope included the following:

- Observations of accessible portions of the Property (reconnaissance) to identify potential sources or indications of hazardous substances, including: aboveground storage tanks (ASTs); underground storage tanks (USTs); tank vents and fill ports; transformers and other items that could contain polychlorinated biphenyls (PCBs), drums or areas where hazardous materials were used, stored, or disposed; stained surfaces and soils; leaks; odors. In addition, neighboring properties were viewed, but only from public rights-of-way, to identify similar concerns.
- Readily available geological and groundwater (hydrogeological) information was evaluated to assist in determining the potential for contamination migration (including in soil, soil vapor and/or groundwater) within, from and onto the Property.
- The reconnaissance of accessible portions of the Property included observation of any readily visible suspect asbestos-containing materials (ACMs) and potential lead-based paint (LBP). However, no samples were collected or analyzed as part of reconnaissance and this reconnaissance provides neither definitive nor exhaustive information.
- A state database of county-level radon concentrations was used to determine typical indoor radon levels and compare them to United States Environmental Protection Agency (USEPA) guidelines.
- Historical land use maps for the Property and nearby sites were reviewed to evaluate historical land uses.
- The following federal regulatory databases were reviewed to determine the regulatory status of the Property and other properties within the ASTM-defined radii: the National Priority List (NPL); Superfund Enterprise Management System (SEMS), including Superfund Enterprise Management System Archive (SEMS-ARCHIVE); Comprehensive Environmental Response, Compensation, and Liability Information System-No Further Remedial Action Planned (CERCLIS-NFRAP); Corrective Actions Report (CORRACTS); Resource Conservation and Recovery Information System (RCRIS); and Emergency Response Notification System (ERNS). Federal ASTM supplemental records reviewed included: Toxic Chemical Release Inventory System (TRIS); Superfund Consent Decrees (CONSENT); Records of Decision (ROD); National Priority List Deletions (Delisted NPL); and United States Brownfields.
- The following state regulatory databases were reviewed to determine the regulatory status of the Property and other properties within predetermined radii: petroleum and hazardous material spills

(SPILLS); Leaking Underground Storage Tanks (LTANKs); Chemical Bulk Storage (CBS); Solid Waste Facilities (SWF); Petroleum Bulk Storage (PBS); State Inactive Hazardous Waste Disposal Sites (SHWS); Hazardous Substance Waste Disposal Site Inventory (HSWDS); Major Oil Storage Facilities (MOSF); Environmental Restoration Program (ERP); Voluntary Cleanup Program (VCP); and New York Brownfield Cleanup Program (BCP).

- Local agency reviews including online Buildings and Finance Departments records and Environmental Quality Review (CEQR) E Designation-sites were conducted for the Property only.
- Review of historic reports including non-ASTM scope items.

2.0 PHYSICAL SITE DESCRIPTION

Visual inspection of the Property was performed on May 4, 2021 by Ms. Elizabeth Baird of AKRF. Ms. Baird was not accompanied by a Client representative during the inspection. At the time of the inspection, the weather was partly cloudy and approximately 65ºF with generally good visibility. The majority of the parking spaces were occupied and surface conditions of the Property were not fully visible during inspection.

The Property was inspected for the presence of stained surfaces and soil, evidence of storage tanks, drums, leaking pipes, transformers, and any other evidence of hazardous material usage and storage on-site. Neighboring properties were also viewed, but only from public rights-of-way. Photographs documenting the inspection are included in Appendix A.

2.1 General Site Conditions

The Property consisted of an approximately 20,880 square foot municipal parking facility for short-term parking. The Property was generally bounded by commercial/retail units to the north, residential/commercial units to the south, residential units and 32nd Street to the east, and 31st Street/an elevated subway station to the west.

The parking facility was comprised of an at-grade asphalt paved parking lot with 60 parking spaces and two pay stations. The asphalt pavement was in poor condition with cracking, patches, and petroleum-like staining observed. Several pole lights, steel traffic bollards, and guard rails were observed on the Property. No other above-grade structures were observed on the Property.

Three apparent storm drains were observed and were presumably connected to the municipal sewer system. Utility manholes were observed along 31st Street and 32nd Street.

Three five-gallon containers of orphan waste were observed in the southeastern-most corner of the Property. Two of the containers were labeled as kerosene and lacquer; the remaining container was unmarked. One trash can, containing household waste, was located on the Property.

No pits, ponds, or lagoons exhibiting evidence (e.g., discolored water, distressed vegetation, obvious wastewater discharge) of holding liquids or sludge containing hazardous substances or petroleum products were observed on the Property. One groundwater monitoring well was observed in the eastern sidewalk along 31st Street, along the western Property boundary. A second monitoring well was observed in the sidewalk of the west-adjacent Property block.

2.2 Topography and Hydrogeology

Based on the U.S. Geological Survey, Central Park, New York 2013 Quadrangle map, the Property lies at approximately 49 feet above mean sea level, with the general surrounding area topography gently sloping down in a westerly direction towards the East River. The East River is located approximately one mile west of the Property.

Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River; however, actual groundwater flow at the Property can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Property. Groundwater in Queens is not used as a source of potable water.

2.3 Storage Tanks

2.3.1 Underground Storage Tanks (USTs)

During the Property inspection, no evidence, such as manways, vent pipes, or dispenser equipment, was observed that would indicate past or present USTs at the Property. NYC Department of Buildings (NYCDOB) records did not indicate any USTs on the Property.

Off-site USTs are discussed in Section 5.2.2.

2.3.2 Aboveground Storage Tanks (ASTs)

No evidence, such as tanks or vaults likely to contain tanks, vent pipes or fill caps, was observed during the reconnaissance to indicate that ASTs are or were present. NYCDOB records did not indicate any records of ASTs at the Property.

Off-site ASTs are discussed in Section 5.2.2.

2.4 Polychlorinated Biphenyls (PCBs)

Until 1979, polychlorinated biphenyls (PCBs), which provided beneficial insulating properties, were used in a variety of products, in particular electrical equipment such as transformers, capacitors, fluorescent light fixtures, and voltage regulators, but also in hydraulic fluids and some other products such as caulking.

No suspect PCB-containing equipment was identified, and no obvious leaks or odors were noted at the Property.

2.5 Lead-Based Paint (LBP)

Although use of lead-based paint (LBP) has diminished since the 1960s, LBP may still sometimes be used outdoors. Lead-based paint can present a hazard, particularly to children, especially when it is in poor condition.

Painted surfaces on the Property were observed to be in generally good to fair condition, with some damaged paint noted on the steel traffic bollards. Any renovation activities with the potential to disturb lead-based paint must be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62—Lead Exposure in Construction).

2.6 Utilities

Consolidated Edison provided electricity to the Property and electricity and natural gas to the surrounding area. The Property was connected to the New York City municipal water and sewer systems.

2.7 Waste Management and Chemical Handling

General refuse generated at the Property was presumably removed by the NYC Department of Sanitation. No evidence of current on-site hazardous waste operations was observed during the site reconnaissance.

2.8 Radon

Radon is a colorless, odorless gas most commonly produced by the natural radioactive decay of certain rocks. According to a New York State Department of Health database, 563 radon tests were conducted in Queens in December 2020. The average basement radon level was found to be 1.22 picoCuries per liter (pCi/L), below the USEPA recommended action level of 4.0 pCi/.

3.0 ASBESTOS-CONTAINING MATERIAL (ACM)

Asbestos refers to a group of natural minerals that provide good fire resistance and insulation. Asbestos is also commonly found in vinyl flooring, plaster, drywall, joint compound, ceiling tiles, roofing materials, gaskets, mastics, caulks and other products. Materials containing more than one percent asbestos are considered asbestos-containing materials (ACM). ACM are classified as either friable (i.e., more readily release fibers, such as most spray-applied fireproofing) or non-friable (such as floor tiles).

Suspect ACM was not observed during the reconnaissance. However, this reconnaissance did not constitute and cannot substitute for an asbestos survey, which includes comprehensive inspection and material sampling with laboratory testing.

Regulatory requirements for ACM (or suspect ACM until proven not to be ACM) include maintaining the materials in good condition and, prior to any renovation or demolition, inspection/sampling by a NYC-certified asbestos investigator to determine whether the project will disturb ACM. Any ACM that would be disturbed by the renovation or demolition must be properly removed prior to such activity.

4.0 ADJACENT LAND USE

The Property was abutted to the north by commercial/retail units, followed by Broadway; to the west by 31st Street and an elevated subway station, followed by commercial/retail and residential units; to the south by residential units and the Cretans Association Omonia, Inc. Cultural Facility, followed by retail and commercial units; and to the east by residential units and 32nd Street. The greater surrounding area was primarily commercial/retail, residential and transit uses.

5.0 PROPERTY HISTORY AND RECORDS REVIEW

5.1 Prior Ownership and Usage

5.1.1 Historical Land Use Maps

Historical maps were reviewed for indications of uses (or other evidence) suggesting hazardous materials generation, usage or disposal on or near the Property. Specifically, Sanborn Fire Insurance Maps from 1898, 1915, 1936, 1948, 1950, 1967, 1977, 1979, 1981, 1985, 1986, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1999, 2001, 2002, 2003, 2004, 2005, and 2006. Copies of the maps are provided in Appendix B.

1898

Property:

The Property was depicted as multiple vacant lots with one dwelling and associated shed located on the northern portion of the Property.

Surrounding Properties:

The surrounding properties were primarily vacant lots and some residential dwellings. The William H. Siebrecht Florist Greenhouses were identified north of Broadway between 30th and 31st Streets.

1915

Property:

The Property remained primarily vacant. The previously identified dwelling and shed were replaced with a new dwelling and shed located in the northwestern portion of the Property.

Surrounding Properties:

The surrounding areas were further developed as mostly residential with some commercial uses. A beer bottling and wagon shed was identified on the north-adjacent Property block. Retail stores and wagon sheds were identified on the northwest-adjacent Property block.

1936

Property:

The Property remained mostly unchanged from the 1915 map except for the addition of a one-car garage to the east of the previously identified dwelling.

Surrounding Properties:

The surrounding areas were further developed with residential apartment buildings and rowhouse dwellings as well as commercial uses. A two-story building with shops, a bowling alley, and offices was noted north-adjacent to the Property. The elevated Broadway Subway Station was identified running north-south along 31st Street. The previously identified beer bottling and wagon shed was noted as retail stores. The Broadway Theater Moving Picture Studio was identified north of Property at the intersection of Broadway and 32nd Street. A garage with a gasoline tank and auto repair shop with three adjacent gasoline tanks were noted northwest of the Property at the intersection of Broadway and 29th Street.

1948

Property:

The Property remained mostly unchanged from the 1936 map.

Surrounding Properties:

The surrounding areas continued to develop with more residential (i.e., apartment buildings and rowhouses) and commercial/retail uses. The previously identified William H. Siebrecht Florist Greenhouses were now noted as residential dwellings. The previously identified Broadway Theater Moving Picture Studio and the auto garage and repair shop with gasoline tanks remained unchanged from the 1936 map.

1950

Property:

The Property remained mostly unchanged from the 1948 map except for the configuration and number of the property lot lines, which was reduced to five.

Surrounding Properties:

The surrounding area remained mostly unchanged from the 1948 map. The previously identified auto repair shop and nearby gasoline tanks were no longer depicted northwest of the Property.

1967-1977

Property:

The Property remained unchanged from the 1950 map.

Surrounding Properties:

The surrounding area remained mostly unchanged from the 1950 map. A filling station was identified north-northeast of the Property on 31st Street. A commercial building was identified south-adjacent to the Property. A mechanic's shop and warehouse was identified southwest of the Property along 31st Street between Broadway and 34th Avenue. A dry cleaners was identified along Broadway between 32nd and 33rd Streets, northeast of the Property. The building previously identified as Broadway Theater Moving Picture Studio was no longer identified as such. The eastern-most portions of the 1967 and 1977 maps were indiscernible due to poor image quality.

1979-1986

Property:

The previously identified dwelling was no longer depicted on the Property. The previously identified one-car garage remained on the Property. The western portion of the Property was identified as parking.

Surrounding Properties:

The Property block and surrounding areas remained mostly unchanged, with minimal changes in commercial and residential uses.

1988-1989

Property:

The previously identified one-car garage was no longer identified on the map and the entirety of the Property was labeled as parking.

Surrounding Properties:

The Property block and surrounding areas remained mostly unchanged, with minimal changes in commercial and residential uses.

1990

Property:

The Property remained unchanged from the 1988-1989 maps.

Surrounding Properties:

The previously identified mechanic's shop was noted as a fitness center; the neighboring mechanic's warehouse remained unchanged. The surrounding areas remained mostly unchanged, with minimal changes in commercial and residential uses.

1991-2006

Property:

The Property remained unchanged from the 1990 map.

Surrounding Properties:

The Property block and surrounding areas remained mostly unchanged, with minimal changes in commercial and residential uses.

In summary, historical Sanborn maps indicated that the Property was developed as a residential dwelling from at least 1898 to 1979. The Property was developed in its current configuration as a parking facility by 1988.

Sanborn maps identified primarily residential and commercial uses adjacent to the Property and in the surrounding area. Some of the pertinent commercial listings between circa 1936 and 2006 included: a filling station located north-northeast of the Property; a garage and auto repair shop with gasoline tanks located northwest of the Property; a dry cleaners located northeast of the Property; and a machine shop and warehouse located southwest of the Property.

5.1.2 Property Tax Files and Zoning Records

Based on NYC Department of City Planning's Zoning Map information, the Property was zoned C1-2 (Commercial District Overlay) and R5 (Residential).

5.1.3 Recorded Land Title Records

Copies of title records were not provided to AKRF for review. A review of computerized New York City Automated City Register Information System (ACRIS) records, which included records of financial transactions involving the Property, identified no environmental liens for the Property.

5.1.4 Local Street Directories

A City Directory prepared by Environmental Data Resources, Inc. (EDR) was reviewed as part of this Phase I ESA. The City Directory consisted of the names of businesses located on-site and in adjacent properties, compiled from city and reverse telephone directories at approximately five-year intervals starting in 1920. A summary of the directory findings is below:

The Property was listed in the City Directory in 1934, 1945, 1967, 2000, and 2005; all occupants identified were residential occupants. No occupants indicating non-residential use were listed.

In the surrounding areas, the directories identified mainly residential uses, with some proximal commercial uses, including:

- TR Service Station at 31-70 31st Street (located north-northeast of the Property) in 1962, 1967, 1970, and 1983.
- Riteway/Bartley's Service Station at 32-02 30th Street (located southwest of the Property) in 1939 and 1962.
- Brighton Cleaners/City Cleaners at 31-84 33rd Road/31-85 33rd Street/33-14 Broadway (located northeast of the Property) in 1934, 1939, 1945, 1962, 1994, 2004, 2005, 2014, and 2017.
- Minerva Cleaners at 31-89 29th Street/29-09 Broadway (located northwest of the Property) in 1970, 1994, 2004, 2005, 2009, 2014, and 2017.
- Jeon's Cleaners/Renee French Cleaners at 30-08 Broadway (located north-northwest of the Property) in 1962, 1994, 2004, 2005, 2009, and 2017.
- United Cleaners at 30-02 and 30-06 Broadway (located north-northwest of the Property) in 1934.
- D&F Cleaners at 33-12 Broadway (located east of the Property) in 1934.
- World Cleaners at 32-08 Broadway (located east of the Property) in 2005 and 2009.
- Roosevelt Cleaners at 30-17 Broadway (located north of the Property) in 1962.
- M&M Auto Service at 31-73 31st Street (located northwest of the Property) in 1939.

Given their locations, the above-listed facilities have some potential to have affected the Property subsurface.

The City Directory search results are included in Appendix C.

5.2 Regulatory Review

EDR of Shelton, Connecticut, was contracted to obtain information regarding the regulatory status of the Property and the surrounding area. This information included records from databases maintained by the USEPA and New York State Department of Environmental Conservation (NYSDEC). AKRF reviewed these records to identify the use, generation, storage, treatment and/or disposal of hazardous material and chemicals, or releases of such materials which may impact the project site. All applicable regulatory databases meet ASTM guidelines requesting utilization of information within 90 days' receipt from the appropriate agency. Copies of the pertinent sections of the EDR report are included in Appendix D.

5.2.1 Federal

Federal ASTM standard records reviewed included: the National Priority List (NPL); Superfund Enterprise Management System (SEMS), including Superfund Enterprise Management System Archive (SEMS-ARCHIVE); Comprehensive Environmental Response, Compensation, and Liability Information System-No Further Remedial Action Planned (CERCLIS-NFRAP); Corrective Actions Report (CORRACTS); Resource Conservation and Recovery Information System (RCRIS); and Emergency Response Notification System (ERNS).

Federal ASTM supplemental records reviewed included: Toxic Chemical Release Inventory System (TRIS); Superfund Consent Decrees (CONSENT); Records of Decision (ROD); National Priority List Deletions (Delisted NPL); and United States Brownfields.

National Priority List (NPL)

The NPL is the USEPA's database of some of the most serious uncontrolled or abandoned hazardous waste sites identified for probable remedial action under the Superfund Program. These sites may constitute an immediate threat to human health and the environment. Due to the amount of public attention focused on NPL sites, they pose a significant risk of stigmatizing surrounding properties and potentially impacting property values.

The Property was not listed on the NPL database. No NPL sites were identified within a one-mile radius of the Property.

Superfund Enterprise Management System (SEMS), including Superfund Enterprise Management System Archive (SEMS-ARCHIVE)

The SEMS (formerly known as CERCLIS) list is a compilation of known and suspected uncontrolled or abandoned hazardous waste sites which are, or were, under investigation by USEPA but have not been elevated to the status of a Superfund (NPL) site. Former CERCLIS sites that have been granted the status of No Further Remedial Action Planned (NFRAP), currently known as Superfund Enterprise Management System Archive (SEMS-ARCHIVE) sites, are also included in this database.

The Property was not listed on the SEMS or SEMS-ARCHIVE databases. No SEMS or SEMS-ARCHIVE were identified within a ½-mile radius of the Property.

Corrective Actions Report (CORRACTS)

The CORRACTS database identifies hazardous waste handlers with RCRA corrective action activity.

The Property was not listed on the CORRACTS database. No CORRACTS sites were identified within a one-mile radius of the Property.

Resource Conservation and Recovery Information System (RCRIS)

This database lists sites that have filed notification forms regarding hazardous waste activity, including: treatment, storage and disposal facilities (TSDs); very small quantity generators (VSQG), small quantity generators (SQG), and large quantity generators (LQG); and transporters regulated under RCRA.

The Property was not listed on RCRIS databases. No TSD or LQG facilities were identified within a ½-mile radius of the Property.

One SQG and two VSQG facilities were identified within a ⅛-mile radius of the Property. Of these, the following facilities has some limited potential to have affected environmental conditions at the Property:

- Rite Aid Store No. 10569, located at 32-14 31st Street, approximately 100 feet west of the Property, was listed as a conditionally exempt small quantity generator of wastes associated with photograph development activities and pharmaceutical handling activities.
- The New York City Transit (NYCT) Elevated Subway Station, located at 31st Street and Broadway, approximately 140 feet north-northeast of the Property, was listed as a small quantity generator of lead in 2015.
- Brighton Cleaners, located at 33-14 Broadway, approximately 453 feet northeast of the Property, was listed as a conditionally exempt small quantity generator of spent halogenated solvents in 2006 and 2007 and as a small quantity generator in 1987.

Details of the listings are included in Appendix F.

Emergency Response Notification System (ERNS)

This federal database, compiled by the Emergency Response Notification System, records and stores information on certain reported releases of petroleum and other potentially hazardous substances.

No ERNS listings were identified at the Property.

Toxic Chemical Release Inventory System (TRIS)

The TRIS contains information reported by a variety of industries on their annual estimated releases of certain chemicals.

The Property was not identified on the TRIS database. No TRIS sites were identified within a ⅛-mile radius of the Property.

Superfund Consent Decrees (CONSENT)

Superfund consent decrees are major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. These decrees are periodically released by the United States District Courts after settlement by parties to litigation matters.

The Property was not listed on the CONSENT database. No CONSENT sites were identified within a one-mile radius of the Property.

Records of Decision (ROD)

ROD documents mandate permanent remedies at NPL sites, and contain technical and health information to aid in the cleanup.

The Property was not listed on the ROD database. No ROD sites were identified within a one-mile radius of the Property.

National Priority List Deletions (Delisted NPL)

This database described former NPL sites that are removed from the NPL list by the US EPA. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establish the criteria used by the EPA to delist sites where no further federal response is needed.

The Property was not listed on the delisted NPL database. No delisted NPL sites were identified within a one-mile radius of the Property.

US Brownfields

The US Brownfields program is for properties that report cleanups to the EPA and are served by Brownfields grant programs.

The Property was not listed on the US Brownfields database. No US Brownfields sites were identified within a ½-mile radius of the Property.

5.2.2 State

The state records reviewed included the listings of hazardous material spills (SPILLS); Leaking Underground Storage Tanks (LTANKs); Chemical Bulk Storage (CBS); Solid Waste Facilities (SWF); Petroleum Bulk Storage (PBS); State Inactive Hazardous Waste Disposal Sites (SHWS); Hazardous Substance Waste Disposal Site Inventory (HSWDS); Major Oil Storage Facilities (MOSF); Environmental Restoration Program (ERP); Voluntary Cleanup Program (VCP); and New York Brownfield Cleanup Program (BCP).

New York State Spills Information Database (NY Spills)/Leaking Underground Storage Tanks (LTANKs)

This database includes releases reported to the NYSDEC, including tank test failures (for USTs only) and tank failures.

The Property was not listed within the NY Spills and LTANKS listings. A total of 282 spills, which included 52 leaking tanks, were reporting on surrounding properties within a ½-mile radius. Based on their proximity (within approximately 400 feet), assumed hydraulic relationships, and/or listing details, the following listings have some limited potential to affect subsurface conditions at the Property:

- NYSDEC Spill No. 0512053 was reported at 32-16 33rd Street, approximately 214 feet east-northeast of the Property, and involved a leaking fuel oil AST (presumably with a capacity of 275 gallons) in a residential basement. According to the spill report, following a 230-gallon oil delivery, the entire contents of the tank were released to concrete and soil within the basement. Approximately 17 cubic yards of soil were excavated; however, residual contamination was documented via endpoint sampling. A passive venting system was installed at the property and the spill was closed in 2006.
- NYSDEC Spill Nos. 8903296, 9003215, and 0613804 were reported at 31-70 31st Street, approximately 446 feet north-northeast of the Property and were related to an auto service station with several USTs. According to the information provided in the spill listings, petroleum product was identified in an on-site groundwater monitoring well in 1990; no additional details regarding remediation was provided.

  The listing also reported that several USTs (quantity unknown) were removed and replaced at the site circa 1999, following a tank test failure. Information regarding the tank removals was not provided to NYSDEC and therefore, NYSDEC required further assessment of the site. A Phase II ESA was performed at the site in 2006; the assessment did not encounter petroleum-impacted soils or groundwater and NYSDEC subsequently issued a "No Further Action". In 2007, two 4,000-gallon USTs, six previously unidentified 550-gallon USTs, two pump islands, and associated piping were removed from the site. During tank removal activities,

impacted soil was encountered and approximately 270 tons of petroleum-contaminated soil were excavated from the site. No further investigation or remediation was required and NYSDEC closed the spill in 2007. According to the Petroleum Bulk Storage (PBS) listing, it was reported that the two 4,000-gallon tanks had been converted to non-regulated use. See the PBS Database summary below for additional details.

Based on their locations, assumed hydraulic relationships, and/or listing details, the remaining listings are not likely to have significantly affected subsurface conditions at the Property. Details for all listed NY Spills and LTANKS sites are included in Appendix D.

Chemical Bulk Storage (CBS) Database

The New York CBS is a list of facilities that store regulated non-petroleum substances in aboveground tanks with capacities greater than 185 gallons and/or in underground tanks of any size.

The Property was not listed on the CBS database. No CBS facilities were identified within a ⅛-mile radius of the Property.

Solid Waste Facilities/Landfill Sites (SWF/LF)

The SWF/LF database is a comprehensive listing of state permitted/recorded solid waste management facilities including certain landfills, incinerators, transfer stations, recycling centers, and other sites which manage solid waste.

The Property was not listed in the SWF/LF database. No SWF/LF facilities were identified with a ½-mile radius of the Property.

Petroleum Bulk Storage (PBS) Database

This database lists facilities that registered having either aboveground or underground petroleum tanks with total storage exceeding 1,100 gallons. Facilities with more than 400,000 gallons appear on the Major Oil Storage Facilities (MOSF) database (see below).

Thirty PBS facilities were identified within a ⅛-mile radius of the Property. Of these, the following facilities have some limited potential to have affected environmental conditions at the Property:

Table 1
Area Petroleum Bulk Storage Facility Data

Location	Capacity (gallons)	Product Stored	Status	Distance/Direction from the Property
34-04/08 Broadway	1 x 1,500 AST	No. 2 Fuel Oil	Closed - removed in 2012	140 feet east
30-18 Broadway	1 x 3,000 AST	No. 2 Fuel Oil	Active	147 feet north
31-01 Broadway	1 x 1,500 UST	No. 2 Fuel Oil	Closed - removed in 1990	184 feet north-northeast
30-02 Broadway	1 x 3,000 AST	No. 2 Fuel Oil	Active	197 feet north-northwest
32-12 Broadway	1 x 1,500 UST	No. 2 Fuel Oil	Closed - in place in 1991	197 feet east
31-11 Broadway	1 x 2,000 UST	No. 2 Fuel Oil	Active	200 feet northeast
32-15 30th Street	1 x 3,000 AST	No. 2 Fuel Oil	Active	238 feet northwest
31-77 32nd Street	1 x 5,000 AST	No. 2 Fuel Oil	Active	340 feet east-northeast
32-42 33rd Street	1 x 5,000 UST	No. 6 Fuel Oil	Active	352 feet south-southeast
31-70 31st Street	2 x 4,000 UST	Gasoline	Converted to Non-regulated Use (According to the LTANLKS/SPILLS listings, these tanks, along with six 550-gallon USTs were removed in 2007)	446 feet north-northeast

Based on listing details, distance from the Property and/or inferred groundwater flow direction, the remaining listings would not be expected to have significantly affected the Property.

Details of all PBS listings are included in Appendix D.

State Inactive Hazardous Waste Disposal Site Registry (SHWS)

This program, also known as State Superfund, lists information regarding a variety of sites likely requiring cleanup.

The Property was not listed on the SHWS database. Eleven SHWS sites were identified within a one-mile radius of the Property. Of these, the following listing has some limited potential to have affected environmental conditions at the Property:

- An auto repair facility, located at 34-14 31st Street, approximately 808 feet southwest of the Property, was listed in the database as a 4,000-square foot facility which had operated as an auto repair shop since at least 1936. Elevated concentrations of the volatile organic compounds (VOCs) tetrachloroethylene (PCE) and metals (lead, mercury, and nickel) were detected in site soils. PCE and trichloroethene (TCE) were detected at elevated concentrations in sub-slab vapor samples. Groundwater was not encountered during the remedial investigation. Remediation at this site has been completed; no information regarding the nature and extent of the remediation was provided in the database listing.

Based on the distance from the Property and/or presumed hydraulic relationship, the other facilities are not anticipated to have affected subsurface conditions at the Property.

Details of the SHWS listing are included in Appendix D.

Hazardous Substance Waste Disposal Site Inventory (HSWDS)

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that USEPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites.

The Property was not listed on the HSWDS database. No HSWDS sites were identified within a ½-mile radius of the Property.

Major Oil Storage Facilities (MOSF) Database

These facilities have petroleum storage of 400,000 gallons or more.

The Property was not listed on the MOSF database. No MOSF facilities were reported within a ⅛-mile radius of the Property.

Environmental Restoration Program (ERP)

These sites (which are generally municipally-owned) are receiving New York State funding for site investigation and remediation. Some sites in this program have known contamination, whereas others have not had sufficient investigation to determine whether contamination is present.

The Property was not listed on the ERP database. No ERP sites were identified within a ½-mile radius of the Property.

Voluntary Cleanup Program (VCP)

The VCP is a NYSDEC program for investigation and remediation of (generally) privately-owned sites. Some sites in this program have known contamination, whereas others have not had sufficient investigation to determine whether contamination is present.

The Property was not listed on the VCP database. One VCP site, the Levco Metals Finishers site, was identified within a ½-mile radius of the Property. The Levco Metals Finishers site was located at 34-11 36th Street, approximately 2,000 feet south of the Property. Based on the distance from the Property and the presumed hydraulic relationship, this facility is not anticipated to have affected subsurface conditions at the Property.

Details of the VCP listing are included in Appendix D.

Brownfield Cleanup Program (BCP)

The BCP is a NYSDEC program and is the successor to the VCP. Some sites have known contamination, whereas others have not had sufficient investigation to determine whether contamination is present.

The Property was not listed on the BCP database. One BCP site, Teitelbaum Dry Cleaning, Inc., was identified within a ½ -mile radius of the Property. The Teitelbaum Dry Cleaning site is located at 35-45 35th Street, approximately 2,000 feet south of the Property. Based on the distance from the Property and the presumed hydraulic relationship, this BCP site is not anticipated to have affected subsurface conditions at the Property.

Details of the BCP listing are included in Appendix D.

New York City E-Designation Site Listing

A New York City "E" designation for a property requires that the fee owner of the site conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYC Office of Environmental Remediation (OER) before the issuance of a building permit by the NYC Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements).

The Property was not listed with an E-designation in the database information.

EDR US Historic Auto Station Listings

The EDR US Historic Auto Station database was researched to identify listings for the Property and within a ⅛-mile radius of the Property. This database lists properties that might include gas/filling station establishments based on EDR's search of select national business directories.

The Property was not listed on the historic auto stations database. One EDR historic auto station was identified within a ⅛-mile radius:

- TR Service Station/Sunoco Service Station, located at 31-70 31st Street, approximately 446 feet north-northeast of the Property.

Please refer to the SPILLS/LTANKS listings for further details on this site.

Manufactured Gas Plant (MGP) Sites (Coal Gas)

The EDR manufactured gas plant (MGP) database was researched to identify listings for the Property and facilities within a one-mile radius of the Property.

The Property was not listed on the MGP database. No MGP sites were identified within a one-mile radius of the Property.

Registered Dry Cleaners/EDR US Hist Cleaners

The registered dry cleaners database was researched to identify listings within ¼-mile of the Site. As a supplement to the registered dry cleaners database, EDR's proprietary listing of potential drycleaner sites (listings based on the opinion of EDR) was also reviewed.

The Property was not listed on the database. Six registered dry cleaners and four US EDR Historic Cleaners sites were listed within a ¼-mile radius of the Property. Of these, the following facilities have very limited potential to have affected environmental conditions at the Property:

- City/Brighton Cleaners, Inc., located at 33-14 Broadway, approximately 453 feet east-southeast of the Property, was listed as a dry cleaner and a dry cleaning plant, except rugs in the EDR historical cleaners records between the years of 1991 and 2012.
- Minerva Tailors and Cleaners, located at 29-09 Broadway, approximately 490 feet north-northwest of the Property, was listed as a dry cleaning drop shop. This facility was also listed as a garment pressing and cleaners' agent between the years of 1987 and 1991 and a dry cleaning plant, except rugs between the years of 1992 and 2014 in the EDR historical cleaners records.
- Jeon's Cleaners, located at 30-08 Broadway, approximately 182 feet north-northwest of the Property, was listed as a registered dry cleaning drop shop. This facility, also identified as 3008 Incorporated ERS/Renee French Cleaners, was

listed as a garment pressing and cleaners' agent between the years of 1987 and 2003 and as a cleaning service between the years of 2004 and 2014 in the EDR historical cleaners records.

- Market Supervisory Services, located at 29-10 Broadway, approximately 437 feet northwest of the Property, was listed as a garment pressing and cleaners' agent in 1997 in the EDR historical cleaners records.

Based on their distance from the Property and/or presumed groundwater flow, the remaining facilities are not anticipated to have affected subsurface conditions at the Property.

Details of the registered dry cleaners/EDR US historic cleaners listing are included in Appendix D.

5.2.3 Local Agency File Review

Records available online from the New York City Buildings and Finance Departments were viewed for the Property. Since the local records typically address a multitude of issues, the review focused on items likely to relate to the potential presence of hazardous materials, e.g., petroleum tank installation applications and permits, and records indicating prior uses. Copies of pertinent information are included in Appendix E (Buildings and Finance Department Records).

NYC Buildings Department (DOB)

Electronic NYCDOB records for the Property were reviewed to determine whether there were any references to buildings, tanks or other structures, property usage or inspection reports that may have indicated the presence, past use, or release of hazardous substances, wastes or petroleum products within the Property. A Certificate of Occupancy dated 1957 identified the Property usage as a parking lot. No additional pertinent environmental records were identified in the NYCDOB electronic files.

Land Title Records and Tax Records

Copies of title records were not provided to AKRF for review. A review of computerized New York City ACRIS records, which included records of financial transactions involving the Property, identified no environmental liens or use restrictions for the Property. No deed information was provided in the ACRIS files. Pertinent Property information obtained from the ACRIS files is summarized below:

Year	Land Title Records Information for the Property
1983	Deed for Block 611, Lot 25 Grantor is: Louise Tedeschi (Executor); Grantee is: Frederick Tedeschi and James Tedeschi
1997	Court Order for Block 611, Lots 25, 29, 31, and 32 Grantor is: James Tedeschi and Frederick Tedeschi; Grantee is the City of New York

New York City Department of Health and Mental Hygiene (NYCDOHMH)

AKRF sent a freedom of information law (FOIL) request to the NYCDOHMH for pertinent environmental records on April 29, 2021. On April 29, 2021, NYCDOHMH issued a response e-mail acknowledging the request.

To date, no response has been provided. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

New York City Department of Environmental Protection (NYCDEP)

AKRF sent a FOIL request to the NYCDEP on April 29, 2021. On April 29, 2021, NYCDEP issued a response e-mail acknowledging the request.

To date, no response has been provided. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

5.2.4 Additional Environmental Record Sources

To enhance the search, ASTM requires that additional local records be reviewed (i.e., beyond those included as part of the standard database search or checked online) when, in judgment of the environmental professional, such records for the Property or any adjoining property would be reasonably ascertainable; useful, accurate and complete in light of the objective of the records review. These records may include:

- Local Brownfields Lists
- Local Lists of Landfill/solid waste disposal sites
- Local Lists of Hazardous Waste/Contaminated Sites
- Local Lists of Registered Tanks
- Local Land Records (for activity use limitations)
- Records of emergency release reports
- Records of contaminated public wells

Sources for these records include:

- Department of Health/Environmental Division
- Fire Department
- Building Permit/Inspection Department
- Local/Regional Pollution Control Agency
- Local/Regional Water Quality Agency
- Local Electric Utility (for PCB records)

On April 29, 2021, AKRF sent FOIL requests to the following agencies requesting information pertaining to environmental records for the Property;

- Fire Department of the City of New York (FDNY)
- NYSDEC Region 2
- New York State Department of Health (NYSDOH)

To date, no responses have been provided. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

In addition, AKRF submitted a FOIL request to NYSDEC Region 2 regarding the former auto service station located at 31-70 31st Street, on the northwest-adjacent Property block. To date, no response has been provided. Additional information regarding this site is provided in Section 5.2.2.

In AKRF's judgment, no other local records meeting the ASTM criteria are pertinent for the Property.

6.0 USER-PROVIDED INFORMATION

In preparing this Phase I ESA, AKRF requested that the client provide any pertinent information regarding the Property, specifically:

- Whether any environmental liens or activity and land use limitations (AULs) are in place or filed or recorded against the Property?
- Whether they had any specialized knowledge or experience related to the Property or nearby properties (e.g., specialized knowledge of any chemicals used on-site)?
- Whether the (anticipated) purchase price reflects that the Property is or could be contaminated?
- Whether they were aware of commonly known or reasonably ascertainable information about environmental conditions of the Property?
- Whether they were aware of any obvious indicators of contamination at the Property?
- Whether they were aware of any pending, threatened, ongoing or past litigation/enforcement action/consent order/notice of violation related to hazardous substances or petroleum products?

Mr. Emanuel Kokinakis of Mega Development LLC completed a user questionnaire for the Property. Mr. Kokinakis was not aware/had no information on the status of any: environmental liens or activity use limitations on the Property; property value reduction due to environmental issues; any pending, threatened, ongoing or past litigation/enforcement action/consent order/notice of violation related to hazardous substances or petroleum products; or any obvious indicators of contamination on the Property. To the extent that pertinent additional information was provided, it has been summarized elsewhere in this report.

7.0 PREVIOUS STUDIES

No previous studies were provided for review.

8.0 VAPOR ENCROACHMENT SCREENING

A Tier 1 Vapor Encroachment Screening was conducted in accordance with ASTM Standard E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The term "Vapor Encroachment Condition" means the presence or likely presence of vapors from chemicals of concern (COC) in the subsurface of a Property caused by the release of vapors on or near the Property. The object of the Tier 1 screening is to conduct a screen for vapor encroachment based on findings from the Phase I ESA to determine if a possible VEC exists at the Property.

Based on AKRF's review of historical and regulatory database records, the following potential VECs were identified based on the Tier 1 Vapor Encroachment Screening:

- One groundwater monitoring well was observed on 31st Street sidewalk west-adjacent of the Property.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry cleaning uses in the surrounding area.

9.0 LIMITATIONS AND DATA GAPS

This assessment met the requirements of the American Society for Testing and Materials (ASTM) as established by ASTM Standard E1527-13 at the time it was performed, with the following limitations:

- Results of this investigation are valid as of the dates on which the investigation was performed.
- During the site reconnaissance, the majority of the parking spaces were occupied and surface conditions of the asphalt parking lot were not fully visible during inspection.
- Interviews and user-provided information were limited to those discussed in Section 6.0. To the extent that interviews were not conducted with the list of interviewees cited in the ASTM Standard (past and present owners, operators, and occupants of the Property and local government officials), AKRF does not believe that this represents a significant data gap likely to result in additional or significantly changed recognized environmental conditions or conclusions.
- The Property area history was not conducted in five-year intervals. However, sufficient information about the history of the site and surrounding area could be obtained from the available historical Sanborn maps, and this data gap is not likely to alter the conclusions of this report.
- Agency file reviews for the Property and adjacent properties consisted of a review of standard databases and electronic records maintained by pertinent departments and agencies (summarized in Section 5.2), as well as FOIL requests submitted to NYSDEC, NYCDEP, NYSDOH, and NYCDOH. AKRF believes that this file review was sufficient in determining the potential for recognized environmental conditions or other environmental concerns at the Property and additional reviews beyond this are not warranted and would not likely change the conclusions of this assessment.

10.0 CONCLUSIONS AND RECOMMENDATIONS

AKRF, Inc. was retained by Mega Development LLC to prepare a Phase I ESA of 31-07 31st Street, located in Astoria, Queens (the "Property"). The Property was identified as Queens Tax Block 611, Lot 25. The Property was generally bounded by commercial units to the north, residential/institutional units to the south, commercial/residential units and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1). The Property consisted of an existing 20,880 square-foot municipal parking facility.

The greater surrounding area was primarily residential and commercial/retail with some transit uses. The objective of this assessment was to identify any potential environmental concerns associated with the Property resulting from past or current usage of the Property or neighboring properties.

This Phase I Environmental Site Assessment was performed in conformance with ASTM Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice*. Any exceptions to, or deletions from, the Standard and/or data gaps are described in Section 9.0. The term "Recognized Environmental Condition" (REC) means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The Standard also includes definitions of Historic REC (HREC), Controlled REC (CREC), and *De Minimis* Condition. A *De Minimis* Condition is defined as an environmental concern that is not a threat to human health or the environment and would not be subject to enforcement action.

A Tier 1 Vapor Encroachment Screen was also conducted in accordance with ASTM Standard E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. The term "Vapor Encroachment Condition" (VEC) means the presence or likely presence of vapors from chemicals of concern (COC) in the subsurface of a property caused by the release of vapors on or near the property.

A summary of the assessment findings is presented below:

Recognized Environmental Conditions (RECs)/Vapor Encroachment Conditions (VECs)

- One groundwater monitoring well was observed on 31st Street sidewalk west-adjacent of the Property.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry cleaning uses in the surrounding area.

Business Environmental Risks (including items outside the scope of ASTM E1527-13 such as asbestos containing material [ACM], lead-based paint [LBP] and/or polychlorinated biphenyls [PCBs] in building materials or fill/debris)

- Buried demolition debris from former on-site structures could contain ACM, LBP, PCBs and/or underground storage tanks.

De Minimus

- Three five-gallon containers of orphan waste were located on the southeastern-most corner of the Property. Two of the three containers were labeled as kerosene and lacquer; the third container was unmarked. These containers should be removed from the Property and properly disposed of in accordance with federal, state, and local requirements.

Recommendations

- A subsurface (Phase II) investigation should be conducted at the Property to investigate the identified RECs/VECs.
- During any future subsurface disturbance, excavated soil should be handled and disposed of in accordance with all applicable regulatory requirements, with testing as required. Any evidence of a petroleum spill must be reported to the NYSDEC and addressed in accordance with applicable requirements. If any tanks are encountered, they should be properly assessed, closed, and removed in accordance with federal, state, and local regulations. Transportation of material leaving the Property for off-site disposal should be in accordance with federal, state, and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc.
- If dewatering is required during future construction activities, water must be discharged in accordance with the New York City Department of Environmental Protection (NYCDEP) requirements.
- Any activities with the potential to disturb LBP must be performed in accordance with applicable requirements (including federal Occupational Safety and Health Administration regulation 29 CFR 1926.62 - Lead Exposure in Construction) and NYC Local Laws regarding tenant notification, contractor licensing, abatement procedures, etc. Additional requirements, even if no disturbance is planned (e.g., tenant notification, inspections, contractor licensing, and abatement) apply to occupied residential buildings.
- Unless there is labeling or test data that indicates that fluorescent lights and other electrical equipment are not mercury- and/or PCB-containing, if disposal is required, it should be performed in accordance with applicable federal, state, and local regulations and guidelines.
- Any suspect ACM-containing material and/or LBP encountered during excavation should be properly characterized, managed and disposed of in accordance with applicable regulations.

11.0 SIGNATURE PAGE

I declare that, to the best of our professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property for which the assessment was performed. I have performed all the appropriate inquiries in conformance with standards and practices set forth in 40 CFR Part 312.



Deborah Shapiro, QEP
Senior Vice President

12.0 QUALIFICATIONS

The purpose of this assessment was to convey a professional opinion about the potential presence or absence of contamination, or possible sources of contamination on the Property, and to identify existing and/or potential environmental issues associated with the Property including *Recognized Environmental Conditions* as defined in ASTM Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice.*

The assessment was performed in accordance with customary principles and practices in the environmental consulting industry, and in accordance with the above-referenced ASTM Standard, except as noted otherwise in Section 8.0. It should only be used as a guide in determining the possible presence or absence of hazardous materials on the Property at the time of the reconnaissance, as it is based upon the review of readily available records relating to both the Property and to the surrounding area, as well as a visual reconnaissance of current conditions.

This Phase I Assessment is not, and should not be construed as, a guarantee, warranty, or certification of the presence or absence of hazardous substances, which can be made only with testing, and contains no formal plans or recommendations to rectify or remediate the presence of any hazardous substances which may be subject to regulatory approval. This report is not a regulatory compliance audit.

This report is based on services performed by AKRF, Inc. professional staff and observation of the Property and its surroundings. We represent that observations made in this assessment are accurate to the best of our knowledge, and that no findings or observations concerning the potential presence of hazardous substances have been withheld or amended. The research and reconnaissance have been carried to a level that meets accepted industry and professional standards. Nevertheless, AKRF and the undersigned shall have no liability or obligation to any party other than the Mega Development LLC and their successors or assignees, and AKRF's obligations and liabilities to the above, their successors or assignees is limited to fraudulent statements made, or grossly negligent or willful acts or omissions.

13.0 REFERENCES

1. Environmental Data Resources, Inc., 31-07 31st Street, Regulatory Radius Map™ Report with GeoCheck®, April 2021.
2. *U.S. Geological Survey – Central Park, New York 2013 Quadrangle*, 7.5 minute Series (Topographic), Scale 1:24,000, 2013.
3. New York State Department of Health: Office of Public Health - Environmental Radiation Section, Basement Radon Screening Data, December 2020.
4. Historical Sanborn maps dated 1898, 1915, 1936, 1948, 1950, 1967, 1977, 1979, 1981, 1985, 1986, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1999, 2001, 2002, 2003, 2004, 2005, and 2006.
5. Environmental Data Resources, 31-07 31st Street City Directory Abstract, April 2021.
6. New York City Department of Buildings, Building Information Search Online (http://a810-bisweb.nyc.gov/bisweb).

IKOS Senior Living
31-07 31st Street
ASTORIA, NEW YORK

Subsurface (Phase II) Investigation Report

AKRF Project Number: 210124

CEQR Number: 22HPD043Q

Prepared for:

Mega Development LLC
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Prepared by:

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JANUARY 2024

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1.0 INTRODUCTION

AKRF, Inc. (AKRF) performed a Subsurface (Phase II) Investigation at the property located at 31-07 31st Street, located in Astoria, Queens (the "Site"). The Site is identified as Block 611, Lot 25 on the New York City Tax map. The Site consists of an approximately 20,880 square-foot municipal parking lot and is generally bounded by commercial units to the north, residential and institutional uses to the south, commercial and residential uses and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1). A Site location map is provided as Figure 1, and a Site plan with sample locations is provided as Figure 2.

The Phase II investigation described below is intended to ascertain whether past uses on or near the Site have adversely affected the Site subsurface prior to redevelopment. The scope of work is based on the findings of a Phase I Environmental Site Assessment (ESA) of the Site, prepared by AKRF in June 2021, which is described in Section 3.0 below, as well as proposed redevelopment plans for the Site.

This investigation was conducted in accordance with a Subsurface (Phase II) Investigation Work Plan and Health and Safety Plan (AKRF, June 2022) approved by the New York City Department of Environmental Protection (NYCDEP) in a letter dated June 16, 2022. Any deviations from the Work Plan are detailed in Section 4.0.

Field activities were performed on October 3 through 5, 2022, and consisted of a geophysical survey, and the installation of seven soil borings, four temporary wells, and five soil vapor probes, with the collection of 14 soil samples, four groundwater samples, and five soil vapor samples for laboratory analysis. This report describes the methods and results of the investigation conducted by AKRF. The locations of the soil borings, temporary groundwater monitoring wells, and temporary soil vapor points are shown on Figure 2.

2.0 SITE DESCRIPTION

At the time of the Phase II Investigation, the Site consisted of a parking lot with no structures. The Site is generally bounded by commercial uses to the north, residential and institutional uses to the south, commercial and residential uses and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1).

Based on the U.S. Geological Survey, Central Park, New York 2013 Quadrangle map, the Site is approximately 49 feet above mean sea level, with the general surrounding area topography gently sloping down in a westerly direction towards the East River. The East River is located approximately one mile west of the Site.

Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River; however, actual groundwater flow at the Site can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Site. Groundwater in Queens is not used as a source of potable water.

During this Phase II Investigation, fill material (consisting of sand and gravel, with varying amounts of asphalt and brick) was encountered at depths ranging from approximately just below surface grade down to 5 to 14 feet below grade. The fill material was underlain by sand with trace amounts of gravel. Groundwater was encountered between 31 and 34 feet below grade in all seven soil borings.

3.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Phase I Environmental Site Assessment (ESA) – 31-07 31st Street, Astoria, NY, AKRF Inc., June 2021

AKRF conducted a Phase I ESA of the Site in June 2021 in accordance with ASTM E1527-13. At the time of the ESA, the Site consisted of the existing municipal parking facility. The Phase I ESA identified the following Recognized Environmental Conditions (RECs) in connection with the Site:

- One groundwater monitoring well was observed on the 31st Street sidewalk, west-adjacent of the Site.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry-cleaning uses in the surrounding area.

AKRF identified the following Business Environmental Risks (BERs) outside the scope of ASTM E1527-13:

- Potential fill materials and/or demolition debris beneath the Site could contain asbestos-containing materials (ACM), lead-based paint (LBP), and/or polychlorinated biphenyls (PCBs) related to former structures.

Based on the RECs identified, AKRF recommended a Subsurface (Phase II) Investigation be conducted at the Site.

4.0 FIELD ACTIVITIES

4.1 Geophysical Investigation

On October 3, 2022, a geophysical survey was conducted by Enviroprobe Service, Inc. (Enviroprobe) of Mt. Laurel, New Jersey across accessible areas of the Site, to clear the proposed soil boring locations for subsurface utilities and/or structures, and to search for potential USTs. Portions of the Site covered by parked vehicles were inaccessible and not surveyed by Enviroprobe. The geophysical survey included electromagnetic (EM), radio-detection (RD), and ground penetrating radar (GPR) methods. During the geophysical survey, underground electric and storm drainage infrastructure was located to the north and along the eastern and western boundaries. An unknown utility was encountered immediately south of the existing storm drainage infrastructure along the northern portion of the Site. The geophysical investigation report is attached as Appendix A. Photographs of the Phase II activities are provided in Appendix B.

In addition to the geophysical survey, AARCO Environmental Services (AARCO), the drilling contractor, notified Dig Safely New York at least 3 days prior to the start of the intrusive investigation work.

4.2 Soil Sampling and Analysis

Seven soil borings (SB-01 through SB-07) were advanced at the Site on October 3 through 5, 2022 by AARCO. Soil borings were advanced using a track-mounted Geoprobe® direct push probe (DPP). Several borings were relocated within approximately 5 feet of the proposed locations proposed in the Work Plan due to access considerations, utility markouts, and/or geophysical survey findings.

All soil borings were advanced approximately 5 feet into the water table to approximately 40 feet below grade, except for SB-04, which was advanced to 45 feet below grade. Soil cores were collected using 5-foot long, 2-inch diameter macrocore piston rod samplers fitted with dedicated acetate liners. Each macrocore sample was split lengthwise and all samples were logged by AKRF field personnel. Logging consisted of: describing the soil according to the modified Burmister Classification System; describing any evidence of contamination (e.g., staining, sheens, odors); and field-screening the soil for organic vapors using a photoionization detector (PID). The PID was calibrated at the start of the work day, prior to on-site use, using 100 parts per million (ppm) isobutylene gas in accordance with the manufacturer's instructions. Soil boring locations are shown on Figure 2 and soil boring logs are provided in Appendix C.

In accordance with the Work Plan, discrete soil samples were collected from the 0-2 foot interval of each boring, and the interval with the greatest contamination. In the absence of contamination, the sample was collected from the 2-foot interval immediately above the groundwater interface. No staining or sheen was detected in any of the soil borings. Elevated PID readings above background levels were not detected in any of the borings.

Soil samples were placed in laboratory-supplied containers within a chilled cooler in accordance with U.S. Environmental Protection Agency (EPA) protocols and transported via courier with appropriate chain of custody documentation to Eurofins TestAmerica, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory, in Edison, New Jersey. The samples were analyzed for:

- VOCs by EPA Method 8260;
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082;

- Pesticides by EPA Method 8081; and
- Target Analyte List (TAL) Metals plus Hexavalent Chromium by EPA 6000/7000 series.

4.3 Groundwater Sampling and Analysis

Between October 3 and 5, 2022, four 1-inch diameter temporary groundwater monitoring wells, designated as TW-01 through TW-04, were installed in borings SB-01 through SB-04, respectively, to facilitate the collection of groundwater samples for laboratory analysis. Groundwater monitoring wells TW-01, TW-02, and TW-03 were installed to approximately 40 feet below grade and monitoring well TW-04 was installed to 45 feet below grade.

The wells were constructed of 1-inch diameter Schedule 40, threaded, flush-jointed polyvinyl chloride (PVC) materials with a 10-foot screen installed across the water table. The wells were developed following installation by purging approximately three well volumes. Prior to sampling, the depth to groundwater and the total well depth were measured using a multi-parameter interface probe attached to a measuring tape accurate to 0.01 feet. Depth to groundwater ranged from 30.31 to 36.61 feet below grade across the Site. No evidence of floating petroleum (separate phase product), sheen, or odors was detected in the purge water at either location, and purge water was discarded back into the boring following sampling activities. Temporary well locations are shown on Figure 2.

Groundwater samples slated for analysis were placed in laboratory-supplied containers and a chilled cooler in accordance with EPA protocols and were analyzed by Eurofins TestAmerica. The groundwater samples were analyzed for:

- VOCs by EPA Method 8260;
- SVOCs by EPA Method 8270;
- PCBs by EPA Method 8082;
- Pesticides by EPA Method 8081; and
- TAL Metals (total and dissolved) by EPA 6000/7000 series. Groundwater samples were filtered in the field for the dissolved metals analysis.

4.4 Soil Vapor Sampling and Analysis

Five soil vapor probes (SV-01 through SV-05) were installed using a Geoprobe® DPP drill rig by advancing an expendable drive point to approximately 14 feet below grade, approximately 2 feet below the proposed building foundation footprint. A 6-inch long, 0.5-inch diameter stainless steel soil vapor screen implant with connected Teflon tubing extending above grade was threaded into the drive point. The probe was then retracted approximately six inches to create a void. No. 2 Morie sand was used to fill the annular space around the vapor point and then, hydrated bentonite was used to fill the void around the tubing to grade. The soil vapor sample locations are shown on Figure 2.

The soil vapor probes were sampled in accordance with the NYSDOH October 2006 *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. Prior to sampling, each probe was purged of approximately three sampler volumes using a Gilian® GilAir™ Plus personal air pump. During purging, an inverted bucket was placed over the probe and helium was introduced through a small hole in the bucket to saturate the atmosphere around the sample port. The purged vapors were collected into a Tedlar® bag and a Dielectric Technologies Model MGD-2002 portable helium detector was used to check for short-circuiting by ambient air, i.e. to verify the adequacy of the bentonite seal. Helium concentrations of less than the NYSDOH guideline of 10 percent were

considered sufficient. Purged vapors were also field-screened for VOCs using a PID calibrated with 100 ppm isobutylene gas. Soil vapor sampling logs are provided in Appendix C.

PID readings were not detected in the purged vapor at all five vapor points. After purging, the probes were connected via tubing to laboratory-supplied, batch-certified clean six-liter SUMMA canisters equipped with two-hour flow regulators. Vacuum readings were collected at the start, middle, and end of sampling. The soil vapor samples were transported via courier with chain of custody documentation to Eurofins TestAmerica for analysis of VOCs by EPA Method TO-15. Upon completion, the soil vapor probes were removed, the holes backfilled, and the ground surface restored to its original condition.

5.0 INVESTIGATION RESULTS

5.1 Field Observations

Soil Sampling

Soil borings were advanced to a maximum depth of approximately 45 feet below grade during this investigation. Fill material (consisting of sand and gravel, with varying amounts of asphalt and brick) was encountered at depths ranging from approximately just below surface grade down to 5 to 14 feet below grade. The fill material was underlain by sand with trace amounts of gravel. Groundwater was encountered between 31 and 34 feet below grade in all seven soil borings.

No evidence of contamination, i.e., PID readings, staining, or odors were observed in any of the seven soil borings. Soil descriptions, observations, and PID readings are detailed in the soil boring logs provided in Appendix C.

Groundwater Sampling

Groundwater, as measured from temporary well points, was encountered between 30.31 and 36.61 feet below grade. No evidence of contamination (i.e., sheen or floating product) was noted in the groundwater samples.

Soil Vapor Sampling

No helium was detected during purging, verifying an adequate bentonite seal for each soil vapor point. PID readings were not detected in the purged vapor prior to sampling. The field logs detailing the soil vapor purging and sampling are included in Appendix C.

5.2 Soil Analytical Results

A total of 14 soil samples were submitted to Eurofins TestAmerica for analysis of VOCs, SVOCs, PCBs, pesticides, TAL metals and hexavalent chromium. Laboratory analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Soil Cleanup Objectives for Unrestricted Use and Restricted-Residential Use (UUSCOs and RRSCOs, respectively) presented in Sections 6.8(b) of 6 NYCRR Part 375. Soil analytical results are summarized in Tables 1 through 5. The complete laboratory analytical report is provided as Appendix D. The analytical results from the soil sampling are discussed below.

Volatile Organic Compounds (VOCs)

Up to three VOCs [1,2,4-Trimethylbenzene, acetone, and tetrachloroethene (PCE)] were detected in up to 10 of the 14 soil samples with sample concentrations ranging from 0.00024 milligrams per kilogram (mg/kg) to 0.16 mg/kg. Several of the reported concentrations were marked with a "J" qualifier, indicating estimated concentrations. Acetone was detected slightly above the UUSCO of 0.05 mg/kg in two samples with a maximum concentration of 0.16 mg/kg. No VOCs were detected above the RRSCOs.

Analytical results for VOCs in soil are summarized in Table 1.

Semi-volatile Organic Compounds (SVOCs)

Twenty-three SVOCs were detected in the soil samples. Seven SVOCs were detected at concentrations above the UUSCOs and/or RRSCOs, as presented below:

SVOCs in Soil above UUSCOs and RRSCOs

Boring ID Depth (feet bg) Units = mg/kg	UUSCO	RRSCO	SB-01 0-2	SB-05 0-2	SB-05 29-31
Benzo(a)Anthracene	**1**	**1**	**6.5**	**25**	NE
Benzo(a)Pyrene	**1**	**1**	**5.3**	**23**	NE
Benzo(b)Fluoranthene	**1**	**1**	**7.1**	**29**	NE
Benzo(k)Fluoranthene	**0.8**	**3.9**	**2.3**	**7.6**	NE
Chrysene	**1**	**3.9**	**6**	**23**	NE
Dibenz(a,h)Anthracene	**0.33**	**0.33**	**0.95**	**2.7**	NE
Indeno(1,2,3-c,d)Pyrene	**0.5**	**0.5**	**4.2**	**17**	**1.2**

Bold = Detection above UUSCO
Bold and highlighted = Detection above RRSCO
mg/kg = milligrams per kilogram
bg = below grade
NE = No detection above UUSCO or RRSCO

The SVOCs detected above the SCOs consisted of polycyclic aromatic hydrocarbons (PAHs), a class of compounds commonly found in ash, asphalt, and petroleum products. Based on the field observations, the PAHs are most likely attributable to the fill material encountered in the soil borings at the corresponding depths, as noted on the boring log (Appendix C). Analytical results for SVOCs in soil are summarized in Table 2.

Metals

Twenty-three of the 24 metals analyzed for were detected in the soil samples. Hexavalent chromium was not detected above laboratory reporting limits. Four metals (copper, lead, mercury, and zinc) were detected at concentrations exceeding their UUSCOs, but not their RRSCOs, in four out of the 14 samples, as presented below.

Metals in Soil above UUSCOs

Boring ID Depth (feet bg) Units = mg/kg	UUSCO	RRSCO	SB-03 0-2	SB-04 0-2	SB-05 0-2	SB-07 0-2
Copper	**50**	**270**	NE	NE	**63.1**	NE
Lead	**63**	**400**	**81.7**	**80**	**283**	**131**
Mercury	**0.18**	**0.81**	NE	**0.59**	NE	NE
Zinc	**109**	**10,000**	NE	NE	**149**	NE

Bold = Detection above UUSCO
mg/kg = milligrams per kilogram
bg = below grade
NE = No detection above UUSCO or RRSCO

Based on the field observations and the Site history, these findings are most likely attributable to the fill material observed in the borings at corresponding depths, and not to a release or other source area. Analytical results for metals in soil are summarized in Table 3.

Polychlorinated Biphenyls (PCBs) and Pesticides

The PCB Aroclor 1262 was detected at a concentration of 0.063 mg/kg, below its UUSCO of 0.1 mg/kg and RRSCO of 1 mg/kg, in sample SB-02_0-2_20221003. PCBs were not detected above the UUSCO or RRSCO in any of the 14 soil samples.

Four pesticides (cis-chlordane, dieldrin, and P,P'-DDT) were detected in up to three of the 14 soil samples collected. P,P'-DDT was detected at a maximum concentration of 0.0063 mg/kg in sample SB-05_0-2_20221004, above its UUSCO of 0.0033 mg/kg. No other pesticides were detected at concentrations above the UUSCOs. Several of the reported concentrations were marked with a "J" qualifier, indicating estimated concentrations.

Analytical results for PCBs and pesticides in soil are summarized in Tables 4 and 5, respectively.

The detections of SVOCs, metals, PCBs, and pesticides are likely attributable to fill material observed in the soil borings or historical Site uses, and do not appear to indicate a significant release or source area. PCE was detected at low levels in shallow soil samples, indicating potential source material, which has migrated to the groundwater table as evidenced by the groundwater results for VOCs.

5.3 Groundwater Analytical Results

Groundwater analytical results were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs) as presented in the NYSDEC Division of Water TOGS 1.1.1. The groundwater analytical results are summarized in Tables 6 through 11. The complete laboratory analytical report is provided as Appendix D. The analytical results from the groundwater sampling are discussed below:

VOCs

Chlorinated solvent-related VOCs were detected above AWQSGVs in four groundwater samples, as presented below:

VOCs in Groundwater above Class GA AWQSGVs

Well ID Units = µg/L	Class GA AWQSGV	TW-01	TW-02	TW-03	TW-04
Chloroform	**7**	NE	NE	NE	**9.2**
Cis-1,2-Dichloroethylene	**5**	**14**	**6.7**	NE	NE
Tetrachloroethylene (PCE)	**5**	**100**	**19**	**100**	**330**

Notes:
Bold = Detection above the Class GA AWQSGV
µg/L = micrograms per liter
NE = No detection above the Class GA AWQSGV

The elevated concentrations of chlorinated solvents in groundwater indicate the possible presence of a release. As the current and prior usage of the Site include parking and residential, the source of the chlorinated solvent detections is unknown at this time. The complete analytical results for VOCs in groundwater are summarized in Table 6.

SVOCs

SVOCs were detected above the AWQSGVs in the sample collected from TW-01, as presented below:

SVOCs in Groundwater above Class GA AWQSGVs

Well ID Units = µg/L	Class GA AWQSGV	TW-01
Benzo(a)Anthracene	**0.002**	**2.1**
Benzo(a)Pyrene	**ND**	**1.6**
Benzo(b)Fluoranthene	**0.002**	**2.2**
Bis(2-Ethylhexyl) Phthalate	**5**	**6.2**
Chrysene	**0.002**	**2**
Indeno(1,2,3-c,d)Pyrene	**0.002**	**1.6 J**

Notes:
Bold = Detection above the Class GA AWQSGV
µg/L = micrograms per liter
J = estimated concentration
ND = Non-detect

No other SVOCs were detected above the AWQSGVs in the groundwater samples. The SVOC detected are likely attributable to fill material entrained in the water sample. Analytical results for SVOCs in groundwater are summarized in Table 7.

The complete analytical results for SVOCs in groundwater are summarized in Table 7.

Metals (total and dissolved)

In the unfiltered (total) groundwater samples, there were exceedances of the AWQSGVs for 14 metals, whereas in the filtered (dissolved) samples exceedances were limited to iron, magnesium, manganese, and sodium, as presented below:

Total Metals in Groundwater Above AWQSGVs

Well ID Units = µg/L	Class GA AWQSGV	TW-01	TW-02	TW-03	TW-04
Arsenic	**25**	**63.9**	NE	NE	NE
Barium	**1,000**	**3,540**	NE	NE	NE
Beryllium	**3**	**14.2**	NE	NE	NE
Chromium, Total	**50**	**3,390**	NE	NE	NE
Copper	**200**	**1,340**	NE	NE	NE
Iron	**300**	**971,000**	NE	**1,660**	**4,430**
Lead	**25**	**857**	NE	NE	NE
Magnesium	**35,000**	**355,000**	NE	**47,500**	NE
Manganese	**300**	**24,600**	**439**	NE	**1,090**
Mercury	**0.7**	**1.7**	NE	NE	NE
Nickel	**100**	**922**	NE	NE	NE
Sodium	**20,000**	**74,600**	**140,000**	**128,000**	**109,000**
Thallium	**0.5**	**5.1**	NE	NE	NE
Zinc	**2,000**	**2,640**	NE	NE	NE

Notes:
Bold = Detection above the Class GA AWQSGV
µg/L = micrograms per liter
NE = No detection above the Class GA AWQSGV

Dissolved Metals in Groundwater Above AWQSGVs

Well ID Units = µg/L	Class GA AWQSGV	TW-01	TW-02	TW-03	TW-04
Iron	**300**	NE	NE	**492**	**1,630**
Magnesium	**35,000**	NE	NE	**45,900**	NE
Manganese	**300**	NE	**450**	NE	**1,020**
Sodium	**20,000**	**35,300**	**141,000**	**127,000**	**107,000**

Notes:
Bold = Detection above the Class GA AWQSGV
µg/L = micrograms per liter
NE = No detection above the Class GA AWQSGV

The discrepancy between total and dissolved analysis indicates, as is typical, that the unfiltered samples included entrained particulate material. The exceedances in the filtered samples were likely indicative of natural conditions (e.g., sodium and manganese) and urban background conditions (e.g., heavy metals). Analytical results for metals in groundwater are summarized in Tables 8 and 9.

PCBs and Pesticides

No PCBs or pesticides were detected above laboratory reporting limits in the groundwater samples. The complete analytical results for PCBs and pesticides in groundwater are summarized in Tables 10 and 11, respectively.

The detected metal concentrations in the groundwater samples were likely attributable to regional groundwater contamination and particulate material entrained in the samples. The concentrations of chlorinated solvents above the AWQSGVs indicate the possible presence of a release. As the current and prior usage of the Site include parking and residential, the source of the chlorinated solvent detections is unknown at this time. PAH detections in groundwater are likely attributable to particulates entrained in the water samples, as opposed to an on-site source of SVOC contamination.

5.4 Soil Vapor Analytical Results

The soil vapor sample results indicated 38 of the 71 VOCs analyzed utilizing EPA Method TO-15 were detected in one or more samples. Although there are currently no regulatory or published guidance values for VOCs in soil vapor, soil vapor data was used to assess the potential for exposure to receptors and to help define the nature and extent of contamination at the Site. The analytical results for VOCs in soil vapor are summarized in Table 9. The complete laboratory analytical report is provided in Appendix D.

Solvent-related VOCs [including carbon 1,1,1-trichloroethane, carbon tetrachloride, cis-1,2-dichloroethylene, methylene, PCE, and trichloroethylene (TCE)] were detected at individual concentrations up to 1,900 micrograms per cubic meter (µg/m^3) from a diluted sample (PCE in sample SV-04_20221003). Petroleum-related VOCs benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) were detected in up to all five soil vapor samples at concentrations up to 29 µg/m^3 (toluene in SV-04_20221003).

The elevated concentrations of chlorinated solvents are likely attributable to off-gassing from the elevated solvent concentrations in groundwater or the detections in soil.

6.0 CONCLUSIONS AND RECOMMENDATIONS

AKRF, Inc. (AKRF) performed a Subsurface (Phase II) Investigation at the property located at 31-07 31st Street, located in Astoria, Queens (the "Site"). The Site is identified as Block 611, Lot 25 on the New York City Tax map. The Site consists of an approximately 20,880 square-foot municipal parking lot and is generally bounded by commercial units to the north, residential and institutional uses to the south, commercial and residential uses and 32nd Street to the east, and 31st Street and an elevated subway station to the west (as shown on Figure 1).

The Phase II investigation is intended to ascertain whether past uses on or near the Site have adversely affected the Site subsurface prior to redevelopment. The scope of work is based on the findings of a Phase I Environmental Site Assessment (ESA) of the Site, prepared by AKRF in June 2021, which is described in Section 3.0 below, as well as proposed redevelopment plans for the Site.

This investigation was conducted in accordance with a Subsurface (Phase II) Investigation Work Plan and Health and Safety Plan (AKRF, June 2022) approved by the New York City Department of Environmental Protection (NYCDEP) in a letter dated June 16, 2022. Any deviations from the Work Plan are detailed in Section 4.0.

This investigation was conducted in accordance with a Subsurface (Phase II) Investigation Work Plan and Health and Safety Plan (AKRF, June 2022). Field activities were conducted on October 3 through 5, 2022 and consisted of the installation of seven soil borings, four temporary wells and five soil vapor probes, with the collection of 14 soil samples, four groundwater samples and five soil vapor samples for laboratory analysis. This report describes the methods and results of the investigation conducted by AKRF. The locations of the soil borings, temporary groundwater monitoring wells, and temporary soil vapor points are shown on Figure 2.

During this Phase II Investigation, fill material (consisting of sand and gravel, with varying amounts of asphalt and brick) was encountered at depths ranging from approximately just below surface grade down to 5 to 14 feet below grade. The fill material was underlain by sand with trace amounts of gravel. Groundwater was encountered between 31 and 34 feet below grade in all seven soil borings.

Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River; however, actual groundwater flow at the Site can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Site. Groundwater in this portion of Queens is not used as a source of potable water.

Soil sample analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs). Groundwater sample analytical results were compared to NYSDEC TOGS (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs). It should be noted that the Class GA AWQSGVs were developed assuming use of groundwater as a drinking source, a scenario that does not and will not occur at the Site. There are currently no regulatory or published guidance values for volatile organic compounds (VOCs) in soil vapor.

A summary of the analytical results is as follows:

- Fourteen discrete soil samples were collected from the seven soil borings (two samples collected per boring) advanced across the Site and analyzed for VOCs, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and metals. Analytical results for the soil samples identified one VOC (acetone) in two samples above UUSCOs. No VOCs exceeded the RRSCOs. Up

to seven SVOCs were detected above the UUSCOs and/or RRSCOs. Four metals (copper, lead, mercury, and zinc) were detected in up to four samples above their UUSCOs, but below the RRSCOs. The pesticide P,P'-DDT was detected in one sample above its UUSCO.

- Four groundwater samples were collected from temporary wells TW-01 through TW-04 (installed in borings SB-01 through SB-04) and analyzed for VOCs, SVOCs, PCBs, pesticides, and metals (total and dissolved). Three VOCs [tetrachloroethylene (PCE), cis-1,2-dichloroethene, and chloroform] were detected in at least one of the four samples above their AWQSGVs. Six SVOCs were detected in sample TW-01_20221005 at concentrations above the AWQSGVs. In the unfiltered (total) metals analysis, up to 14 metals were detected at concentrations above the AWQSGVs. In the filtered (dissolved) metals analysis, four metals were detected at concentrations above the AWQSGVs.
- Several VOCs [including PCE, trichloroethylene (TCE), and cis-1,2-dichloroethene] were detected at elevated concentrations in the five soil vapor samples. Concentrations were detected up to 1,900 micrograms per cubic meter ($\mu g/m^3$) of PCE.

6.1 Conclusions

Based on the findings of the Phase II investigation, AKRF concludes the following:

- The SVOCs, PCBs, pesticides, and metals detected above the SCOs in soil are most likely attributable to the fill material encountered in the soil borings at the corresponding depths, and not related to an on-site source. PCE was detected at low levels in shallow soil samples, indicating potential source material, which has migrated to the groundwater table as evidenced by the groundwater results for VOCs.
- The elevated concentrations of chlorinated solvents (PCE, cis-1,2-dichloroethene, and chloroform) in groundwater and soil vapor indicate the possible presence of a release. As the current and prior usage of the Site include parking and residential, the source of the chlorinated solvent detections is unknown at this time.
- The detected metal and PAH concentrations in the groundwater samples were likely attributable to regional groundwater contamination and particulate material entrained in the samples.
- The elevated concentrations of chlorinated solvents in soil vapor are likely attributable to off-gassing from the elevated solvent concentrations in groundwater or the detections in shallow soil.

6.2 Recommendations

AKRF understands that the Client is proposing to redevelop the Site with two buildings: a 13-story mixed-used residential building on the Site's 31st Street frontage with 167 affordable senior units and one superintendent's unit and ground-floor retail space; and a three-story community facility building on the Site's 32nd Street frontage. The 13-story building would have a full cellar level, which would require excavation to approximately 12 feet below grade (with limited deeper excavation for foundation elements). The remainder of the Site would be redeveloped with private open space.

- A Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) should be prepared for implementation during proposed construction and submitted for DEP approval. The RAP should address requirements for items such as: soil stockpiling, soil disposal and transportation; dust control; tank removal procedures and contingency measures

if petroleum storage tank(s) or other contamination should be unexpectedly encountered; and installation of a vapor barrier beneath the new building foundations to mitigate potential vapor intrusion from new or existing off-site sources. The CHASP should include measures for worker and community protection, including personal protective equipment, dust control, air monitoring, and emergency response procedures.

- Any soil or fill excavated as part of future Site redevelopment activities should be managed in accordance with applicable regulations. All material intended for off-site disposal (including all dumped debris piles) should be tested in accordance with 6 NYCRR Part 360 regulations and the requirements of the intended receiving facility. Transportation of all material leaving the Site for off-site disposal should be in accordance with 6 NYCRR Part 364 requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc. Excavation may reveal different or more significant soil contamination in areas not tested as part of this investigation. If discovered, such contamination could require further investigation and/or remediation in accordance with applicable regulations.
- If dewatering is required during future construction activities, water must be disposed or discharged in accordance with local, county, state, and federal requirements.
- Based on the elevated concentrations of chlorinated solvents in soil vapor, a vapor mitigation system, including a vapor barrier and sub-slab depressurization system (SSDS), is recommended to be installed during new building construction, to prevent intrusion of contaminated vapors into the proposed building.

7.0 LIMITATIONS

The findings set forth in this report are strictly limited in scope and time to the date of the evaluation described herein. The conclusions and recommendations presented in the report are based solely on the services and any limitations described in this report.

This report may contain conclusions that are based on the analysis of data collected at the time and locations noted in the report through intrusive or non-intrusive sampling. However, further investigation might reveal additional data or variations of the current data, which may differ from our understanding of the conditions presented in this report and require the enclosed recommendations to be reevaluated or modified.

Chemical analyses may have been performed for specific parameters during the course of this investigation, as summarized in the text and tables. It should be noted that additional chemical constituents, not searched for during this investigation, may be present at the site. Due to the nature of the investigation and the limited data available, no warranty, expressed or implied, shall be construed with respect to undiscovered liabilities. The presence of biological hazards, radioactive materials, lead-based paint and asbestos-containing materials was not investigated, unless specified in the report.

Interpretations of the data, including comparison to regulatory standards, guidelines or background values, are not opinions that these comparisons are legally applicable. Furthermore, any conclusions or recommendations should not be construed as legal advice. For such advice, the client is recommended to seek appropriate legal counsel. Disturbance, handling, transportation, storage and disposal of known or potentially contaminated materials is subject to all applicable laws, which may or may not be fully described as part of this report.

The analytical data, conclusions, and/or recommendations provided in this report should not be construed in any way as a classification of waste that may be generated during future disturbance of the project site. Waste(s) generated at the site including excess fill may be considered regulated solid waste and potentially hazardous waste. Requirements for intended disposal facilities should be determined beforehand as the data provided in this report may be insufficient and could vary following additional sampling.

This report may be based solely or partially on data collected, conducted, and provided by, AKRF and/or others. No warranty is expressed or implied by usage of such data. Such data may be included in other investigation reports or documentation. In addition, these reports may have been based upon available previous reports, historical records, documentation from federal, state and local government agencies, personal interviews, and geological mapping. This report is subject, at a minimum, to the limitations of the previous reports, historical documents, availability and accuracy of collected documentation, and personal recollection of those persons interviewed. In certain instances, AKRF has been required to assume that the information provided is accurate with limited or no corroboratory evidence.

This report is intended for the use solely by Mega Development LLC. Reliance by third parties on the information and opinions contained herein is strictly prohibited and requires the written consent of AKRF. AKRF accepts no responsibility for damages incurred by third parties for any decisions or actions taken based on this report. This report must be used, interpreted, and presented in its entirety.

8.0 SOIL DISPOSAL ISSUES

In addition to the discussions in the Conclusions, Recommendations, and Limitations Sections (Sections 6.0 and 7.0), the issue of appropriate management of off-site disposal of soil warrants careful consideration. Any material being disposed of off-site is a regulated waste, and disposal must be in accordance with:

- Requirements of the specific receiving facility;
- Requirements of any agencies overseeing the cleanup/excavation; and
- Federal and state requirements (sometimes in both the state where the soil is generated and where disposal will occur).

For hazardous wastes and petroleum-contaminated soil (and other 'clearly contaminated' materials), the requirements are usually fairly well defined. It is in the situation where contamination is not readily apparent (e.g., so called "historic or urban fill" or "construction and demolition debris" or material that may have been formerly identified as "clean fill") that present the greatest potential for problems and cost overruns. Even on sites where no contamination requiring remediation is identified, it is common that most of the excavated material is considered "contaminated" for purposes of waste disposal. Concentrations of the various contaminants in historic fill can be highly variable, and upon further testing, the material could contain higher contaminant concentrations than outlined in this investigation. Portions of this material could be classified as hazardous waste.

It is important that the intended disposal facility (or facilities) be identified in advance of off-site disposal. Agency approval is sometimes required for disposal, and the facility will frequently require additional testing prior to (and sometimes at the time of) accepting material. Material must conform to a lengthy list of requirements based on both chemical composition and sometimes numerous other parameters (related to size, percentage of liquids, presence of odors, etc.) for acceptance at the facility. Assuming (or allowing a contractor to assume) that all, or even most, of the soil from a site can be disposed of at minimal cost may result in unanticipated and expensive change orders.

For these reasons, we recommend that professional advice be sought prior to preparing bid documents and contracts incorporating soil disposal.

9.0 REFERENCES

1. Phase I Environmental Site Assessment, 31-07 31st Street, Astoria, New York, AKRF, June 2021.
2. Subsurface (Phase II) Investigation Work Plan, 31-07 31st Street, Astoria, New York, AKRF, June 2022.
3. 6 NYCRR § 375, New York State Department of Environmental Conservation Rules and Regulations, Remedial Program Requirements, effective December 14, 2006.
4. New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1), Class GA Ambient Water Quality Standards and Guidance Values.
5. U.S. Geological Survey – Central Park, New York- 2013 Quadrangle, 7.5 minute Series (Topographic), Scale 1:24,000, 2013.

TABLES

Table 1
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-01_0-2_20221005		SB-01_31-33_20221005		SB-02_0-2_20221003		SB-02_31-33_20221003		SB-03_0-2_20221003	
		Laboratory Sample ID	460-266877-1		460-266877-2		460-266752-1		460-266752-2		460-266752-3	
		Date Sampled	10/05/2022		10/05/2022		10/03/2022		10/03/2022		10/03/2022	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Dilution Factor	1		1		1		1		1	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,1,2-Trichloroethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,1-Dichloroethane	0.27	26	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,1-Dichloroethene	0.33	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2,3-Trichlorobenzene	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2,4-Trichlorobenzene	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2,4-Trimethylbenzene	3.6	52	0.00055	J	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2-Dichlorobenzene	1.1	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2-Dichloroethane	0.02	3.1	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,2-Dichloropropane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,3-Dichlorobenzene	2.4	49	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
1,4-Dichlorobenzene	1.8	13	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
2-Hexanone	NS	NS	0.0067	U	0.0066	U	0.001	U	0.00097	U	0.0011	U
Acetone	0.05	100	0.008	U	**0.16**		0.0012	U	0.0071		0.0014	U
Benzene	0.06	4.8	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Bromochloromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Bromodichloromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Bromoform	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Bromomethane	NS	NS	0.0027	U	0.0026	U	0.0004	U	0.00039	U	0.00045	U
Carbon Disulfide	NS	NS	0.0013	U	0.0013	UT	0.0002	U	0.00019	U	0.00023	U
Carbon Tetrachloride	0.76	2.4	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Chlorobenzene	1.1	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Chloroethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Chloroform	0.37	49	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Chloromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Cis-1,2-Dichloroethylene	0.25	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Cis-1,3-Dichloropropene	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Cyclohexane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Dibromochloromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Dichlorodifluoromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Ethylbenzene	1	41	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Isopropylbenzene (Cumene)	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
M,P-Xylenes	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Methyl Acetate	NS	NS	0.0067	U	0.0066	U	0.001	U	0.00097	U	0.0011	U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0067	U	0.0066	U	0.001	U	0.00097	U	0.0011	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0067	U	0.0066	U	0.001	U	0.00097	U	0.0011	U
Methylcyclohexane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Methylene Chloride	0.05	100	0.0027	U	0.0026	U	0.0004	U	0.00039	U	0.00045	U
N-Butylbenzene	12	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
N-Propylbenzene	3.9	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Sec-Butylbenzene	11	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Styrene	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
T-Butylbenzene	5.9	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Tert-Butyl Methyl Ether	0.93	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Tetrachloroethylene (PCE)	1.3	19	0.0013	U	0.002		0.0013		0.00019	U	0.00023	U
Toluene	0.7	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Trans-1,2-Dichloroethene	0.19	100	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Trans-1,3-Dichloropropene	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Trichloroethylene (TCE)	0.47	21	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Trichlorofluoromethane	NS	NS	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Vinyl Chloride	0.02	0.9	0.0013	U	0.0013	U	0.0002	U	0.00019	U	0.00023	U
Xylenes, Total	0.26	100	0.0027	U	0.0026	U	0.0004	U	0.00039	U	0.00045	U

Table 1
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-03_31-33_20221003		SB-04_0-2_20221003		SB-04_32-34_20221003		SB-05_0-2_20221004		SB-05_29-31_20221004	
		Laboratory Sample ID	460-266752-4		460-266752-5		460-266752-6		460-266826-1		460-266826-2	
		Date Sampled	10/03/2022		10/03/2022		10/03/2022		10/04/2022		10/04/2022	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Dilution Factor	1		1		1		1		1	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,1,2-Trichloroethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,1-Dichloroethane	0.27	26	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,1-Dichloroethene	0.33	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2,3-Trichlorobenzene	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2,4-Trichlorobenzene	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2,4-Trimethylbenzene	3.6	52	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2-Dichlorobenzene	1.1	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2-Dichloroethane	0.02	3.1	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,2-Dichloropropane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,3-Dichlorobenzene	2.4	49	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
1,4-Dichlorobenzene	1.8	13	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
2-Hexanone	NS	NS	0.00099	U	0.0011	U	0.00098	U	0.0054	U	0.008	U
Acetone	0.05	100	0.014		0.0013	U	0.0012	U	0.0065	U	**0.14**	
Benzene	0.06	4.8	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Bromochloromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Bromodichloromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Bromoform	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Bromomethane	NS	NS	0.00039	U	0.00043	U	0.00039	U	0.0022	U	0.0032	U
Carbon Disulfide	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Carbon Tetrachloride	0.76	2.4	0.0002	UT	0.00021	UT	0.0002	UT	0.0011	U	0.0016	U
Chlorobenzene	1.1	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Chloroethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Chloroform	0.37	49	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Chloromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Cis-1,2-Dichloroethylene	0.25	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Cis-1,3-Dichloropropene	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Cyclohexane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Dibromochloromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Dichlorodifluoromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Ethylbenzene	1	41	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Isopropylbenzene (Cumene)	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
M,P-Xylenes	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Methyl Acetate	NS	NS	0.00099	U	0.0011	U	0.00098	U	0.0054	U	0.008	U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.00099	U	0.0011	U	0.00098	U	0.0054	U	0.008	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.00099	U	0.0011	U	0.00098	U	0.0054	U	0.008	U
Methylcyclohexane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Methylene Chloride	0.05	100	0.00039	U	0.00043	U	0.00039	U	0.0022	U	0.0032	U
N-Butylbenzene	12	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
N-Propylbenzene	3.9	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Sec-Butylbenzene	11	100	0.0002	UT	0.00021	UT	0.0002	UT	0.0011	U	0.0016	U
Styrene	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
T-Butylbenzene	5.9	100	0.0002	UT	0.00021	UT	0.0002	UT	0.0011	U	0.0016	U
Tert-Butyl Methyl Ether	0.93	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Tetrachloroethylene (PCE)	1.3	19	0.0002	U	0.00021	U	0.0002	U	0.0097		0.0014	J
Toluene	0.7	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Trans-1,2-Dichloroethene	0.19	100	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Trans-1,3-Dichloropropene	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Trichloroethylene (TCE)	0.47	21	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Trichlorofluoromethane	NS	NS	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Vinyl Chloride	0.02	0.9	0.0002	U	0.00021	U	0.0002	U	0.0011	U	0.0016	U
Xylenes, Total	0.26	100	0.00039	U	0.00043	U	0.00039	U	0.0022	U	0.0032	U

Table 1
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-06_0-2_20221004	SB-06_29-31_20221004	SB-07_0-2_20221003	SB-07_32-34_20221003
		Laboratory Sample ID	460-266826-3	460-266826-4	460-266752-7	460-266752-8
		Date Sampled	10/04/2022	10/04/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,1-Dichloroethane	0.27	26	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,1-Dichloroethene	0.33	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2,3-Trichlorobenzene	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2,4-Trichlorobenzene	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2,4-Trimethylbenzene	3.6	52	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2-Dichlorobenzene	1.1	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2-Dichloroethane	0.02	3.1	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,3-Dichlorobenzene	2.4	49	0.0014 U	0.0012 U	0.00022 U	0.0002 U
1,4-Dichlorobenzene	1.8	13	0.0014 U	0.0012 U	0.00022 U	0.0002 U
2-Hexanone	NS	NS	0.0071 U	0.0061 U	0.0011 U	0.001 U
Acetone	0.05	100	0.0085 U	0.0073 U	0.01	0.031
Benzene	0.06	4.8	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Bromochloromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Bromodichloromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Bromoform	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 UT
Bromomethane	NS	NS	0.0028 U	0.0024 U	0.00043 U	0.0004 U
Carbon Disulfide	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Carbon Tetrachloride	0.76	2.4	0.0014 U	0.0012 U	0.00022 UT	0.0002 U
Chlorobenzene	1.1	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Chloroethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Chloroform	0.37	49	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Chloromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Cis-1,2-Dichloroethylene	0.25	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Cis-1,3-Dichloropropene	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Cyclohexane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Dibromochloromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Dichlorodifluoromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Ethylbenzene	1	41	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Isopropylbenzene (Cumene)	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
M,P-Xylenes	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Methyl Acetate	NS	NS	0.0071 U	0.0061 U	0.0011 U	0.001 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0071 U	0.0061 U	0.0011 U	0.001 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0071 U	0.0061 U	0.0011 U	0.001 U
Methylcyclohexane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Methylene Chloride	0.05	100	0.0028 U	0.0024 U	0.00043 U	0.0004 U
N-Butylbenzene	12	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
N-Propylbenzene	3.9	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Sec-Butylbenzene	11	100	0.0014 U	0.0012 U	0.00022 UT	0.0002 U
Styrene	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
T-Butylbenzene	5.9	100	0.0014 U	0.0012 U	0.00022 UT	0.0002 U
Tert-Butyl Methyl Ether	0.93	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Tetrachloroethylene (PCE)	1.3	19	0.0014 U	0.00087 J	0.00024	0.00024
Toluene	0.7	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Trans-1,2-Dichloroethene	0.19	100	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Trichloroethylene (TCE)	0.47	21	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Trichlorofluoromethane	NS	NS	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Vinyl Chloride	0.02	0.9	0.0014 U	0.0012 U	0.00022 U	0.0002 U
Xylenes, Total	0.26	100	0.0028 U	0.0024 U	0.00043 U	0.0004 U

Table 2
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-01_0-2_20221005	SB-01_0-2_20221005	SB-01_31-33_20221005	SB-02_0-2_20221003	SB-02_31-33_20221003	SB-03_0-2_20221003
		Laboratory Sample ID	460-266877-1	460-266877-1	460-266877-2	460-266752-1	460-266752-2	460-266752-3
		Date Sampled	10/05/2022	10/05/2022	10/05/2022	10/03/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	5	1	1	1	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2,4,5-Trichlorophenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2,4,6-Trichlorophenol	NS	NS	0.14 U	NR	0.14 U	0.14 U	0.14 U	0.16 U
2,4-Dichlorophenol	NS	NS	0.14 U	NR	0.14 U	0.14 U	0.14 U	0.16 U
2,4-Dimethylphenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2,4-Dinitrophenol	NS	NS	0.29 U	NR	0.27 U	0.28 U	0.27 U	0.31 U
2,4-Dinitrotoluene	NS	NS	0.073 U	NR	0.068 U	0.072 U	0.069 U	0.079 U
2,6-Dinitrotoluene	NS	NS	0.073 U	NR	0.068 U	0.072 U	0.069 U	0.079 U
2-Chloronaphthalene	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2-Chlorophenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2-Methylnaphthalene	NS	NS	0.28 J	NR	0.34 U	0.35 U	0.34 U	0.39 U
2-Methylphenol (O-Cresol)	0.33	100	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2-Nitroaniline	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
2-Nitrophenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
3- And 4- Methylphenol (Total)	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	NR	0.14 U	0.14 U	0.14 U	0.16 U
3-Nitroaniline	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	NR	0.27 U	0.28 U	0.27 U	0.31 U
4-Bromophenyl Phenyl Ether	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Chloro-3-Methylphenol	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Chloroaniline	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Methylphenol (P-Cresol)	0.33	100	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Nitroaniline	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
4-Nitrophenol	NS	NS	0.73 U	NR	0.68 U	0.72 U	0.69 U	0.79 U
Acenaphthene	20	100	0.84	NR	0.34 U	0.35 U	0.34 U	0.39 U
Acenaphthylene	100	100	0.22 J	NR	0.34 U	0.35 U	0.34 U	0.39 U
Acetophenone	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Anthracene	100	100	2.3	NR	0.34 U	0.35 U	0.34 U	0.39 U
Atrazine	NS	NS	0.14 U	NR	0.14 U	0.14 U	0.14 U	0.16 U
Benzaldehyde	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Benzo(a)Anthracene	1	1	**6.5**	NR	0.034 U	0.031 J	0.034 U	0.049
Benzo(a)Pyrene	1	1	**5.3**	NR	0.034 U	0.025 J	0.034 U	0.041
Benzo(b)Fluoranthene	1	1	**7.1**	NR	0.034 U	0.033 J	0.034 U	0.057
Benzo(g,h,i)Perylene	100	100	3.3	NR	0.34 U	0.015 J	0.34 U	0.024 J
Benzo(k)Fluoranthene	0.8	3.9	**2.3**	NR	0.034 U	0.014 J	0.034 U	0.022 J
Benzyl Butyl Phthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Biphenyl (Diphenyl)	NS	NS	0.081 J	NR	0.34 U	0.35 U	0.34 U	0.39 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Caprolactam	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Carbazole	NS	NS	0.86	NR	0.34 U	0.35 U	0.34 U	0.39 U
Chrysene	1	3.9	**6**	NR	0.34 U	0.025 J	0.34 U	0.046 J
Dibenz(a,h)Anthracene	0.33	0.33	**0.95**	NR	0.034 U	0.035 U	0.034 U	0.039 U
Dibenzofuran	7	59	0.5	NR	0.34 U	0.35 U	0.34 U	0.39 U
Diethyl Phthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Dimethyl Phthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Di-N-Butyl Phthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Di-N-Octylphthalate	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Fluoranthene	100	100	NR	18	0.34 U	0.039 J	0.34 U	0.076 J
Fluorene	30	100	0.77	NR	0.34 U	0.35 U	0.34 U	0.39 U
Hexachlorobenzene	0.33	1.2	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
Hexachlorobutadiene	NS	NS	0.073 U	NR	0.068 U	0.072 U	0.069 U	0.079 U
Hexachlorocyclopentadiene	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Hexachloroethane	NS	NS	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	**4.2**	NR	0.034 U	0.018 J	0.034 U	0.028 J
Isophorone	NS	NS	0.14 U	NR	0.14 U	0.14 U	0.14 U	0.16 U
Naphthalene	12	100	0.37	NR	0.34 U	0.35 U	0.34 U	0.39 U
Nitrobenzene	NS	NS	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
N-Nitrosodi-N-Propylamine	NS	NS	0.036 U	NR	0.034 U	0.035 U	0.034 U	0.039 U
N-Nitrosodiphenylamine	NS	NS	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Pentachlorophenol	0.8	6.7	0.29 U	NR	0.27 U	0.28 U	0.27 U	0.31 U
Phenanthrene	100	100	NR	16	0.34 U	0.015 J	0.34 U	0.035 J
Phenol	0.33	100	0.36 U	NR	0.34 U	0.35 U	0.34 U	0.39 U
Pyrene	100	100	NR	17	0.34 U	0.039 J	0.34 U	0.075 J

Table 2
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-03_31-33_20221003	SB-04_0-2_20221003	SB-04_32-34_20221003	SB-05_0-2_20221004	SB-05_0-2_20221004	SB-05_29-31_20221004
		Laboratory Sample ID	460-266752-4	460-266752-5	460-266752-6	460-266826-1	460-266826-1	460-266826-2
		Date Sampled	10/03/2022	10/03/2022	10/03/2022	10/04/2022	10/04/2022	10/04/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	10	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2,4,5-Trichlorophenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2,4,6-Trichlorophenol	NS	NS	0.14 U	0.15 U	0.14 U	0.15 U	NR	0.14 U
2,4-Dichlorophenol	NS	NS	0.14 U	0.15 U	0.14 U	0.15 U	NR	0.14 U
2,4-Dimethylphenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2,4-Dinitrophenol	NS	NS	0.28 U	0.3 U	0.27 U	0.29 U	NR	0.27 U
2,4-Dinitrotoluene	NS	NS	0.071 U	0.075 U	0.069 U	0.074 U	NR	0.069 U
2,6-Dinitrotoluene	NS	NS	0.071 U	0.075 U	0.069 U	0.074 U	NR	0.069 U
2-Chloronaphthalene	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2-Chlorophenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2-Methylnaphthalene	NS	NS	0.35 U	0.37 U	0.34 U	0.28 J	NR	0.34 U
2-Methylphenol (O-Cresol)	0.33	100	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2-Nitroaniline	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
2-Nitrophenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
3- And 4- Methylphenol (Total)	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.15 U	0.14 U	0.15 U	NR	0.14 U
3-Nitroaniline	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.28 U	0.3 U	0.27 U	0.29 U	NR	0.27 U
4-Bromophenyl Phenyl Ether	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Chloro-3-Methylphenol	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Chloroaniline	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Methylphenol (P-Cresol)	0.33	100	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Nitroaniline	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
4-Nitrophenol	NS	NS	0.71 U	0.75 U	0.69 U	0.74 U	NR	0.69 U
Acenaphthene	20	100	0.35 U	0.37 U	0.34 U	2.7	NR	0.03 J
Acenaphthylene	100	100	0.35 U	0.37 U	0.34 U	0.67	NR	0.037 J
Acetophenone	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Anthracene	100	100	0.35 U	0.025 J	0.34 U	6.5	NR	0.08 J
Atrazine	NS	NS	0.14 U	0.15 U	0.14 U	0.15 UT	NR	0.14 UT
Benzaldehyde	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Benzo(a)Anthracene	1	1	0.035 U	0.092	0.034 U	NR	**25**	0.27
Benzo(a)Pyrene	1	1	0.035 U	0.08	0.034 U	NR	**23**	0.29
Benzo(b)Fluoranthene	1	1	0.035 U	0.11	0.034 U	NR	**29**	0.39
Benzo(g,h,i)Perylene	100	100	0.35 U	0.042 J	0.34 U	7.5	NR	1.3
Benzo(k)Fluoranthene	0.8	3.9	0.035 U	0.036 J	0.034 U	**7.6**	NR	0.14
Benzyl Butyl Phthalate	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Biphenyl (Diphenyl)	NS	NS	0.35 U	0.37 U	0.34 U	0.14 J	NR	0.34 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.35 U	0.08 J	0.34 U	0.37 U	NR	0.34 U
Caprolactam	NS	NS	0.35 U	0.37 U	0.34 U	0.37 UT	NR	0.34 UT
Carbazole	NS	NS	0.35 U	0.37 U	0.34 U	1.9	NR	0.023 J
Chrysene	1	3.9	0.35 U	0.088 J	0.34 U	NR	**23**	0.2 J
Dibenz(a,h)Anthracene	0.33	0.33	0.035 U	0.037 U	0.034 U	**2.7**	NR	0.22
Dibenzofuran	7	59	0.35 U	0.37 U	0.34 U	1.2	NR	0.34 U
Diethyl Phthalate	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Dimethyl Phthalate	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Di-N-Butyl Phthalate	NS	NS	0.35 U	0.37 U	0.34 U	0.026 J	NR	0.34 U
Di-N-Octylphthalate	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Fluoranthene	100	100	0.35 U	0.17 J	0.34 U	NR	48	0.46
Fluorene	30	100	0.35 U	0.37 U	0.34 U	2.5	NR	0.018 J
Hexachlorobenzene	0.33	1.2	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
Hexachlorobutadiene	NS	NS	0.071 U	0.075 U	0.069 U	0.074 U	NR	0.069 U
Hexachlorocyclopentadiene	NS	NS	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Hexachloroethane	NS	NS	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.035 U	0.048	0.034 U	NR	**17**	**1.2**
Isophorone	NS	NS	0.14 U	0.15 U	0.14 U	0.15 U	NR	0.14 U
Naphthalene	12	100	0.35 U	0.37 U	0.34 U	0.47	NR	0.0062 J
Nitrobenzene	NS	NS	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
N-Nitrosodi-N-Propylamine	NS	NS	0.035 U	0.037 U	0.034 U	0.037 U	NR	0.034 U
N-Nitrosodiphenylamine	NS	NS	0.35 U	0.37 U	0.34 U	0.056 J	NR	0.34 U
Pentachlorophenol	0.8	6.7	0.28 U	0.3 U	0.27 U	0.29 U	NR	0.27 U
Phenanthrene	100	100	0.35 U	0.1 J	0.34 U	NR	27	0.18 J
Phenol	0.33	100	0.35 U	0.37 U	0.34 U	0.37 U	NR	0.34 U
Pyrene	100	100	0.35 U	0.17 J	0.34 U	NR	38	0.39

Table 2
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-06_0-2_20221004		SB-06_29-31_20221004		SB-07_0-2_20221003		SB-07_32-34_20221003	
		Laboratory Sample ID	460-266826-3		460-266826-4		460-266752-7		460-266752-8	
		Date Sampled	10/04/2022		10/04/2022		10/03/2022		10/03/2022	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg	
		Dilution Factor	1		1		1		1	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
1,4-Dioxane (P-Dioxane)	0.1	13	0.036	U	0.034	U	0.037	U	0.034	U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2,4,5-Trichlorophenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2,4,6-Trichlorophenol	NS	NS	0.15	U	0.14	U	0.15	U	0.14	U
2,4-Dichlorophenol	NS	NS	0.15	U	0.14	U	0.15	U	0.14	U
2,4-Dimethylphenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2,4-Dinitrophenol	NS	NS	0.29	U	0.28	U	0.3	U	0.27	U
2,4-Dinitrotoluene	NS	NS	0.073	U	0.069	U	0.076	U	0.069	U
2,6-Dinitrotoluene	NS	NS	0.073	U	0.069	U	0.076	U	0.069	U
2-Chloronaphthalene	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2-Chlorophenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2-Methylnaphthalene	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2-Methylphenol (O-Cresol)	0.33	100	0.36	U	0.34	U	0.37	U	0.34	U
2-Nitroaniline	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
2-Nitrophenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
3- And 4- Methylphenol (Total)	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
3,3'-Dichlorobenzidine	NS	NS	0.15	U	0.14	U	0.15	U	0.14	U
3-Nitroaniline	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29	U	0.28	U	0.3	U	0.27	U
4-Bromophenyl Phenyl Ether	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4-Chloro-3-Methylphenol	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4-Chloroaniline	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4-Chlorophenyl Phenyl Ether	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4-Methylphenol (P-Cresol)	0.33	100	0.36	U	0.34	U	0.37	U	0.34	U
4-Nitroaniline	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
4-Nitrophenol	NS	NS	0.73	U	0.69	U	0.76	U	0.69	U
Acenaphthene	20	100	0.36	U	0.34	U	0.37	U	0.34	U
Acenaphthylene	100	100	0.01	J	0.34	U	0.37	U	0.34	U
Acetophenone	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Anthracene	100	100	0.028	J	0.023	J	0.37	U	0.34	U
Atrazine	NS	NS	0.15	UT	0.14	UT	0.15	U	0.14	U
Benzaldehyde	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Benzo(a)Anthracene	1	1	0.036	U	0.034	U	0.061		0.034	U
Benzo(a)Pyrene	1	1	0.13		0.053		0.056		0.034	U
Benzo(b)Fluoranthene	1	1	0.17		0.034	U	0.083		0.034	U
Benzo(g,h,i)Perylene	100	100	0.062	J	0.024	J	0.029	J	0.34	U
Benzo(k)Fluoranthene	0.8	3.9	0.066		0.034	U	0.035	J	0.034	U
Benzyl Butyl Phthalate	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Biphenyl (Diphenyl)	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Bis(2-Chloroethoxy) Methane	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036	U	0.034	U	0.037	U	0.034	U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36	U	0.34	U	0.022	J	0.34	U
Caprolactam	NS	NS	0.36	UT	0.34	UT	0.37	U	0.34	U
Carbazole	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Chrysene	1	3.9	0.11	J	0.049	J	0.062	J	0.34	U
Dibenz(a,h)Anthracene	0.33	0.33	0.036	U	0.034	U	0.037	U	0.034	U
Dibenzofuran	7	59	0.36	U	0.34	U	0.37	U	0.34	U
Diethyl Phthalate	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Dimethyl Phthalate	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Di-N-Butyl Phthalate	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Di-N-Octylphthalate	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Fluoranthene	100	100	0.22	J	0.1	J	0.094	J	0.34	U
Fluorene	30	100	0.36	U	0.34	U	0.37	U	0.34	U
Hexachlorobenzene	0.33	1.2	0.036	U	0.034	U	0.037	U	0.034	U
Hexachlorobutadiene	NS	NS	0.073	U	0.069	U	0.076	U	0.069	U
Hexachlorocyclopentadiene	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Hexachloroethane	NS	NS	0.036	U	0.034	U	0.037	U	0.034	U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.14		0.071		0.034	J	0.034	U
Isophorone	NS	NS	0.15	U	0.14	U	0.15	U	0.14	U
Naphthalene	12	100	0.36	U	0.34	U	0.37	U	0.34	U
Nitrobenzene	NS	NS	0.036	U	0.034	U	0.037	U	0.034	U
N-Nitrosodi-N-Propylamine	NS	NS	0.036	U	0.034	U	0.037	U	0.034	U
N-Nitrosodiphenylamine	NS	NS	0.36	U	0.34	U	0.37	U	0.34	U
Pentachlorophenol	0.8	6.7	0.29	U	0.28	U	0.3	U	0.27	U
Phenanthrene	100	100	0.12	J	0.076	J	0.039	J	0.34	U
Phenol	0.33	100	0.36	U	0.34	U	0.37	U	0.34	U
Pyrene	100	100	0.21	J	0.1	J	0.093	J	0.34	U

Table 3
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Metals

		AKRF Sample ID	SB-01_0-2_20221005	SB-01_31-33_20221005	SB-02_0-2_20221003	SB-02_31-33_20221003
		Laboratory Sample ID	460-266877-1	460-266877-2	460-266752-1	460-266752-2
		Date Sampled	10/05/2022	10/05/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aluminum	**NS**	**NS**	5,960	2,340	4,180	2,810
Antimony	**NS**	**NS**	0.25 J	0.81 U	1 U	0.94 U
Arsenic	**13**	**16**	2.2	0.62 J	1.5	0.61 J
Barium	**350**	**400**	35.1	20.7	36.3	23.4
Beryllium	**7.2**	**72**	0.32 J	0.12 J	0.24 J	0.23 J
Cadmium	**2.5**	**4.3**	0.098 J	0.81 U	0.14 J	0.11 J
Calcium	**NS**	**NS**	5,840	7,590	7,730	21,600
Chromium, Hexavalent	**1**	**110**	2.1 U	2 U	2.1 U	2.1 U
Chromium, Total	**NS**	**NS**	16.7	8	9.5	8.3
Cobalt	**NS**	**NS**	5.2	2.9	3.7	2.9
Copper	**50**	**270**	15.2	6.8	12.5	9.5
Iron	**NS**	**NS**	10,500	5,240	7,870	6,500
Lead	**63**	**400**	19.1	2.8	13	4
Magnesium	**NS**	**NS**	2,460	4,370	4,190	12,100
Manganese	**1,600**	**2,000**	338	183	207	168
Mercury	**0.18**	**0.81**	0.018	0.016 U	0.15	0.07
Nickel	**30**	**310**	12.1	5.7	8.8	6.7
Potassium	**NS**	**NS**	714	383	744	522
Selenium	**3.9**	**180**	1.1 U	1 U	0.16 J	0.17 J
Silver	**2**	**180**	0.35 U	0.32 U	0.41 U	0.38 U
Sodium	**NS**	**NS**	152	117	275	201
Thallium	**NS**	**NS**	0.058 J	0.32 U	0.11 J	0.069 J
Vanadium	**NS**	**NS**	21.8	7.4	14.8	9.8
Zinc	**109**	**10,000**	28.9	10.2	36.2	15.2

Table 3
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Metals

		AKRF Sample ID	SB-03_0-2_20221003		SB-03_31-33_20221003		SB-04_0-2_20221003		SB-04_32-34_20221003	
		Laboratory Sample ID	460-266752-3		460-266752-4		460-266752-5		460-266752-6	
		Date Sampled	10/03/2022		10/03/2022		10/03/2022		10/03/2022	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg	
		Dilution Factor	1		1		1		1	
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**
Aluminum	**NS**	**NS**	6,790		3,030		9,180		4,170	
Antimony	**NS**	**NS**	0.16	J	1	U	0.49	J	1	U
Arsenic	**13**	**16**	2.5		0.86	J	4		1.3	
Barium	**350**	**400**	62.6		19.1		78.8		35.4	
Beryllium	**7.2**	**72**	0.36	J	0.16	J	0.63		0.26	J
Cadmium	**2.5**	**4.3**	0.21	J	1	U	0.43	J	1	U
Calcium	**NS**	**NS**	32,300		1,560		9,950		1,230	
Chromium, Hexavalent	**1**	**110**	2.3	U	2.2	U	2.2	U	2.1	U
Chromium, Total	**NS**	**NS**	16.4		10.1		19.1		19.3	
Cobalt	**NS**	**NS**	5		2.6		9.6		4.6	
Copper	**50**	**270**	23.3		8.2		34.8		18.3	
Iron	**NS**	**NS**	11,300		6,720		20,700		10,400	
Lead	**63**	**400**	**81.7**		2.7		**80**		6.1	
Magnesium	**NS**	**NS**	5,740		1,940		4,900		2,050	
Manganese	**1,600**	**2,000**	216		177		689		268	
Mercury	**0.18**	**0.81**	0.077		0.071		**0.59**		0.018	U
Nickel	**30**	**310**	13.5		6.4		20.7		10.2	
Potassium	**NS**	**NS**	1,360		510		2,720		826	
Selenium	**3.9**	**180**	0.18	J	1.2	U	0.35	J	1.3	U
Silver	**2**	**180**	0.44	U	0.4	U	0.43	U	0.4	U
Sodium	**NS**	**NS**	309		161		301		199	
Thallium	**NS**	**NS**	0.093	J	0.4	U	0.21	J	0.07	J
Vanadium	**NS**	**NS**	20.8		8.5		31.6		15.3	
Zinc	**109**	**10,000**	65.1		14.4		107		27.3	

Table 3
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Metals

		AKRF Sample ID	SB-05_0-2_20221004	SB-05_29-31_20221004	SB-06_0-2_20221004	SB-06_29-31_20221004
		Laboratory Sample ID	460-266826-1	460-266826-2	460-266826-3	460-266826-4
		Date Sampled	10/04/2022	10/04/2022	10/04/2022	10/04/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**0-2_20221004 Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aluminum	**NS**	**NS**	6,680	3,380	6,750	3,730
Antimony	**NS**	**NS**	0.3 J	1 U	1 U	1 U
Arsenic	**13**	**16**	6.9	0.72 J	3.4	0.79 J
Barium	**350**	**400**	119	22.4	37.3	23
Beryllium	**7.2**	**72**	0.4 J	0.19 J	0.41 J	0.19 J
Cadmium	**2.5**	**4.3**	0.66 J	1 U	0.16 J	1 U
Calcium	**NS**	**NS**	18,600	18,100	8,910	22,200
Chromium, Hexavalent	**1**	**110**	2.2 U	2.1 U	2.2 U	2.1 U
Chromium, Total	**NS**	**NS**	15.5	9.7	12.3	9.1
Cobalt	**NS**	**NS**	5.3	3	6	3.7
Copper	**50**	**270**	**63.1**	8.9	27.7	9.6
Iron	**NS**	**NS**	13,600	6,800	11,500	8,350
Lead	**63**	**400**	**283**	4.8	30.4	2.2
Magnesium	**NS**	**NS**	5,510	9,550	3,720	14,700
Manganese	**1,600**	**2,000**	265	190	335	176
Mercury	**0.18**	**0.81**	0.094	0.017 U	0.075	0.034
Nickel	**30**	**310**	16.3	6.7	12.3	7.9
Potassium	**NS**	**NS**	1,050	694	763	918
Selenium	**3.9**	**180**	0.48 J	1.3 U	0.19 J	1.3 U
Silver	**2**	**180**	0.25 J	0.41 U	0.42 U	0.4 U
Sodium	**NS**	**NS**	444	175	281	281
Thallium	**NS**	**NS**	0.13 J	0.41 U	0.079 J	0.049 J
Vanadium	**NS**	**NS**	28.1	12.5	17.2	15.5
Zinc	**109**	**10,000**	**149**	16.4	42.5	22.7

Table 3
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Metals

		AKRF Sample ID	SB-07_0-2_20221003		SB-07_32-34_20221003	
		Laboratory Sample ID	460-266752-7		460-266752-8	
		Date Sampled	10/03/2022		10/03/2022	
		Unit	mg/kg		mg/kg	
		Dilution Factor	1		1	
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC**	**Q**	**CONC**	**Q**
Aluminum	**NS**	**NS**	5,980		3,830	
Antimony	**NS**	**NS**	0.2	J	1	U
Arsenic	**13**	**16**	3.9		1	
Barium	**350**	**400**	66.6		29.2	
Beryllium	**7.2**	**72**	0.31	J	0.22	J
Cadmium	**2.5**	**4.3**	0.33	J	1	U
Calcium	**NS**	**NS**	27,200		6,370	
Chromium, Hexavalent	**1**	**110**	2.3	U	2.1	U
Chromium, Total	**NS**	**NS**	15.1		10.2	
Cobalt	**NS**	**NS**	5.4		3.6	
Copper	**50**	**270**	39.8		15.4	
Iron	**NS**	**NS**	13,300		8,020	
Lead	**63**	**400**	**131**		13.7	
Magnesium	**NS**	**NS**	11,900		4,700	
Manganese	**1,600**	**2,000**	274		212	
Mercury	**0.18**	**0.81**	0.11		0.016	U
Nickel	**30**	**310**	16.8		8.1	
Potassium	**NS**	**NS**	1,220		729	
Selenium	**3.9**	**180**	0.19	J	1.2	U
Silver	**2**	**180**	0.11	J	0.4	U
Sodium	**NS**	**NS**	402		170	
Thallium	**NS**	**NS**	0.11	J	0.062	J
Vanadium	**NS**	**NS**	32.6		13.4	
Zinc	**109**	**10,000**	109		21.4	

Table 4
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-01_0-2_20221005	SB-01_31-33_20221005	SB-02_0-2_20221003	SB-02_31-33_20221003
		Laboratory Sample ID	460-266877-1	460-266877-2	460-266752-1	460-266752-2
		Date Sampled	10/05/2022	10/05/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
PCB-1016 (Aroclor 1016)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1221 (Aroclor 1221)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1232 (Aroclor 1232)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1242 (Aroclor 1242)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1248 (Aroclor 1248)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1254 (Aroclor 1254)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1260 (Aroclor 1260)	**NS**	**NS**	0.073 U	0.069 U	0.063 J	0.069 U
PCB-1262 (Aroclor 1262)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
PCB-1268 (Aroclor 1268)	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U
Total PCBs	**0.1**	**1**	0.073 U	0.069 U	0.063 J	0.069 U

Table 4
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-03_0-2_20221003	SB-03_31-33_20221003	SB-04_0-2_20221003	SB-04_32-34_20221003
		Laboratory Sample ID	460-266752-3	460-266752-4	460-266752-5	460-266752-6
		Date Sampled	10/03/2022	10/03/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
PCB-1016 (Aroclor 1016)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1221 (Aroclor 1221)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1232 (Aroclor 1232)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1242 (Aroclor 1242)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1248 (Aroclor 1248)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1254 (Aroclor 1254)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1260 (Aroclor 1260)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1262 (Aroclor 1262)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
PCB-1268 (Aroclor 1268)	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U
Total PCBs	**0.1**	**1**	0.079 U	0.071 U	0.075 U	0.069 U

Table 4
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-05_0-2_20221004		SB-05_29-31_20221004		SB-06_0-2_20221004		SB-06_29-31_20221004	
		Laboratory Sample ID	460-266826-1		460-266826-2		460-266826-3		460-266826-4	
		Date Sampled	10/04/2022		10/04/2022		10/04/2022		10/04/2022	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg	
		Dilution Factor	1		1		1		1	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1221 (Aroclor 1221)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1232 (Aroclor 1232)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1242 (Aroclor 1242)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1248 (Aroclor 1248)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1254 (Aroclor 1254)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1260 (Aroclor 1260)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1262 (Aroclor 1262)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
PCB-1268 (Aroclor 1268)	NS	NS	0.074	U	0.069	U	0.073	U	0.069	U
Total PCBs	0.1	1	0.074	U	0.069	U	0.073	U	0.069	U

Table 4
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-07_0-2_20221003	SB-07_32-34_20221003
		Laboratory Sample ID	460-266752-7	460-266752-8
		Date Sampled	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg
		Dilution Factor	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**
PCB-1016 (Aroclor 1016)	**NS**	**NS**	0.076 U	0.069 U
PCB-1221 (Aroclor 1221)	**NS**	**NS**	0.076 U	0.069 U
PCB-1232 (Aroclor 1232)	**NS**	**NS**	0.076 U	0.069 U
PCB-1242 (Aroclor 1242)	**NS**	**NS**	0.076 U	0.069 U
PCB-1248 (Aroclor 1248)	**NS**	**NS**	0.076 U	0.069 U
PCB-1254 (Aroclor 1254)	**NS**	**NS**	0.076 U	0.069 U
PCB-1260 (Aroclor 1260)	**NS**	**NS**	0.076 U	0.069 U
PCB-1262 (Aroclor 1262)	**NS**	**NS**	0.076 U	0.069 U
PCB-1268 (Aroclor 1268)	**NS**	**NS**	0.076 U	0.069 U
Total PCBs	**0.1**	**1**	0.076 U	0.069 U

Table 5
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Pesticides

		AKRF Sample ID	SB-01_0-2_20221005	SB-01_31-33_20221005	SB-02_0-2_20221003	SB-02_31-33_20221003
		Laboratory Sample ID	460-266877-1	460-266877-2	460-266752-1	460-266752-2
		Date Sampled	10/05/2022	10/05/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aldrin	**0.005**	**0.097**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	**0.02**	**0.48**	0.0022 U	0.002 U	0.0021 U	0.002 U
Alpha Endosulfan	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	**0.036**	**0.36**	0.0022 U	0.002 U	0.0021 U	0.002 U
Beta Endosulfan	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
cis-Chlordane	**0.094**	**4.2**	0.0073 U	0.0069 U	0.0052 JP	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	**0.04**	**100**	0.0022 U	0.002 U	0.0021 U	0.002 U
Dieldrin	**0.005**	**0.2**	0.002 J	0.002 U	0.0021 U	0.002 U
Endosulfan Sulfate	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Endosulfans ABS	**2.4**	**24**	0 U	0 U	0 U	0 U
Endrin	**0.014**	**11**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Endrin Aldehyde	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Endrin Ketone	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Gamma Bhc (Lindane)	**0.1**	**1.3**	0.0022 U	0.002 U	0.0021 U	0.002 U
Heptachlor	**0.042**	**2.1**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Heptachlor Epoxide	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
Methoxychlor	**NS**	**NS**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
P,P'-DDD	**0.0033**	**13**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
P,P'-DDE	**0.0033**	**8.9**	0.0073 U	0.0069 U	0.0072 U	0.0069 U
P,P'-DDT	**0.0033**	**7.9**	0.0033 J	0.0069 U	0.0072 U	0.0069 U
Toxaphene	**NS**	**NS**	0.073 U	0.069 U	0.072 U	0.069 U

Table 5
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Pesticides

		AKRF Sample ID	SB-03_0-2_20221003	SB-03_31-33_20221003	SB-04_0-2_20221003	SB-04_32-34_20221003
		Laboratory Sample ID	460-266752-3	460-266752-4	460-266752-5	460-266752-6
		Date Sampled	10/03/2022	10/03/2022	10/03/2022	10/03/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aldrin	**0.005**	**0.097**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	**0.02**	**0.48**	0.0023 U	0.0021 U	0.0022 U	0.0021 U
Alpha Endosulfan	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	**0.036**	**0.36**	0.0023 U	0.0021 U	0.0022 U	0.0021 U
Beta Endosulfan	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
cis-Chlordane	**0.094**	**4.2**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	**0.04**	**100**	0.0023 U	0.0021 U	0.0022 U	0.0021 U
Dieldrin	**0.005**	**0.2**	0.0023 U	0.0021 U	0.0022 U	0.0021 U
Endosulfan Sulfate	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Endosulfans ABS	**2.4**	**24**	0 U	0 U	0 U	0 U
Endrin	**0.014**	**11**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Endrin Aldehyde	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Endrin Ketone	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Gamma Bhc (Lindane)	**0.1**	**1.3**	0.0023 U	0.0021 U	0.0022 U	0.0021 U
Heptachlor	**0.042**	**2.1**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Heptachlor Epoxide	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Methoxychlor	**NS**	**NS**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
P,P'-DDD	**0.0033**	**13**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
P,P'-DDE	**0.0033**	**8.9**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
P,P'-DDT	**0.0033**	**7.9**	0.0079 U	0.0071 U	0.0075 U	0.0069 U
Toxaphene	**NS**	**NS**	0.079 U	0.071 U	0.075 U	0.069 U

Table 5
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Pesticides

		AKRF Sample ID	SB-05_0-2_20221004	SB-05_29-31_20221004	SB-06_0-2_20221004	SB-06_29-31_20221004
		Laboratory Sample ID	460-266826-1	460-266826-2	460-266826-3	460-266826-4
		Date Sampled	10/04/2022	10/04/2022	10/04/2022	10/04/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aldrin	**0.005**	**0.097**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	**0.02**	**0.48**	0.0022 U	0.0021 U	0.0022 U	0.0021 U
Alpha Endosulfan	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	**0.036**	**0.36**	0.0022 U	0.0021 U	0.0022 U	0.0021 U
Beta Endosulfan	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
cis-Chlordane	**0.094**	**4.2**	0.013 P	0.0069 U	0.0073 U	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	**0.04**	**100**	0.0022 U	0.0021 U	0.0022 U	0.0021 U
Dieldrin	**0.005**	**0.2**	0.0027	0.0021 U	0.0022 U	0.0021 U
Endosulfan Sulfate	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Endosulfans ABS	**2.4**	**24**	0 U	0 U	0 U	0 U
Endrin	**0.014**	**11**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Endrin Aldehyde	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Endrin Ketone	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Gamma Bhc (Lindane)	**0.1**	**1.3**	0.0022 U	0.0021 U	0.0022 U	0.0021 U
Heptachlor	**0.042**	**2.1**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Heptachlor Epoxide	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
Methoxychlor	**NS**	**NS**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
P,P'-DDD	**0.0033**	**13**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
P,P'-DDE	**0.0033**	**8.9**	0.0074 U	0.0069 U	0.0073 U	0.0069 U
P,P'-DDT	**0.0033**	**7.9**	**0.0063 J**	0.0069 U	0.0073 U	0.0069 U
Toxaphene	**NS**	**NS**	0.074 U	0.069 U	0.073 U	0.069 U

Table 5
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Analytical Results
Pesticides

		AKRF Sample ID	SB-07_0-2_20221003		SB-07_32-34_20221003	
		Laboratory Sample ID	460-266752-7		460-266752-8	
		Date Sampled	10/03/2022		10/03/2022	
		Unit	mg/kg		mg/kg	
		Dilution Factor	1		1	
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	**CONC**	**Q**	**CONC**	**Q**
Aldrin	**0.005**	**0.097**	0.0076	U	0.0069	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	**0.02**	**0.48**	0.0023	U	0.0021	U
Alpha Endosulfan	**NS**	**NS**	0.0076	U	0.0069	U
Beta Bhc (Beta Hexachlorocyclohexane)	**0.036**	**0.36**	0.0023	U	0.0021	U
Beta Endosulfan	**NS**	**NS**	0.0076	U	0.0069	U
cis-Chlordane	**0.094**	**4.2**	0.0076	U	0.0069	U
Delta BHC (Delta Hexachlorocyclohexane)	**0.04**	**100**	0.0023	U	0.0021	U
Dieldrin	**0.005**	**0.2**	0.0023	U	0.0021	U
Endosulfan Sulfate	**NS**	**NS**	0.0076	U	0.0069	U
Endosulfans ABS	**2.4**	**24**	0	U	0	U
Endrin	**0.014**	**11**	0.0076	U	0.0069	U
Endrin Aldehyde	**NS**	**NS**	0.0076	U	0.0069	U
Endrin Ketone	**NS**	**NS**	0.0076	U	0.0069	U
Gamma Bhc (Lindane)	**0.1**	**1.3**	0.0023	U	0.0021	U
Heptachlor	**0.042**	**2.1**	0.0076	U	0.0069	U
Heptachlor Epoxide	**NS**	**NS**	0.0076	U	0.0069	U
Methoxychlor	**NS**	**NS**	0.0076	U	0.0069	U
P,P'-DDD	**0.0033**	**13**	0.0076	U	0.0069	U
P,P'-DDE	**0.0033**	**8.9**	0.0076	U	0.0069	U
P,P'-DDT	**0.0033**	**7.9**	0.0076	U	0.0069	U
Toxaphene	**NS**	**NS**	0.076	U	0.069	U

Table 6
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
VOCs

	AKRF Sample ID	TW-01_20221005		TW-02_20221003		TW-03_20221004		TW-04_20221004		TB_20221003	
	Laboratory Sample ID	460-266877-3		460-266752-9		460-266826-5		460-266826-6		460-266752-10	
	Date Sampled	10/05/2022		10/03/2022		10/04/2022		10/04/2022		10/03/2022	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
	Dilution Factor	1		1		1		1		1	
Compound	AWQSGV	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	0.04	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.6	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene (Mesitylene)	5	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
2-Hexanone	50	5	U	5	U	5	U	5	U	5	U
Acetone	50	50		5	U	5	U	5	U	5	U
Benzene	1	0.3	J	1	U	1	U	1	U	1	U
Bromochloromethane	5	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	50	1	U	1	U	1	U	0.5	J	1	U
Bromoform	50	1	U	1	U	1	U	1	U	1	U
Bromomethane	5	1	U	1	UT	1	UT	1	UT	1	UT
Carbon Disulfide	60	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	5	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	5	1	U	1	U	1	U	1	U	1	U
Chloroethane	5	1	U	1	U	1	U	1	U	1	U
Chloroform	7	1.6		2.4		2.7		**9.2**		1	U
Chloromethane	5	1	U	1	U	1	U	1	U	1	U
Cis-1,2-Dichloroethylene	5	**14**		**6.7**		0.41	J	2.3		1	U
Cis-1,3-Dichloropropene	NS	1	U	1	U	1	U	1	U	1	U
Cyclohexane	NS	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	1	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	5	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	5	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene (Cumene)	5	1	U	1	U	1	U	1	U	1	U
M,P-Xylenes	5	1	U	1	U	1	U	1	U	0.47	J
Methyl Acetate	NS	5	U	5	U	5	U	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	50	9.4		5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	5	1	U	1	U	1	U	1	U	0.32	J
N-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	1	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	5	1	U	1	U	1	U	1	U	1	U
Sec-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
Styrene	5	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
Tert-Butyl Methyl Ether	10	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	5	**100**		**19**		**100**		**330**		1	U
Toluene	5	1	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	1	U	1	U	1	U	1	U	1	U
Trichloroethylene (TCE)	5	2.1		1	U	0.69	J	1.9		1	U
Trichlorofluoromethane	5	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	2	1	U	1	U	1	U	1	U	1	U
Xylenes, Total	NS	2	U	2	U	2	U	2	U	2	U

Table 7
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
SVOCs

	AKRF Sample ID	TW-01_20221005	TW-02_20221003	TW-02_20221003	TW-03_20221004	TW-04_20221004
	Laboratory Sample ID	460-266877-3	460-266752-9	460-266752-9	460-266826-5	460-266826-6
	Date Sampled	10/05/2022	10/03/2022	10/03/2022	10/04/2022	10/04/2022
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	5	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	NR	10 U	10 U
1,4-Dioxane (P-Dioxane)	NS	10 U	10 U	NR	10 U	10 U
2,3,4,6-Tetrachlorophenol	NS	10 U	10 U	NR	10 U	10 U
2,4,5-Trichlorophenol	NS	10 U	10 U	NR	10 U	10 U
2,4,6-Trichlorophenol	NS	10 U	10 U	NR	10 U	10 U
2,4-Dichlorophenol	5	10 U	10 U	NR	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U	NR	10 U	10 U
2,4-Dinitrophenol	10	40 U	40 U	NR	40 U	40 U
2,4-Dinitrotoluene	5	10 U	10 U	NR	10 U	10 U
2,6-Dinitrotoluene	5	2 U	2 U	NR	2 U	2 U
2-Chloronaphthalene	10	10 U	10 U	NR	10 U	10 U
2-Chlorophenol	NS	10 U	10 U	NR	10 U	10 U
2-Methylnaphthalene	NS	10 U	10 U	NR	10 U	10 U
2-Methylphenol (O-Cresol)	NS	10 U	10 U	NR	10 U	10 U
2-Nitroaniline	5	10 U	10 U	NR	10 U	10 U
2-Nitrophenol	NS	10 U	10 U	NR	10 U	10 U
3- And 4- Methylphenol (Total)	NS	10 U	10 U	NR	10 U	10 U
3,3'-Dichlorobenzidine	5	10 U	10 U	NR	10 U	10 U
3-Nitroaniline	5	10 U	10 U	NR	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	20 U	20 U	NR	20 U	20 U
4-Bromophenyl Phenyl Ether	NS	10 U	10 U	NR	10 U	10 U
4-Chloro-3-Methylphenol	NS	10 U	10 U	NR	10 U	10 U
4-Chloroaniline	5	10 U	10 U	NR	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	10 U	10 U	NR	10 U	10 U
4-Methylphenol (P-Cresol)	NS	10 U	10 U	NR	10 U	10 U
4-Nitroaniline	5	10 U	10 U	NR	10 U	10 U
4-Nitrophenol	NS	20 U	20 U	NR	20 U	20 U
Acenaphthene	20	10 U	10 U	NR	10 U	10 U
Acenaphthylene	NS	10 U	10 U	NR	10 U	10 U
Acetophenone	NS	10 U	10 U	NR	10 U	10 U
Anthracene	50	10 U	10 U	NR	10 U	10 U
Atrazine	7.5	2 UT	2 UT	NR	2 UT	2 UT
Benzaldehyde	NS	10 U	10 U	NR	10 U	10 U
Benzo(a)Anthracene	0.002	**2.1**	1 U	NR	1 U	1 U
Benzo(a)Pyrene	ND	**1.6**	1 U	NR	1 U	1 U
Benzo(b)Fluoranthene	0.002	**2.2**	2 U	NR	2 U	2 U
Benzo(g,h,i)Perylene	NS	1.7 J	10 U	NR	10 U	10 U
Benzo(k)Fluoranthene	0.002	1 U	1 U	NR	1 U	1 U
Benzyl Butyl Phthalate	50	10 U	10 U	NR	10 U	10 U
Biphenyl (Diphenyl)	5	10 U	10 U	NR	10 U	10 U
Bis(2-Chloroethoxy) Methane	5	10 U	10 U	NR	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1 U	1 U	NR	1 U	1 U
Bis(2-Chloroisopropyl) Ether	5	10 U	10 U	NR	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	5	**6.2**	2 U	NR	2 U	2 U
Caprolactam	NS	10 U	NR	98	10 U	10 U
Carbazole	NS	10 U	10 U	NR	10 U	10 U
Chrysene	0.002	**2**	2 U	NR	2 U	2 U
Dibenz(a,h)Anthracene	NS	1 U	1 U	NR	1 U	1 U
Dibenzofuran	NS	10 U	10 U	NR	10 U	10 U
Diethyl Phthalate	50	10 U	10 U	NR	10 U	10 U
Dimethyl Phthalate	50	10 U	10 U	NR	10 U	10 U
Di-N-Butyl Phthalate	50	10 U	10 U	NR	10 U	10 U
Di-N-Octylphthalate	50	10 U	10 U	NR	10 U	10 U
Fluoranthene	50	4 J	10 U	NR	10 U	10 U
Fluorene	50	10 U	10 U	NR	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	NR	1 U	1 U
Hexachlorobutadiene	0.5	1 U	1 U	NR	1 U	1 U
Hexachlorocyclopentadiene	5	10 U	10 U	NR	10 U	10 U
Hexachloroethane	5	2 U	2 U	NR	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.002	**1.6 J**	2 U	NR	2 U	2 U
Isophorone	50	10 U	10 U	NR	10 U	10 U
Naphthalene	10	2 U	2 U	NR	2 U	2 U
Nitrobenzene	0.4	1 U	1 U	NR	1 U	1 U
N-Nitrosodi-N-Propylamine	NS	1 U	1 U	NR	1 U	1 U
N-Nitrosodiphenylamine	50	10 U	10 U	NR	10 U	10 U
Pentachlorophenol	NS	20 U	20 U	NR	20 U	20 U
Phenanthrene	50	2.6 J	10 U	NR	10 U	10 U
Phenol	1	10 U	10 U	NR	10 U	10 U
Pyrene	50	3.4 J	10 U	NR	10 U	10 U

Table 8
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
Total Metals

AKRF Sample ID		TW-01_20221005	TW-01_20221005	TW-02_20221003	TW-03_20221004	TW-04_20221004
Laboratory Sample ID		460-266877-3	460-266877-3	460-266752-9	460-266826-5	460-266826-6
Date Sampled		10/05/2022	10/05/2022	10/03/2022	10/04/2022	10/04/2022
Unit		µg/L	µg/L	µg/L	µg/L	µg/L
Dilution Factor		1	5	1	1	1
Compound	**AWQSGV**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
Aluminum	**NS**	NR	294,000	21.1 J	771	2,320
Antimony	**3**	1.9 J	NR	2 U	2 U	2 U
Arsenic	**25**	**63.9**	NR	2 U	2 U	2 U
Barium	**1,000**	**3,540**	NR	103	140	171
Beryllium	**3**	**14.2**	NR	0.8 U	0.8 U	0.16 J
Cadmium	**5**	5	NR	2 U	2 U	2 U
Calcium	**NS**	NR	913,000	88,000	116,000	88,700
Chromium, Total	**50**	**3,390**	NR	4 U	5.5	14.6
Cobalt	**NS**	325	NR	1.7 J	1.6 J	3.3 J
Copper	**200**	**1,340**	NR	4 U	3.7 J	8.6
Iron	**300**	NR	**971,000**	120 U	**1,660**	**4,430**
Lead	**25**	**857**	NR	1.2 U	2.7	1.6
Magnesium	**35,000**	**355,000**	NR	33,700	**47,500**	33,100
Manganese	**300**	NR	**24,600**	**439**	261	**1,090**
Mercury	**0.7**	**1.7**	NR	0.2 U	0.2 U	0.2 U
Nickel	**100**	**922**	NR	4.3	4.3	11.7
Potassium	**NS**	66,400	NR	3,480	5,380	8,380
Selenium	**10**	1.5 J	NR	3.1	2.8	0.78 J
Silver	**50**	2.5	NR	2 U	2 U	2 U
Sodium	**20,000**	**74,600**	NR	**140,000**	**128,000**	**109,000**
Thallium	**0.5**	**5.1**	NR	0.8 U	0.8 U	0.8 U
Vanadium	**NS**	707	NR	4 U	3.2 J	7.1
Zinc	**2,000**	**2,640**	NR	16 U	6.7 J	11.9 J

Table 9
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
Dissolved Metals

AKRF Sample ID		TW-01_20221005		TW-02_20221003		TW-03_20221004		TW-04_20221004	
Laboratory Sample ID		460-266877-3		460-266752-9		460-266826-5		460-266826-6	
Date Sampled		10/05/2022		10/03/2022		10/04/2022		10/04/2022	
Unit		µg/L		µg/L		µg/L		µg/L	
Dilution Factor		1		1		1		1	
Compound	**AWQSGV**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**
Aluminum	**NS**	40	U	40	U	233		797	
Antimony	**3**	1.9	J	2	U	2	U	2	U
Arsenic	**25**	2	U	2	U	2	U	2	U
Barium	**1,000**	16.3		107		125		147	
Beryllium	**3**	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	**5**	2	U	2	U	2	U	2	U
Calcium	**NS**	19,500		88,300		106,000		82,600	
Chromium, Total	**50**	4	U	4	U	4	U	3.9	J
Cobalt	**NS**	0.91	J	1.7	J	1.1	J	2.5	J
Copper	**200**	4	U	4	U	2.5	J	4.9	
Iron	**300**	120	U	120	U	**492**		**1,630**	
Lead	**25**	1.2	U	1.2	U	3.8		1.1	J
Magnesium	**35,000**	4,050		34,500		**45,900**		30,400	
Manganese	**300**	185		**450**		216		**1,020**	
Mercury	**0.7**	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	**100**	9.9		3.9	J	2.4	J	4.9	
Potassium	**NS**	4,310		3,590		4,950		7,610	
Selenium	**10**	2.5	U	2.9		2.2	J	0.85	J
Silver	**50**	2	U	2	U	2	U	2	U
Sodium	**20,000**	**35,300**		**141,000**		**127,000**		**107,000**	
Thallium	**0.5**	0.8	U	0.8	U	0.8	U	0.8	U
Vanadium	**NS**	4	U	4	U	2	J	2.8	J
Zinc	**2,000**	16	U	16	U	16	U	16	U

Table 10
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
PCBs

AKRF Sample ID		TW-01_20221005	TW-02_20221003	TW-03_20221004	TW-04_20221004
Laboratory Sample ID		460-266877-3	460-266752-9	460-266826-5	460-266826-6
Date Sampled		10/05/2022	10/03/2022	10/04/2022	10/04/2022
Unit		µg/L	µg/L	µg/L	µg/L
Dilution Factor		1	1	1	1
Compound	**AWQSGV**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
PCB-1016 (Aroclor 1016)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	**NS**	0.4 U	0.4 U	0.4 U	0.4 U
Total PCBs	**0.09**	0.4 U	0.4 U	0.4 U	0.4 U

Table 11
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Groundwater Analytical Results
Pesticides

AKRF Sample ID		TW-01_20221005		TW-02_20221003		TW-03_20221004		TW-04_20221004	
Laboratory Sample ID		460-266877-3		460-266752-9		460-266826-5		460-266826-6	
Date Sampled		10/05/2022		10/03/2022		10/04/2022		10/04/2022	
Unit		µg/L		µg/L		µg/L		µg/L	
Dilution Factor		1		1		1		1	
Compound	**AWQSGV**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**	**CONC**	**Q**
Aldrin	**ND**	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	**0.01**	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Endosulfan	**NS**	0.02	U	0.02	U	0.02	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	**0.04**	0.02	U	0.02	U	0.02	U	0.02	U
Beta Endosulfan	**NS**	0.02	U	0.02	U	0.02	U	0.02	U
cis-Chlordane	**NS**	0.02	U	0.02	U	0.02	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	**0.04**	0.02	U	0.02	U	0.02	U	0.02	U
Dieldrin	**0.004**	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan Sulfate	**NS**	0.02	U	0.02	U	0.02	U	0.02	U
Endrin	**ND**	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Aldehyde	**5**	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Ketone	**5**	0.02	U	0.02	U	0.02	U	0.02	U
Gamma Bhc (Lindane)	**0.05**	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor	**0.04**	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor Epoxide	**0.03**	0.02	U	0.02	U	0.02	U	0.02	U
Methoxychlor	**35**	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDD	**0.3**	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDE	**0.2**	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDT	**0.2**	0.02	U	0.02	U	0.02	U	0.02	U
Toxaphene	**0.06**	0.5	U	0.5	U	0.5	U	0.5	U

Table 12
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Vapor Analytical Results
VOCs

AKRF Sample ID	SV-01_20221004	SV-01_20221004	SV-02_20221003	SV-02_20221003	SV-03_20221004	SV-04_20221003	SV-04_20221003
Laboratory Sample ID	200-65197-1	200-65197-1	200-65184-1	200-65184-1	200-65197-2	200-65184-2	200-65184-2
Date Sampled	10/04/2022	10/04/2022	10/03/2022	10/03/2022	10/04/2022	10/03/2022	10/03/2022
Unit	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
Dilution Factor	1	6.14	1	2	1	1	10
Compound	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**	**CONC Q**
1,1,1-Trichloroethane	1.1 U	NR	1.1 U	NR	1.1 U	1.1 U	NR
1,1,2,2-Tetrachloroethane	1.4 U	NR	1.4 U	NR	1.4 U	1.4 U	NR
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.48 J	NR	1.5 U	NR	1.5 U	1.5 U	NR
1,1,2-Trichloroethane	1.1 U	NR	1.1 U	NR	1.1 U	1.1 U	NR
1,1-Dichloroethane	0.81 U	NR	0.81 U	NR	0.81 U	0.81 U	NR
1,1-Dichloroethene	0.2 U	NR	0.2 U	NR	0.2 U	0.2 U	NR
1,2,4-Trichlorobenzene	3.7 U	NR	3.7 U	NR	3.7 U	3.7 U	NR
1,2,4-Trimethylbenzene	1.7	NR	1.8	NR	1.6	2.1	NR
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	NR	1.5 U	NR	1.5 U	1.5 U	NR
1,2-Dichlorobenzene	1.2 U	NR	1.2 U	NR	1.2 U	1.2 U	NR
1,2-Dichloroethane	0.81 U	NR	0.81 U	NR	0.81 U	0.81 U	NR
1,2-Dichloropropane	0.92 U	NR	0.92 U	NR	0.92 U	0.92 U	NR
1,2-Dichlorotetrafluoroethane	1.4 U	NR	1.4 U	NR	1.4 U	1.4 U	NR
1,3,5-Trimethylbenzene (Mesitylene)	0.33 J	NR	0.45 J	NR	0.39 J	0.49 J	NR
1,3-Butadiene	3.6	NR	1.6	NR	2.6	3.9	NR
1,3-Dichlorobenzene	1.9	NR	1.6	NR	1.5	2.2	NR
1,4-Dichlorobenzene	1.2 U	NR	1.2 U	NR	1.2 U	1.2 U	NR
2,2,4-Trimethylpentane	1.2	NR	1.5	NR	3.3	1.2	NR
2-Chlorotoluene	1 U	NR	1 U	NR	1 U	1 U	NR
2-Hexanone	2 U	NR	2 U	NR	2 U	1.6 J	NR
4-Ethyltoluene	0.33 J	NR	0.54 J	NR	0.39 J	0.73 J	NR
Acetone	85	NR	NR	170 D	82	NR	130 D
Allyl Chloride (3-Chloropropene)	1.6 U	NR	1.6 U	NR	1.6 U	1.6 U	NR
Benzene	2	NR	2.2	NR	2.2	4.1	NR
Benzyl Chloride	1 UT	NR	1 U	NR	1 UT	1 U	NR
Bromodichloromethane	1.3 U	NR	1.3 U	NR	1.3 U	1.3 U	NR
Bromoform	2.1 U	NR	2.1 U	NR	2.1 U	2.1 U	NR
Bromomethane	0.78 U	NR	0.78 U	NR	0.78 U	0.78 U	NR
Butane	12	NR	8.1	NR	9.9	12	NR
Carbon Disulfide	4.1	NR	1.6	NR	2.3	3	NR
Carbon Tetrachloride	0.32	NR	0.4	NR	0.26	0.24	NR
Chlorobenzene	0.92 U	NR	0.92 U	NR	0.92 U	0.92 U	NR
Chlorodifluoromethane	4	NR	8	NR	8.3	0.87 J	NR
Chloroethane	1.3 U	NR	1.3 U	NR	1.3 U	1.3 U	NR
Chloroform	8.6	NR	10	NR	9.5	5.9	NR
Chloromethane	0.8 J	NR	0.43 J	NR	0.41 J	0.32 J	NR
Cis-1,2-Dichloroethylene	NR	200 D	110	NR	96	22	NR
Cis-1,3-Dichloropropene	0.91 U	NR	0.91 U	NR	0.91 U	0.91 U	NR
Cyclohexane	1.1	NR	1	NR	0.65 J	1.1	NR
Cymene	3	NR	2.3	NR	1.9	2.7	NR
Dibromochloromethane	1.7 U	NR	1.7 U	NR	1.7 U	1.7 U	NR
Dichlorodifluoromethane	1.8 J	NR	0.8 J	NR	2.3 J	1.8 J	NR
Ethylbenzene	1.4	NR	4.2	NR	2.2	5.8	NR
Hexachlorobutadiene	2.1 U	NR	2.1 U	NR	2.1 U	2.1 U	NR
Isopropanol	24	NR	31	NR	24	24	NR
Isopropylbenzene (Cumene)	0.28 J	NR	0.98 U	NR	0.98 U	0.98 U	NR
M,P-Xylenes	5.3	NR	17	NR	8.5	23	NR
Methyl Ethyl Ketone (2-Butanone)	10	NR	6	NR	1.5 U	8.2	NR
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.2 J	NR	2 U	NR	1.3 J	1 J	NR
Methyl Methacrylate	2 U	NR	2 U	NR	2 U	0.76 J	NR
Methylene Chloride	3.9	NR	0.65 J	NR	1.7 U	1.2 J	NR
Naphthalene	2.6 U	NR	2.6 U	NR	2.6 U	2.6 U	NR
N-Butylbenzene	1.1 U	NR	1.1 U	NR	1.1 U	1.1 U	NR
N-Heptane	2.9	NR	2.4	NR	2.5	3.9	NR
N-Hexane	3.3	NR	3.7	NR	3.3	7.1	NR
N-Propylbenzene	0.26 J	NR	0.38 J	NR	0.27 J	0.53 J	NR
O-Xylene (1,2-Dimethylbenzene)	2	NR	3.8	NR	2.4	4.9	NR
Sec-Butylbenzene	1.1 U	NR	1.1 U	NR	1.1 U	1.1 U	NR
Styrene	0.41 J	NR	0.3 J	NR	0.85 U	0.42 J	NR
T-Butylbenzene	1.1 U	NR	1.1 U	NR	1.1 U	1.1 U	NR
Tert-Butyl Alcohol	14 J	NR	8.6 J	NR	36	14 J	NR
Tert-Butyl Methyl Ether	0.72 U	NR	0.72 U	NR	0.72 U	0.72 U	NR
Tetrachloroethylene (PCE)	NR	780 D	210	NR	130	NR	1,900 D
Tetrahydrofuran	15 U	NR	15 U	NR	15 U	15 U	NR
Toluene	11	NR	24	NR	6.1	29	NR
Trans-1,2-Dichloroethene	1.1	NR	1	NR	0.61 J	0.79 U	NR
Trans-1,3-Dichloropropene	0.91 U	NR	0.91 U	NR	0.91 U	0.91 U	NR
Trichloroethylene (TCE)	30	NR	34	NR	45	28	NR
Trichlorofluoromethane	1.6	NR	2	NR	1.4	1 J	NR
Vinyl Bromide	0.87 U	NR	0.87 U	NR	0.87 U	0.87 U	NR
Vinyl Chloride	0.2 U	NR	0.2 U	NR	0.2 U	0.2 U	NR

Table 12
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Soil Vapor Analytical Results
VOCs

AKRF Sample ID	SV-05_20221004	SV-05_20221004
Laboratory Sample ID	200-65197-3	200-65197-3
Date Sampled	10/04/2022	10/04/2022
Unit	µg/m^3	µg/m^3
Dilution Factor	1	2
Compound	**CONC Q**	**CONC Q**
1,1,1-Trichloroethane	0.33 J	NR
1,1,2,2-Tetrachloroethane	1.4 U	NR
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.56 J	NR
1,1,2-Trichloroethane	1.1 U	NR
1,1-Dichloroethane	0.81 U	NR
1,1-Dichloroethene	0.2 U	NR
1,2,4-Trichlorobenzene	3.7 U	NR
1,2,4-Trimethylbenzene	1.5	NR
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	NR
1,2-Dichlorobenzene	1.2 U	NR
1,2-Dichloroethane	0.81 U	NR
1,2-Dichloropropane	0.92 U	NR
1,2-Dichlorotetrafluoroethane	1.4 U	NR
1,3,5-Trimethylbenzene (Mesitylene)	0.38 J	NR
1,3-Butadiene	6.6	NR
1,3-Dichlorobenzene	2.6	NR
1,4-Dichlorobenzene	1.2 U	NR
2,2,4-Trimethylpentane	3.5	NR
2-Chlorotoluene	1 U	NR
2-Hexanone	2 U	NR
4-Ethyltoluene	0.39 J	NR
Acetone	87	NR
Allyl Chloride (3-Chloropropene)	1.6 U	NR
Benzene	3.9	NR
Benzyl Chloride	1 UT	NR
Bromodichloromethane	1.3 U	NR
Bromoform	2.1 U	NR
Bromomethane	0.78 U	NR
Butane	25	NR
Carbon Disulfide	5.4	NR
Carbon Tetrachloride	0.28	NR
Chlorobenzene	0.92 U	NR
Chlorodifluoromethane	2.2	NR
Chloroethane	1.3 U	NR
Chloroform	27	NR
Chloromethane	0.27 J	NR
Cis-1,2-Dichloroethylene	45	NR
Cis-1,3-Dichloropropene	0.91 U	NR
Cyclohexane	2	NR
Cymene	3.6	NR
Dibromochloromethane	1.7 U	NR
Dichlorodifluoromethane	2.3 J	NR
Ethylbenzene	2.9	NR
Hexachlorobutadiene	2.1 U	NR
Isopropanol	11 J	NR
Isopropylbenzene (Cumene)	0.39 J	NR
M,P-Xylenes	9	NR
Methyl Ethyl Ketone (2-Butanone)	11	NR
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.7 J	NR
Methyl Methacrylate	2 U	NR
Methylene Chloride	1.7 U	NR
Naphthalene	2.6 U	NR
N-Butylbenzene	1.1 U	NR
N-Heptane	5.8	NR
N-Hexane	7	NR
N-Propylbenzene	0.28 J	NR
O-Xylene (1,2-Dimethylbenzene)	2.6	NR
Sec-Butylbenzene	1.1 U	NR
Styrene	0.85 U	NR
T-Butylbenzene	1.1 U	NR
Tert-Butyl Alcohol	28	NR
Tert-Butyl Methyl Ether	0.72 U	NR
Tetrachloroethylene (PCE)	NR	390 D
Tetrahydrofuran	15 U	NR
Toluene	5.8	NR
Trans-1,2-Dichloroethene	0.79 U	NR
Trans-1,3-Dichloropropene	0.91 U	NR
Trichloroethylene (TCE)	25	NR
Trichlorofluoromethane	3.3	NR
Vinyl Bromide	0.87 U	NR
Vinyl Chloride	0.2 U	NR

Tables 1-12
IKOS Senior Living
31-07 31st Street
Queens, NY
Phase II Investigation Analytical Results
Notes

DEFINITIONS

D	:	Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.
J	:	The concentration given is an estimated value.
ND	:	The standard is a non-detectable concentration by the approved analytical method.
NR	:	Not reported.
NS	:	No standard.
P	:	Indicates a pesticide/aroclor target analyte had a percent difference greater than 25% between the two gc columns. The lower of the two results is reported.
T	:	Indicates that a quality control parameter has exceeded laboratory limits.
U	:	The analyte was not detected at the indicated concentration.
mg/kg	:	milligrams per kilogram
µg/L	:	micrograms per liter
µg/m^3	:	micrograms per cubic meter of air

STANDARDS

Part 375 Soil Cleanup Objectives	:	Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

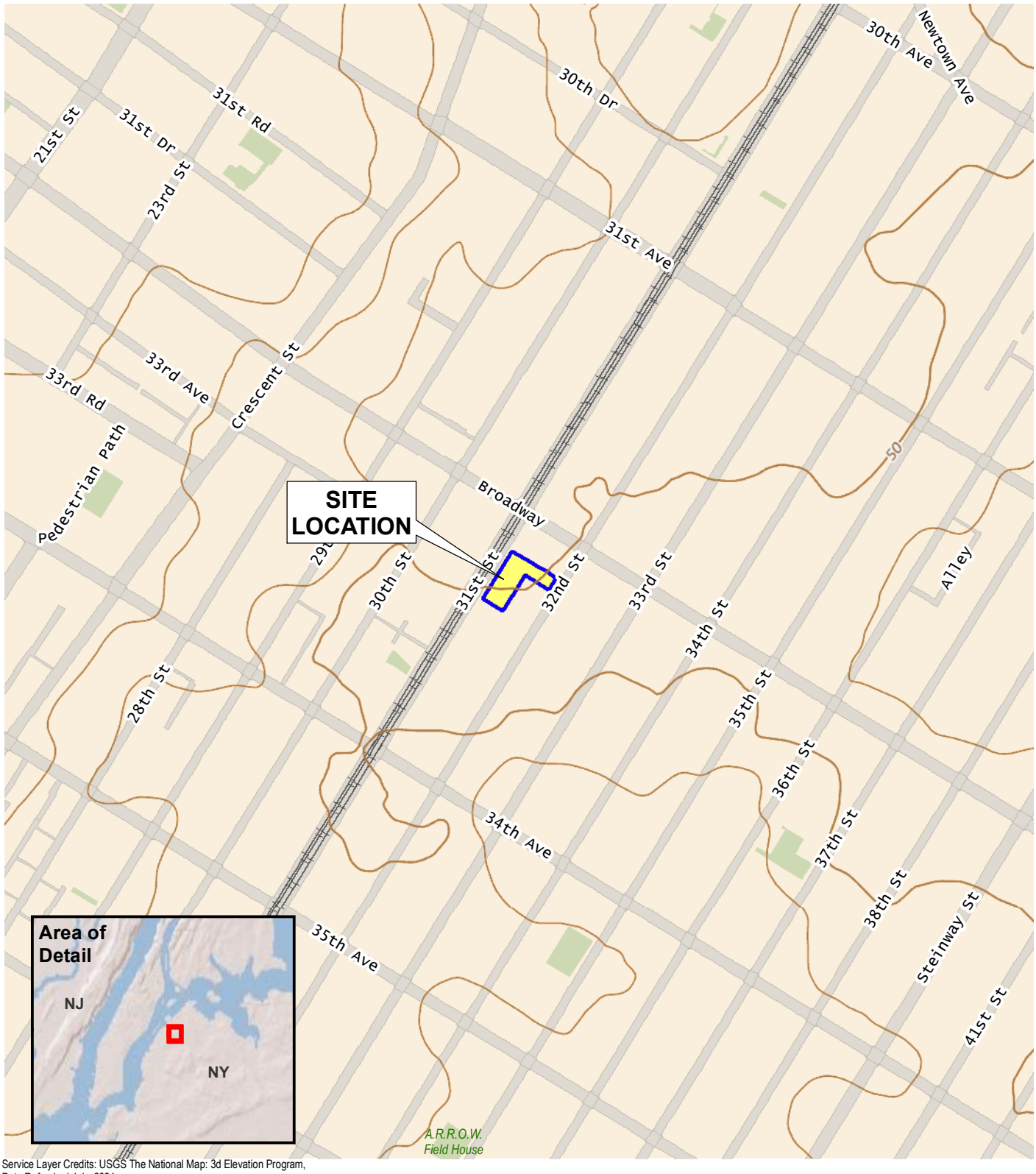
Note: Endosulfans ABS represents the detected sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray shading

NYSDEC Class GA AWQSGVs	:	New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

Exceedances of NYSDEC Class GA AWQSGVs are highlighted in bold font.

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2021

0 600 1,200

SCALE IN FEET

AKRF

440 Park Avenue South, New York, NY 10016

31-07 31st Street
Queens, New York

SITE LOCATION

DATE
11/3/2022

PROJECT NO.
210124

FIGURE
1

©2022 AKRF O:\Projects\210124 - IKOS SENIOR LIVING\SAR\210124 Fig 1 Site Loc Map.mxd11/3/2022 12:19:30 PM jszalus



LEGEND

- APPROXIMATE SITE BOUNDARY
- 25 — LOT BOUNDARY AND TAX LOT NUMBER
- 611 — BLOCK NUMBER
- PROPOSED BUILDING
- PROPOSED CELLAR
- PROPOSED CRAWLSPACE
- EXISTING MONITORING WELL LOCATION
- SOIL BORING
- SOIL BORING/SOIL VAPOR POINT
- SOIL BORING/TEMPORARY WELL
- SOIL VAPOR POINT

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database
Aerial Source:
2020 New York State ITS GIS Orthoimagery

0 40 80
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

31-07 31st Street
Queens, New York

SITE PLAN AND SAMPLE LOCATIONS

DATE
11/3/2022
PROJECT NO.
210124
FIGURE
2

©2022 AKRF O:\Projects\210124 - IKOS SENIOR LIVING\SAR\ph II\210124 Fig 2 Site Plan and Sample Locations.mxd 11/3/2022 3:25:42 PM iszalus

APPENDIX A
GEOPHYSICAL REPORT

GEOPHYSICAL INVESTIGATION REPORT

PERFORMED AT:

31-07 31st Street,
Astoria, Queens , NY

PREPARED FOR:

Adrianna Bosco
AKRF
440 Park Avenue South 7th Floor,
New York ,NY 10016
Reporting: abosco@akrf.com

PREPARED BY:

Aidan O'Sullivan
Geophysical Technician
Enviroprobe Service, Inc.
81 Marter Avenue
Mount Laurel, NJ 08054
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(800) 596-7472

October 03, 2022

1.0 INTRODUCTION

Enviroprobe Service, Inc. (Enviroprobe) is an environmental investigation services firm which provides monitoring well installation (HSA), Geoprobe (DPT) drilling services and Environmental & Engineering Geophysics (EEG) services to the environmental consulting and engineering community.

Enviroprobe conducted a subsurface geophysical investigation at the subject property within client-specified areas of concern. Due to conditions and objectives, the investigation utilized a GSSI UtilityScan HS cart-mounted Ground Penetrating Radar (GPR) unit with a 350 MHz antenna, a Fisher TW-6 metallic locator, a Radiodetection RD7000TX3 multi-frequency transmitter, and a Radiodetection RD7000PXL receiver.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 2,000 MHz) to acquire subsurface information. An EM wave is propagated downward into the ground by a transmitting antenna. Where abrupt changes in electrical properties occur in the subsurface, a portion of the energy is reflected back to the surface. This reflected wave is detected by a receiver antenna and transmitted to a control unit for real time processing and display. The penetration depth of the GSSI unit varies from several inches to tens of feet according to site-specific conditions. The penetration depth decreases with increased soil conductivity. The penetration depth is the greatest in ice, dry sands, and fine gravels. Clayey, highly saline or saturated soils, areas covered by concrete, foundry slag, or other highly conductive materials greatly reduce GPR penetration. GPR is a method that is commonly used for environmental, engineering, archaeological, and other shallow investigations.

The Fisher TW-6 metallic locator is designed to find pipes, cables and other metallic objects such as underground storage tanks (USTs). The TW-6 transmitter generates an electromagnetic field that induces electrical currents in the subsurface. These currents produce a secondary electromagnetic field that is measured by the TW-6 receiver. One surveyor can carry both the transmitter and receiver together to search for underground metallic objects, although the TW-6 response can also be affected by the electrical properties of non-metallic materials in the subsurface.

The Radiodetection (RD) transmitter and receiver are commonly used for pipe and cable locating. The multi-frequency transmitter can be directly connected, clamped, or used to induce a signal in a target line while the multi-frequency receiver is used to measure the signal from energized lines.

2.0 SCOPE OF WORK

On October 03, 2022, a geophysical technician from Enviroprobe Service Inc. was mobilized to the subject property to perform a geophysical investigation. The purpose of the investigation was to clear boring locations, detect possible anomalies and designate underground conduits/utilities in the client selected exterior portions of the subject property. The ground surface of the survey area consisted of asphalt and concrete.

3.0 SURVEY RESULTS

The survey was conducted using a cart-mounted GPR unit, a Fisher TW-6 metallic locator, and a RD unit. The RD unit was used to trace common utilities from sources in and around the survey area. The RD receiver was also used in the passive mode to search for live underground electrical power cables and other utilities emitting 60Hz electromagnetic signals. When possible, the locations of utilities were confirmed with the GPR. Designated utilities were marked on-site with spray paint using the following colors: green – sanitary sewer & storm drainage, pink – vent lines & unknown utilities (See Figure Below).



The GPR and TW-6 were used in a grid pattern over all client specified areas of the site. Based on the results of the GPR and TW-6 surveys, no metallic anomalies That were consistent with UST's, vent piping, or product piping were detected on site (See Figure above)

4.0 LIMITATIONS

The client-selected areas contained obstructions including materials, Reinforced concrete and vehicles. These objects prevented a thorough investigation of the spaces beneath and immediately adjacent to them.

Due to surface conditions and subsurface content, the GPR signal penetration was estimated at less than 4 ft in the majority of the survey area. This penetration was reduced in areas of concrete cover.

The TW-6 survey was kept up to 6 feet away from above ground objects containing metals depending on the sizes, shapes and positions of the metal objects. The TW-6 survey was not effective in areas with reinforced concrete.

Due to the dielectric properties of the subsurface, clay, plastic polymer, and fiberglass utilities may not have been detected.

All field services were conducted in compliance with the industry standard of care guidelines found in ASCE 38-02 (Level B).

5.0 WARRANTIES

The field observations and measurements reported herein are considered sufficient in detail and scope for this project. Enviroprobe Service, Inc. warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods. There is a possibility that conditions may exist which could not be identified within the scope of this project and were not apparent during the site activities performed for this project.

Enviroprobe represents that the services were performed in a manner consistent with that level of care and skill ordinarily exercised by environmental consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

Enviroprobe Service, Inc. believes that the information provided in this report is reliable. However, Enviroprobe cannot warrant or guarantee that the information provided by others is complete or accurate. No other warranties or guarantees are implied or expressed.

GPR data is subject to signal anomalies and operator interpretation. The GPR data is intended to provide the locations of areas of concern requiring additional investigation or the approximate location of underground structures and utilities. Great care must be utilized when excavating and/or drilling around underground structures and utilities since GPR data can only be used for estimation purposes and GPR data is subject to

misinterpretation. Enviroprobe can not guarantee that utilities, post-tension cables, and/or rebar will not be incurred during drilling, cutting, coring, or excavating activities.

This report was prepared pursuant to the contract Enviroprobe has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Enviroprobe and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between Enviroprobe and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Enviroprobe.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Enviroprobe contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

APPENDIX B
PHOTOGRAPHIC LOG



Photograph 1. Locating subsurface utilities during the geophysical survey.



Photograph 2. Geoprobe soil boring advancement at SB-02.



Photograph 3. Installation of SV-02 and collecting a groundwater sample from TW-02.



Photograph 4. Soil cores collected from SB-01.

APPENDIX C
FIELD LOGS

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID: SB-01 Sheet 1 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	60°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 7:30 **Finish Time:** 8:00
Date: 10/05/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	37	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-01_0-2_20221005
2							
3		Bottom 34": Brown coarse SAND, trace fine Gravel (FILL).	ND	DRY	ND	ND	
4							
5							
6	42	Top 15": Brown coarse SAND, trace fine Gravel (FILL).	ND	DRY	ND	ND	
7		Next 6": Dark brown fine SAND, trace fine Gravel (FILL).	ND	DRY	ND	ND	
8							
9		Bottom 21": Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
10							
11	36	Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
12							
13							
14							
15							
16	43	Top 10": Brown fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
17							
18		Bottom 33": Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
19							
20							

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-01 screened from 30 to 40 feet. Groundwater measured at approximately 36.61 feet in TW-01.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID: SB-01 Sheet 2 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	60°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 7:30 **Finish Time:** 8:00
Date: 10/05/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21	46	Top 20": Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
22		Next 7": Brown fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
23		Bottom 19": Light brown coarse fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
24							
25							
26	54	Light brown coarse fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
27							
28							
29							
30							
31	52	Brown coarse SAND, trace fine Gravel.	ND	Wet @ 33"	ND	ND	SB-01_31-33_20221005
32							
33							
34							
35							
36	38	Brown coarse SAND, trace fine Gravel.	ND	WET	ND	ND	
37							
38							
39							
40							

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-01 screened from 30 to 40 feet. Groundwater measured at approximately 36.61 feet in TW-01.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID: SB-02 Sheet 1 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 8:00 Finish Time: 9:00
Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	34	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-02_0-2_20221003
2		Next 7": Dark Brown SAND, little fine Gravel, trace Silt, Brick (FILL).	ND	DRY	ND	ND	
3							
4		Bottom 24": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
5							
6	44	Top 18": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
7							
8		Bottom 26": Light brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
9							
10							
11	56	Top 44": Light brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
12							
13							
14		Bottom 14": Brown fine SAND.	ND	DRY	ND	ND	
15							
16	60	Brown fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
17							
18							
19							
20							

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-02 screened from 30 to 40 feet. Groundwater measured at approximately 30.31 feet in TW-02.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID: SB-02 Sheet 2 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 8:00 **Finish Time:** 9:00
Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	58	Brown fine SAND, trace fine Gravel.	ND	DRY	ND	ND	
26 27 28 29 30	51	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
31 32 33 34 35	46	Brown coarse SAND, trace fine Gravel.	ND	Wet @ 33"	ND	ND	SB-02_31-33_2022 1003
36 37 38 39 40	58	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-02 screened from 30 to 40 feet. Groundwater measured at approximately 30.31 feet in TW-02.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 1 of 2

SB-03

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling

Start Time: 13:15 **Finish Time:** 14:10

Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	44	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-03_0-2_20221003
2		Next 30": Dark Brown fine SAND, little fine Gravel, trace Brick (FILL).	ND	DRY	ND	ND	
3							
4		Bottom 9": Brown coarse SAND (FILL).	ND	DRY	ND	ND	
5							
6	37	Top 7": Brown coarse SAND (FILL).	ND	DRY	ND	ND	
7		Next 9": Dark brown fine SAND, little fine Gravel (FILL).	ND	DRY	ND	ND	
8							
9		Next 19": Brown coarse SAND.	ND	DRY	ND	ND	
10							
11	42	Top 19": Brown coarse SAND.	ND	DRY	ND	ND	
12							
13		Bottom 23": Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
14							
15							
16	41	Top 16": Brown SAND, trace fine Gravel.	ND	DRY	ND	ND	
17		Bottom 29": Brown coarse SAND.	ND	DRY	ND	ND	
18							
19							
20							

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for Installed 1" temporary well TW-03 screened from 30 to 40 feet. Groundwater measured at approximately 33.8 feet in TW-03.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	31-07 31st Street Astoria, NY AKRF Project Number: 210124		Soil Boring ID Sheet 2 of 2	SB-03
AKRF 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822 DT DPP	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 13:15	Finish Time: 14:10
	Driller:	AARCO		
	Weather:	50°F, Rain	Date: 10/03/2022	
	Logged By:	TG, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	41	Brown coarse SAND.	ND	DRY	ND	ND	
26 27 28 29 30	36	Brown coarse SAND.	ND	DRY	ND	ND	
31 32 33 34 35	39	Brown fine SAND.	ND	Wet @ 33"	ND	ND	SB-03_31-33_2022
36 37 38 39 40	60	Brown fine SAND.	ND	WET	ND	ND	

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for Installed 1" temporary well TW-03 screened from 30 to 40 feet. Groundwater measured at approximately 33.8 feet in TW-03.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	31-07 31st Street Astoria, NY AKRF Project Number: 210124		Soil Boring ID Sheet 1 of 2	SB-04
AKRF 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822 DT DPP	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 11:00	Finish Time: 11:50
	Driller:	AARCO		
	Weather:	50°F, Rain	Date: 10/03/2022	
	Logged By:	TG, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	33	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-04_0-2_20221003
2		Next 10": Dark brown fine SAND, little fine Gravel, trace silt (FILL).	ND	DRY	ND	ND	
3							
4		Bottom 20": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
5							
6	28	Top 6": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
7							
8		Bottom 22": Light brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
9							
10							
11	29	Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
12							
13							
14							
15							
16	28	Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
17							
18							
19							
20							

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-04 screened from 35 to 45 feet. Groundwater measured at approximately 36.43 feet in TW-04.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 2 of 2	SB-04

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 11:00 **Finish Time:** 11:50
Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	41	Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
26 27 28 29 30	0	No recovery	N/A	N/A	N/A	N/A	
31 32 33 34 35	55	Top 26": Brown coarse SAND, some fine Gravel. Bottom 29": Light brown coarse SAND.	ND ND	DRY Wet @ 34'	ND ND	ND ND	SB-04_32-34_20221003
36 37 38 39 40	36	Brown coarse SAND, some fine Gravel.	ND	WET	ND	ND	
41 42 43 44 45	44	Brown coarse SAND, some fine Gravel.	ND	WET	ND	ND	

Notes: Soil and groundwater samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals (total and dissolved for groundwater).

Installed 1" temporary well TW-04 screened from 35 to 45 feet. Groundwater measured at approximately 36.43 feet in TW-04.

End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 1 of 2

SB-05

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	40°F, Rain
Logged By:	TG, AKRF

Drilling

Start Time: 10:55 **Finish Time:** 11:25

Date: 10/04/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	34	Top 6": ASPHALT.	ND	DRY	ND	ND	SB-05_0-2_20221004
2		Next 14": Dark brown fine SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
3							
4		Bottom 14": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
5							
6	32	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
7							
8							
9							
10							
11	48	Top 22": Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
12							
13		Bottom 26": Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
14							
15							
16	60	Top 8"; Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
17							
18							
19		Bottom 52": Light brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
20							

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 31 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 2 of 2	SB-05

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	40°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 10:55 | Finish Time: 11:25
Date: 10/04/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	25	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
26 27 28	44	Top 30": Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
29 30		Bottom 14": Light brown fine SAND, some fine Gravel	ND	DRY	ND	ND	SB-05_29-31_20221004
31 32 33 34 35	40	Top 18": Brown coarse SAND, trace fine Gravel. Bottom 22": Light brown coarse SAND, trace fine Gravel.	ND ND	DRY Wet @ 31'	ND ND	ND ND	
36 37 38 39 40	31	Brown coarse SAND, trace fine Gravel.	ND	WET	ND	ND	

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 31 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street
Astoria, NY
AKRF Project Number: 210124

Soil Boring ID
Sheet 1 of 2

SB-06

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	40°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 8:55 **Finish Time:** 9:30
Date: 10/04/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-06_0-2_20221004
2		Next 14": Dark brown fine SAND, little fine Gravel, trace Brick (FILL).	ND	DRY	ND	ND	
3							
4		Bottom 23": Brown coarse SAND, little fine Gravel (FILL).	ND	DRY	ND	ND	
5							
6	42	Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
7							
8							
9							
10							
11	39	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
12							
13							
14							
15							
16	36	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 31 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 2 of 2

SB-06

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	40°F, Rain
Logged By:	TG, AKRF

Drilling

Start Time: 8:55 **Finish Time:** 9:30

Date: 10/04/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	60	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
26 27 28 29 30	31	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	SB-06_29-31_20221004
31 32 33 34 35	30	Brown coarse SAND, trace fine Gravel	ND	Wet @ 31'	ND	ND	
36 37 38 39 40	48	Top 21": Brown coarse SAND, trace fine Gravel. Bottom 27": Brown coarse SAND.	ND ND	WET WET	ND ND	ND ND	

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 31 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street
Astoria, NY
AKRF Project Number: 210124

Soil Boring ID
Sheet 1 of 2

SB-07

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling
Start Time: 9:45 **Finish Time:** 10:30
Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 3": ASPHALT.	ND	DRY	ND	ND	SB-07_0-2_20221003
2		Next 11": Dark brown SAND, little fine Gravel, trace Silt, Brick (FILL).	ND	DRY	ND	ND	
3		Next 7": Brown SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
4							
5		Bottom 19": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
6	36	Top 12": Brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
7		Bottom 24": Light brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
8							
9							
10							
11	40	Top 15": Light brown coarse SAND, some fine Gravel (FILL).	ND	DRY	ND	ND	
12		Bottom 25": Brown fine SAND.	ND	DRY	ND	ND	
13							
14							
15							
16	38	Brown fine SAND.	ND	DRY	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 34 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

31-07 31st Street Astoria, NY AKRF Project Number: 210124	Soil Boring ID Sheet 2 of 2

SB-07

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822 DT DPP
Sampling Method:	5' Macrocore
Driller:	AARCO
Weather:	50°F, Rain
Logged By:	TG, AKRF

Drilling

Start Time: 9:45 **Finish Time:** 10:30

Date: 10/03/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24 25	47	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
26 27 28 29 30	25	Brown coarse SAND, trace fine Gravel.	ND	DRY	ND	ND	
31 32 33 34 35	52	Brown coarse SAND, trace fine Gravel.	ND	Wet @ 34'	ND	ND	SB-07_32-34_20221003
36 37 38 39 40	52	Brown coarse SAND, trace fine Gravel.	ND	WET	ND	ND	

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL metals.
Groundwater encountered at 34 feet below grade during boring advancement.
End of soil boring at 40 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Vapor Sample Log

AKRF Project No:	210124	**Point Installed By:**	AARCO
Project Location:	31-07 31st Street, Astoria, NY	**Installation Method:**	DPP
Client:	Mega Development LLC	**Sampled By:**	T. Giordano
Date:	10/4/2022	**Weather:**	40 °F, Rain

Sample Setup

Vapor Point Depth:	168	Inches	**Total Time of Purge:**	10min
Purging Pump:	Gilair Plus		**Purge Volume:**	2L
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	ND ppm
			Helium Concentration:	0 %

Sample Identification

Soil Vapor Point ID:	**SV-01**	**SUMMA® Canister ID:**	**5630**
Flow Controller ID:	**10655**	**Soil Vapor Sample ID:**	**SV-01_20221004**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	12:30	-30	ND	Open air parking lot / rain
Time Halfway:	13:30	-25	ND	Issue with regulator. AKRF notified laboratory for guidance.
Time Stopped:	15:30	-14	ND	Stopped @ -14 in/Hg as per instruction from lab project manager

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-01 20220713 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	210124	**Point Installed By:**	AARCO
Project Location:	31-07 31st Street, Astoria, NY	**Installation Method:**	DPP
Client:	Mega Development LLC	**Sampled By:**	T. Giordano
Date:	10/3/2022	**Weather:**	50 °F, Rain

Sample Setup

Vapor Point Depth:	168	Inches	**Total Time of Purge:**	10min	
Purging Pump:	Gilair Plus		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	ND	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	**SV-02**	**SUMMA® Canister ID:**	**6266**
Flow Controller ID:	**11564**	**Soil Vapor Sample ID:**	**SV-02_20221003**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	12:00	-30	ND	Open air parking / adjacent to elevated subway station / rain
Time Halfway:	13:00	-9	ND	Premature vacuum
Time Stopped:	13:10	-5	ND	Premature vacuum

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-02_20221003 collected in a C-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	210124	**Point Installed By:**	AARCO
Project Location:	31-07 31st Street, Astoria, NY	**Installation Method:**	DPP
Client:	Mega Development LLC	**Sampled By:**	T. Giordano
Date:	10/4/2022	**Weather:**	40 °F, Rain

Sample Setup

Vapor Point Depth:	168	Inches	**Total Time of Purge:**	10min	
Purging Pump:	Gilair Plus		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	ND	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	**SV-03**	**SUMMA® Canister ID:**	**3642**
Flow Controller ID:	**10652**	**Soil Vapor Sample ID:**	**SV-03_20221004**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	9:00	-30	ND	Open air parking lot / rain
Time Halfway:	10:00	-20	ND	Open air parking lot / rain
Time Stopped:	13:50	-5	ND	Open air parking lot / rain

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-03_20221004 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	210124	**Point Installed By:**	AARCO
Project Location:	31-07 31st Street, Astoria, NY	**Installation Method:**	DPP
Client:	Mega Development LLC	**Sampled By:**	T. Giordano
Date:	10/3/2022	**Weather:**	50 °F, Rain

Sample Setup

Vapor Point Depth:	168	inches	**Total Time of Purge:**	10min	
Purging Pump:	Gilair Plus		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	ND	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	**SV-04**	**SUMMA® Canister ID:**	**5058**
Flow Controller ID:	**7051**	**Soil Vapor Sample ID:**	**SV-04_20221003**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	13:30	-30	ND	Open air parking lot / rain
Time Halfway:	14:30	-19	ND	Open air parking lot / rain
Time Stopped:	15:30	-7	ND	Open air parking lot / rain

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-04 20221003 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	210124	**Point Installed By:**	AARCO
Project Location:	31-07 31st Street, Astoria, NY	**Installation Method:**	DPP
Client:	Mega Development LLC	**Sampled By:**	T. Giordano
Date:	10/4/2022	**Weather:**	40 °F, Rain

Sample Setup

Vapor Point Depth:	168	inches	**Total Time of Purge:**	10min	
Purging Pump:	Gilair Plus		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	ND	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	**SV-06**	**SUMMA® Canister ID:**	**6309**
Flow Controller ID:	**3979**	**Soil Vapor Sample ID:**	**SV-05_20221004**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	12:00	-30	ND	Open air parking lot / rain
Time Halfway:	13:00	-19	ND	Open air parking lot / rain
Time Stopped:	15:30	-8	ND	Open air parking lot / rain

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-05_20221004 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

APPENDIX D
LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Burlington
530 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

Laboratory Job ID: 200-65184-1
Client Project/Site: Ikos Senior Living

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, New York 10016

Attn: Ms. Adrianna Bosco

Melissa Haas

Authorized for release by:
10/11/2022 9:41:12 AM

Melissa Haas, Senior Project Manager
(203)308-0880
Melissa.Haas@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

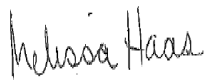
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Melissa Haas
Senior Project Manager
10/11/2022 9:41:12 AM

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Definitions/Glossary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 200-65184-1

Laboratory: Eurofins Burlington

Narrative

CASE NARRATIVE

Client: AKRF Inc

Project: Ikos Senior Living

Report Number: 200-65184-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/4/2022 1:30 PM and 10/5/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANICS (AMBIENT AIR)

Samples SV-02_20221003 (200-65184-1), SV-01_20221004 (200-65197-1), SV-04_20221003 (200-65184-2), SV-03_20221004 (200-65197-2) and SV-05_20221004 (200-65197-3) were analyzed for Volatile Organics (Ambient Air) in accordance with EPA Method TO15. The samples were analyzed on 10/06/2022 and 10/07/2022.

The continuing calibration verification (CCV) associated with batch 200-184402 recovered above the upper control limit for Benzyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SV-01_20221004, SV-03_20221004 and SV-05_20221004.

The laboratory control sample (LCS) for analytical batch 200-184402 recovered outside control limits for the following analytes: Benzyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Client Sample ID: SV-02_20221003 — Lab Sample ID: 200-65184-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.80	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	8.0		1.8	0.39	ug/m3	1		TO-15	Total/NA
Chloromethane	0.43	J	1.0	0.25	ug/m3	1		TO-15	Total/NA
n-Butane	8.1		1.2	0.45	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	1.6		0.44	0.084	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	2.0		1.1	0.29	ug/m3	1		TO-15	Total/NA
Acetone	160	E	12	4.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	31		12	2.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	1.6		1.6	0.40	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.65	J	1.7	0.59	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	8.6	J	15	3.6	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	1.0		0.79	0.35	ug/m3	1		TO-15	Total/NA
n-Hexane	3.7		1.8	0.81	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	6.0		1.5	0.50	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	110		0.20	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	10		0.98	0.22	ug/m3	1		TO-15	Total/NA
Cyclohexane	1.0		0.69	0.12	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.40		0.22	0.20	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.5		0.93	0.16	ug/m3	1		TO-15	Total/NA
Benzene	2.2		0.64	0.24	ug/m3	1		TO-15	Total/NA
n-Heptane	2.4		0.82	0.24	ug/m3	1		TO-15	Total/NA
Trichloroethene	34		0.20	0.13	ug/m3	1		TO-15	Total/NA
Toluene	24		0.75	0.35	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	210		1.4	0.18	ug/m3	1		TO-15	Total/NA
Ethylbenzene	4.2		0.87	0.43	ug/m3	1		TO-15	Total/NA
m,p-Xylene	17		2.2	0.74	ug/m3	1		TO-15	Total/NA
o-Xylene	3.8		0.87	0.41	ug/m3	1		TO-15	Total/NA
Styrene	0.30	J	0.85	0.14	ug/m3	1		TO-15	Total/NA
n-Propylbenzene	0.38	J	0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.54	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.45	J	0.98	0.22	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.8		0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	2.3		1.1	0.21	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	1.6		1.2	0.54	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	2.0	J D	4.9	1.1	ug/m3	2		TO-15	Total/NA
Chlorodifluoromethane - DL	8.0	D	3.5	0.78	ug/m3	2		TO-15	Total/NA
n-Butane - DL	13	D	2.4	0.90	ug/m3	2		TO-15	Total/NA
1,3-Butadiene - DL	1.6	D	0.88	0.17	ug/m3	2		TO-15	Total/NA
Trichlorofluoromethane - DL	2.0	J D	2.2	0.58	ug/m3	2		TO-15	Total/NA
Acetone - DL	170	D	24	9.5	ug/m3	2		TO-15	Total/NA
Isopropyl alcohol - DL	31	D	25	4.8	ug/m3	2		TO-15	Total/NA
Carbon disulfide - DL	1.6	J D	3.1	0.81	ug/m3	2		TO-15	Total/NA
tert-Butyl alcohol - DL	10	J D	30	7.3	ug/m3	2		TO-15	Total/NA
trans-1,2-Dichloroethene - DL	1.0	J D	1.6	0.70	ug/m3	2		TO-15	Total/NA
n-Hexane - DL	3.8	D	3.5	1.6	ug/m3	2		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	6.1	D	2.9	1.0	ug/m3	2		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	110	D	0.40	0.26	ug/m3	2		TO-15	Total/NA
Chloroform - DL	10	D	2.0	0.45	ug/m3	2		TO-15	Total/NA
Cyclohexane - DL	0.96	J D	1.4	0.24	ug/m3	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	1.4	J D	1.9	0.33	ug/m3	2		TO-15	Total/NA
Benzene - DL	2.2	D	1.3	0.47	ug/m3	2		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-02_20221003 (Continued)

Lab Sample ID: 200-65184-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Heptane - DL	2.3	D	1.6	0.48	ug/m3	2		TO-15	Total/NA
Trichloroethene - DL	33	D	0.40	0.26	ug/m3	2		TO-15	Total/NA
Toluene - DL	24	D	1.5	0.70	ug/m3	2		TO-15	Total/NA
Tetrachloroethene - DL	220	D	2.7	0.37	ug/m3	2		TO-15	Total/NA
Ethylbenzene - DL	4.3	D	1.7	0.87	ug/m3	2		TO-15	Total/NA
m,p-Xylene - DL	16	D	4.3	1.5	ug/m3	2		TO-15	Total/NA
o-Xylene - DL	3.9	D	1.7	0.82	ug/m3	2		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	1.8	J D	2.0	0.46	ug/m3	2		TO-15	Total/NA
4-Isopropyltoluene - DL	2.4	D	2.2	0.43	ug/m3	2		TO-15	Total/NA
1,3-Dichlorobenzene - DL	1.6	J D	2.4	1.1	ug/m3	2		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.16	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	2.3		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.21	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
n-Butane	3.4		0.50	0.19	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	0.70		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.36		0.20	0.052	ppb v/v	1		TO-15	Total/NA
Acetone	69	E	5.0	2.0	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	13		5.0	0.98	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.50		0.50	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.19	J	0.50	0.17	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	2.8	J	5.0	1.2	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.26		0.20	0.088	ppb v/v	1		TO-15	Total/NA
n-Hexane	1.1		0.50	0.23	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.0		0.50	0.17	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	27		0.050	0.033	ppb v/v	1		TO-15	Total/NA
Chloroform	2.1		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.29		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.064		0.035	0.032	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.33		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Benzene	0.70		0.20	0.074	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.59		0.20	0.059	ppb v/v	1		TO-15	Total/NA
Trichloroethene	6.3		0.037	0.024	ppb v/v	1		TO-15	Total/NA
Toluene	6.4		0.20	0.093	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	32		0.20	0.027	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.96		0.20	0.10	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	3.9		0.50	0.17	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.87		0.20	0.094	ppb v/v	1		TO-15	Total/NA
Styrene	0.070	J	0.20	0.032	ppb v/v	1		TO-15	Total/NA
n-Propylbenzene	0.076	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.11	J	0.20	0.051	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.092	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.36		0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.42		0.20	0.039	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.27		0.20	0.089	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	0.41	J D	1.0	0.22	ppb v/v	2		TO-15	Total/NA
Chlorodifluoromethane - DL	2.3	D	1.0	0.22	ppb v/v	2		TO-15	Total/NA
n-Butane - DL	5.3	D	1.0	0.38	ppb v/v	2		TO-15	Total/NA
1,3-Butadiene - DL	0.72	D	0.40	0.076	ppb v/v	2		TO-15	Total/NA
Trichlorofluoromethane - DL	0.35	J D	0.40	0.10	ppb v/v	2		TO-15	Total/NA
Acetone - DL	73	D	10	4.0	ppb v/v	2		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-02_20221003 (Continued)

Lab Sample ID: 200-65184-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropyl alcohol - DL	12	D	10	2.0	ppb v/v	2		TO-15	Total/NA
Carbon disulfide - DL	0.52	J D	1.0	0.26	ppb v/v	2		TO-15	Total/NA
tert-Butyl alcohol - DL	3.4	J D	10	2.4	ppb v/v	2		TO-15	Total/NA
trans-1,2-Dichloroethene - DL	0.26	J D	0.40	0.18	ppb v/v	2		TO-15	Total/NA
n-Hexane - DL	1.1	D	1.0	0.46	ppb v/v	2		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	2.1	D	1.0	0.34	ppb v/v	2		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	27	D	0.10	0.066	ppb v/v	2		TO-15	Total/NA
Chloroform - DL	2.1	D	0.40	0.092	ppb v/v	2		TO-15	Total/NA
Cyclohexane - DL	0.28	J D	0.40	0.070	ppb v/v	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.31	J D	0.40	0.070	ppb v/v	2		TO-15	Total/NA
Benzene - DL	0.69	D	0.40	0.15	ppb v/v	2		TO-15	Total/NA
n-Heptane - DL	0.56	D	0.40	0.12	ppb v/v	2		TO-15	Total/NA
Trichloroethene - DL	6.1	D	0.074	0.048	ppb v/v	2		TO-15	Total/NA
Toluene - DL	6.5	D	0.40	0.19	ppb v/v	2		TO-15	Total/NA
Tetrachloroethene - DL	33	D	0.40	0.054	ppb v/v	2		TO-15	Total/NA
Ethylbenzene - DL	0.98	D	0.40	0.20	ppb v/v	2		TO-15	Total/NA
m,p-Xylene - DL	3.7	D	1.0	0.34	ppb v/v	2		TO-15	Total/NA
o-Xylene - DL	0.91	D	0.40	0.19	ppb v/v	2		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	0.36	J D	0.40	0.094	ppb v/v	2		TO-15	Total/NA
4-Isopropyltoluene - DL	0.45	D	0.40	0.078	ppb v/v	2		TO-15	Total/NA
1,3-Dichlorobenzene - DL	0.27	J D	0.40	0.18	ppb v/v	2		TO-15	Total/NA

Client Sample ID: SV-04_20221003

Lab Sample ID: 200-65184-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.8	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	0.87	J	1.8	0.39	ug/m3	1		TO-15	Total/NA
Chloromethane	0.32	J	1.0	0.25	ug/m3	1		TO-15	Total/NA
n-Butane	12		1.2	0.45	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	3.9		0.44	0.084	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.0	J	1.1	0.29	ug/m3	1		TO-15	Total/NA
Acetone	160	E	12	4.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	24		12	2.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	3.0		1.6	0.40	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.2	J	1.7	0.59	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	14	J	15	3.6	ug/m3	1		TO-15	Total/NA
n-Hexane	7.1		1.8	0.81	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	8.2		1.5	0.50	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	22		0.20	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	5.9		0.98	0.22	ug/m3	1		TO-15	Total/NA
Cyclohexane	1.1		0.69	0.12	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.24		0.22	0.20	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.2		0.93	0.16	ug/m3	1		TO-15	Total/NA
Benzene	4.1		0.64	0.24	ug/m3	1		TO-15	Total/NA
n-Heptane	3.9		0.82	0.24	ug/m3	1		TO-15	Total/NA
Trichloroethene	28		0.20	0.13	ug/m3	1		TO-15	Total/NA
Methyl methacrylate	0.76	J	2.0	0.66	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.0	J	2.0	0.78	ug/m3	1		TO-15	Total/NA
Toluene	29		0.75	0.35	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1400	E	1.4	0.18	ug/m3	1		TO-15	Total/NA
Methyl Butyl Ketone (2-Hexanone)	1.6	J	2.0	0.82	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-04_20221003 (Continued)

Lab Sample ID: 200-65184-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	5.8		0.87	0.43	ug/m3	1		TO-15	Total/NA
m,p-Xylene	23		2.2	0.74	ug/m3	1		TO-15	Total/NA
o-Xylene	4.9		0.87	0.41	ug/m3	1		TO-15	Total/NA
Styrene	0.42	J	0.85	0.14	ug/m3	1		TO-15	Total/NA
n-Propylbenzene	0.53	J	0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.73	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.49	J	0.98	0.22	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	2.1		0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	2.7		1.1	0.21	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	2.2		1.2	0.54	ug/m3	1		TO-15	Total/NA
n-Butane - DL	11	J D	12	4.5	ug/m3	10		TO-15	Total/NA
1,3-Butadiene - DL	2.7	J D	4.4	0.84	ug/m3	10		TO-15	Total/NA
Acetone - DL	130	D	120	48	ug/m3	10		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	16	D	2.0	1.3	ug/m3	10		TO-15	Total/NA
Chloroform - DL	4.4	J D	9.8	2.2	ug/m3	10		TO-15	Total/NA
Benzene - DL	4.1	J D	6.4	2.4	ug/m3	10		TO-15	Total/NA
n-Heptane - DL	3.0	J D	8.2	2.4	ug/m3	10		TO-15	Total/NA
Trichloroethene - DL	23	D	2.0	1.3	ug/m3	10		TO-15	Total/NA
Toluene - DL	24	D	7.5	3.5	ug/m3	10		TO-15	Total/NA
Tetrachloroethene - DL	1900	D	14	1.8	ug/m3	10		TO-15	Total/NA
Ethylbenzene - DL	6.1	J D	8.7	4.3	ug/m3	10		TO-15	Total/NA
m,p-Xylene - DL	18	J D	22	7.4	ug/m3	10		TO-15	Total/NA
o-Xylene - DL	5.4	J D	8.7	4.1	ug/m3	10		TO-15	Total/NA
4-Isopropyltoluene - DL	2.1	J D	11	2.1	ug/m3	10		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.35	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.24	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.16	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
n-Butane	5.0		0.50	0.19	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	1.8		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.18	J	0.20	0.052	ppb v/v	1		TO-15	Total/NA
Acetone	69	E	5.0	2.0	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	9.9		5.0	0.98	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.96		0.50	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.35	J	0.50	0.17	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	4.5	J	5.0	1.2	ppb v/v	1		TO-15	Total/NA
n-Hexane	2.0		0.50	0.23	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.8		0.50	0.17	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	5.5		0.050	0.033	ppb v/v	1		TO-15	Total/NA
Chloroform	1.2		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.31		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.038		0.035	0.032	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.26		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Benzene	1.3		0.20	0.074	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.95		0.20	0.059	ppb v/v	1		TO-15	Total/NA
Trichloroethene	5.2		0.037	0.024	ppb v/v	1		TO-15	Total/NA
Methyl methacrylate	0.18	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.25	J	0.50	0.19	ppb v/v	1		TO-15	Total/NA
Toluene	7.6		0.20	0.093	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	200	E	0.20	0.027	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-04_20221003 (Continued) — Lab Sample ID: 200-65184-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl Butyl Ketone (2-Hexanone)	0.38	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.3		0.20	0.10	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	5.4		0.50	0.17	ppb v/v	1		TO-15	Total/NA
o-Xylene	1.1		0.20	0.094	ppb v/v	1		TO-15	Total/NA
Styrene	0.10	J	0.20	0.032	ppb v/v	1		TO-15	Total/NA
n-Propylbenzene	0.11	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.15	J	0.20	0.051	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.099	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.42		0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.49		0.20	0.039	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.37		0.20	0.089	ppb v/v	1		TO-15	Total/NA
n-Butane - DL	4.6	J D	5.0	1.9	ppb v/v	10		TO-15	Total/NA
1,3-Butadiene - DL	1.2	J D	2.0	0.38	ppb v/v	10		TO-15	Total/NA
Acetone - DL	53	D	50	20	ppb v/v	10		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	4.2	D	0.50	0.33	ppb v/v	10		TO-15	Total/NA
Chloroform - DL	0.90	J D	2.0	0.46	ppb v/v	10		TO-15	Total/NA
Benzene - DL	1.3	J D	2.0	0.74	ppb v/v	10		TO-15	Total/NA
n-Heptane - DL	0.72	J D	2.0	0.59	ppb v/v	10		TO-15	Total/NA
Trichloroethene - DL	4.3	D	0.37	0.24	ppb v/v	10		TO-15	Total/NA
Toluene - DL	6.3	D	2.0	0.93	ppb v/v	10		TO-15	Total/NA
Tetrachloroethene - DL	280	D	2.0	0.27	ppb v/v	10		TO-15	Total/NA
Ethylbenzene - DL	1.4	J D	2.0	1.0	ppb v/v	10		TO-15	Total/NA
m,p-Xylene - DL	4.1	J D	5.0	1.7	ppb v/v	10		TO-15	Total/NA
o-Xylene - DL	1.3	J D	2.0	0.94	ppb v/v	10		TO-15	Total/NA
4-Isopropyltoluene - DL	0.38	J D	2.0	0.39	ppb v/v	10		TO-15	Total/NA

Client Sample ID: SV-01_20221004 — Lab Sample ID: 200-65197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.8	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	4.0		1.8	0.39	ug/m3	1		TO-15	Total/NA
Chloromethane	0.80	J	1.0	0.25	ug/m3	1		TO-15	Total/NA
n-Butane	12		1.2	0.45	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	3.6		0.44	0.084	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.6		1.1	0.29	ug/m3	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.48	J	1.5	0.42	ug/m3	1		TO-15	Total/NA
Acetone	85		12	4.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	24		12	2.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	4.1		1.6	0.40	ug/m3	1		TO-15	Total/NA
Methylene Chloride	3.9		1.7	0.59	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	14	J	15	3.6	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	1.1		0.79	0.35	ug/m3	1		TO-15	Total/NA
n-Hexane	3.3		1.8	0.81	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	10		1.5	0.50	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	180	E	0.20	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	8.6		0.98	0.22	ug/m3	1		TO-15	Total/NA
Cyclohexane	1.1		0.69	0.12	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.32		0.22	0.20	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	1.2		0.93	0.16	ug/m3	1		TO-15	Total/NA
Benzene	2.0		0.64	0.24	ug/m3	1		TO-15	Total/NA
n-Heptane	2.9		0.82	0.24	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-01_20221004 (Continued)

Lab Sample ID: 200-65197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	30		0.20	0.13	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.2	J	2.0	0.78	ug/m3	1		TO-15	Total/NA
Toluene	11		0.75	0.35	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	730	E	1.4	0.18	ug/m3	1		TO-15	Total/NA
Ethylbenzene	1.4		0.87	0.43	ug/m3	1		TO-15	Total/NA
m,p-Xylene	5.3		2.2	0.74	ug/m3	1		TO-15	Total/NA
o-Xylene	2.0		0.87	0.41	ug/m3	1		TO-15	Total/NA
Styrene	0.41	J	0.85	0.14	ug/m3	1		TO-15	Total/NA
Cumene	0.28	J	0.98	0.18	ug/m3	1		TO-15	Total/NA
n-Propylbenzene	0.26	J	0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.33	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.33	J	0.98	0.22	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.7		0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	3.0		1.1	0.21	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	1.9		1.2	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane - DL	4.6	J D	11	2.4	ug/m3	6.14		TO-15	Total/NA
n-Butane - DL	13	D	7.3	2.8	ug/m3	6.14		TO-15	Total/NA
1,3-Butadiene - DL	4.2	D	2.7	0.52	ug/m3	6.14		TO-15	Total/NA
Trichlorofluoromethane - DL	1.9	J D	6.9	1.8	ug/m3	6.14		TO-15	Total/NA
Acetone - DL	95	D	73	29	ug/m3	6.14		TO-15	Total/NA
Isopropyl alcohol - DL	28	J D	75	15	ug/m3	6.14		TO-15	Total/NA
Carbon disulfide - DL	4.5	J D	9.6	2.5	ug/m3	6.14		TO-15	Total/NA
Methylene Chloride - DL	4.9	J D	11	3.6	ug/m3	6.14		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	12	D	9.1	3.1	ug/m3	6.14		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	200	D	1.2	0.80	ug/m3	6.14		TO-15	Total/NA
Chloroform - DL	9.5	D	6.0	1.4	ug/m3	6.14		TO-15	Total/NA
Cyclohexane - DL	1.2	J D	4.2	0.74	ug/m3	6.14		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	1.3	J D	5.7	1.0	ug/m3	6.14		TO-15	Total/NA
Benzene - DL	2.2	J D	3.9	1.5	ug/m3	6.14		TO-15	Total/NA
n-Heptane - DL	3.2	J D	5.0	1.5	ug/m3	6.14		TO-15	Total/NA
Trichloroethene - DL	31	D	1.2	0.79	ug/m3	6.14		TO-15	Total/NA
Toluene - DL	11	D	4.6	2.2	ug/m3	6.14		TO-15	Total/NA
Tetrachloroethene - DL	780	D	8.3	1.1	ug/m3	6.14		TO-15	Total/NA
m,p-Xylene - DL	5.1	J D	13	4.5	ug/m3	6.14		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	1.4	J D	6.0	1.4	ug/m3	6.14		TO-15	Total/NA
4-Isopropyltoluene - DL	2.9	J D	6.7	1.3	ug/m3	6.14		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.37	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	1.1		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.39	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
n-Butane	5.1		0.50	0.19	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	1.6		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.28		0.20	0.052	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.063	J	0.20	0.055	ppb v/v	1		TO-15	Total/NA
Acetone	36		5.0	2.0	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	10		5.0	0.98	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	1.3		0.50	0.13	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	1.1		0.50	0.17	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	4.6	J	5.0	1.2	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.27		0.20	0.088	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-01_20221004 (Continued)

Lab Sample ID: 200-65197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Hexane	0.93		0.50	0.23	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.6		0.50	0.17	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	45	E	0.050	0.033	ppb v/v	1		TO-15	Total/NA
Chloroform	1.8		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.31		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.051		0.035	0.032	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.25		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Benzene	0.61		0.20	0.074	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.70		0.20	0.059	ppb v/v	1		TO-15	Total/NA
Trichloroethene	5.5		0.037	0.024	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.29	J	0.50	0.19	ppb v/v	1		TO-15	Total/NA
Toluene	3.0		0.20	0.093	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	110	E	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.32		0.20	0.10	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	1.2		0.50	0.17	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.47		0.20	0.094	ppb v/v	1		TO-15	Total/NA
Styrene	0.097	J	0.20	0.032	ppb v/v	1		TO-15	Total/NA
Cumene	0.057	J	0.20	0.037	ppb v/v	1		TO-15	Total/NA
n-Propylbenzene	0.053	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.067	J	0.20	0.051	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.068	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.36		0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.54		0.20	0.039	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.32		0.20	0.089	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane - DL	1.3	J D	3.1	0.68	ppb v/v	6.14		TO-15	Total/NA
n-Butane - DL	5.3	D	3.1	1.2	ppb v/v	6.14		TO-15	Total/NA
1,3-Butadiene - DL	1.9	D	1.2	0.23	ppb v/v	6.14		TO-15	Total/NA
Trichlorofluoromethane - DL	0.34	J D	1.2	0.32	ppb v/v	6.14		TO-15	Total/NA
Acetone - DL	40	D	31	12	ppb v/v	6.14		TO-15	Total/NA
Isopropyl alcohol - DL	11	J D	31	6.0	ppb v/v	6.14		TO-15	Total/NA
Carbon disulfide - DL	1.5	J D	3.1	0.80	ppb v/v	6.14		TO-15	Total/NA
Methylene Chloride - DL	1.4	J D	3.1	1.0	ppb v/v	6.14		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	4.0	D	3.1	1.0	ppb v/v	6.14		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	50	D	0.31	0.20	ppb v/v	6.14		TO-15	Total/NA
Chloroform - DL	1.9	D	1.2	0.28	ppb v/v	6.14		TO-15	Total/NA
Cyclohexane - DL	0.34	J D	1.2	0.21	ppb v/v	6.14		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.27	J D	1.2	0.21	ppb v/v	6.14		TO-15	Total/NA
Benzene - DL	0.69	J D	1.2	0.45	ppb v/v	6.14		TO-15	Total/NA
n-Heptane - DL	0.78	J D	1.2	0.36	ppb v/v	6.14		TO-15	Total/NA
Trichloroethene - DL	5.7	D	0.23	0.15	ppb v/v	6.14		TO-15	Total/NA
Toluene - DL	2.9	D	1.2	0.57	ppb v/v	6.14		TO-15	Total/NA
Tetrachloroethene - DL	120	D	1.2	0.17	ppb v/v	6.14		TO-15	Total/NA
m,p-Xylene - DL	1.2	J D	3.1	1.0	ppb v/v	6.14		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	0.29	J D	1.2	0.29	ppb v/v	6.14		TO-15	Total/NA
4-Isopropyltoluene - DL	0.53	J D	1.2	0.24	ppb v/v	6.14		TO-15	Total/NA

Client Sample ID: SV-03_20221004

Lab Sample ID: 200-65197-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.3	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	8.3		1.8	0.39	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-03_20221004 (Continued)

Lab Sample ID: 200-65197-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.41	J	1.0	0.25	ug/m3	1		TO-15	Total/NA
n-Butane	9.9		1.2	0.45	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	2.6		0.44	0.084	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.1	0.29	ug/m3	1		TO-15	Total/NA
Acetone	82		12	4.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	24		12	2.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	2.3		1.6	0.40	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	36		15	3.6	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.61	J	0.79	0.35	ug/m3	1		TO-15	Total/NA
n-Hexane	3.3		1.8	0.81	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	96		0.20	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	9.5		0.98	0.22	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.65	J	0.69	0.12	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.26		0.22	0.20	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	3.3		0.93	0.16	ug/m3	1		TO-15	Total/NA
Benzene	2.2		0.64	0.24	ug/m3	1		TO-15	Total/NA
n-Heptane	2.5		0.82	0.24	ug/m3	1		TO-15	Total/NA
Trichloroethene	45		0.20	0.13	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.3	J	2.0	0.78	ug/m3	1		TO-15	Total/NA
Toluene	6.1		0.75	0.35	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	130		1.4	0.18	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.2		0.87	0.43	ug/m3	1		TO-15	Total/NA
m,p-Xylene	8.5		2.2	0.74	ug/m3	1		TO-15	Total/NA
o-Xylene	2.4		0.87	0.41	ug/m3	1		TO-15	Total/NA
n-Propylbenzene	0.27	J	0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.39	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.39	J	0.98	0.22	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.6		0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Isopropyltoluene	1.9		1.1	0.21	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	1.5		1.2	0.54	ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.46	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	2.3		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.20	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
n-Butane	4.2		0.50	0.19	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	1.2		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25		0.20	0.052	ppb v/v	1		TO-15	Total/NA
Acetone	34		5.0	2.0	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	9.6		5.0	0.98	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.75		0.50	0.13	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	12		5.0	1.2	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.15	J	0.20	0.088	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.93		0.50	0.23	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	24		0.050	0.033	ppb v/v	1		TO-15	Total/NA
Chloroform	2.0		0.20	0.046	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.19	J	0.20	0.035	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.042		0.035	0.032	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.71		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Benzene	0.69		0.20	0.074	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.61		0.20	0.059	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-03_20221004 (Continued)

Lab Sample ID: 200-65197-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	8.4		0.037	0.024	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.31	J	0.50	0.19	ppb v/v	1		TO-15	Total/NA
Toluene	1.6		0.20	0.093	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	19		0.20	0.027	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.51		0.20	0.10	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	1.9		0.50	0.17	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.56		0.20	0.094	ppb v/v	1		TO-15	Total/NA
n-Propylbenzene	0.054	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.080	J	0.20	0.051	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.078	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.32		0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.35		0.20	0.039	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.25		0.20	0.089	ppb v/v	1		TO-15	Total/NA

Client Sample ID: SV-05_20221004

Lab Sample ID: 200-65197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.3	J	2.5	0.54	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	2.2		1.8	0.39	ug/m3	1		TO-15	Total/NA
Chloromethane	0.27	J	1.0	0.25	ug/m3	1		TO-15	Total/NA
n-Butane	25		1.2	0.45	ug/m3	1		TO-15	Total/NA
1,3-Butadiene	6.6		0.44	0.084	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	3.3		1.1	0.29	ug/m3	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.56	J	1.5	0.42	ug/m3	1		TO-15	Total/NA
Acetone	87		12	4.8	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	11	J	12	2.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	5.4		1.6	0.40	ug/m3	1		TO-15	Total/NA
tert-Butyl alcohol	28		15	3.6	ug/m3	1		TO-15	Total/NA
n-Hexane	7.0		1.8	0.81	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	11		1.5	0.50	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	45		0.20	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	27		0.98	0.22	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.33	J	1.1	0.21	ug/m3	1		TO-15	Total/NA
Cyclohexane	2.0		0.69	0.12	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.28		0.22	0.20	ug/m3	1		TO-15	Total/NA
2,2,4-Trimethylpentane	3.5		0.93	0.16	ug/m3	1		TO-15	Total/NA
Benzene	3.9		0.64	0.24	ug/m3	1		TO-15	Total/NA
n-Heptane	5.8		0.82	0.24	ug/m3	1		TO-15	Total/NA
Trichloroethene	25		0.20	0.13	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.7	J	2.0	0.78	ug/m3	1		TO-15	Total/NA
Toluene	5.8		0.75	0.35	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	380	E	1.4	0.18	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.9		0.87	0.43	ug/m3	1		TO-15	Total/NA
m,p-Xylene	9.0		2.2	0.74	ug/m3	1		TO-15	Total/NA
o-Xylene	2.6		0.87	0.41	ug/m3	1		TO-15	Total/NA
Cumene	0.39	J	0.98	0.18	ug/m3	1		TO-15	Total/NA
n-Propylbenzene	0.28	J	0.98	0.23	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	0.39	J	0.98	0.25	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.38	J	0.98	0.22	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.5		0.98	0.23	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-05_20221004 (Continued)

Lab Sample ID: 200-65197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Isopropyltoluene	3.6		1.1	0.21	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	2.6		1.2	0.54	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	2.4	J D	4.9	1.1	ug/m3	2		TO-15	Total/NA
Chlorodifluoromethane - DL	2.3	J D	3.5	0.78	ug/m3	2		TO-15	Total/NA
n-Butane - DL	26	D	2.4	0.90	ug/m3	2		TO-15	Total/NA
1,3-Butadiene - DL	7.0	D	0.88	0.17	ug/m3	2		TO-15	Total/NA
Trichlorofluoromethane - DL	3.4	D	2.2	0.58	ug/m3	2		TO-15	Total/NA
Acetone - DL	87	D	24	9.5	ug/m3	2		TO-15	Total/NA
Isopropyl alcohol - DL	10	J D	25	4.8	ug/m3	2		TO-15	Total/NA
Carbon disulfide - DL	5.4	D	3.1	0.81	ug/m3	2		TO-15	Total/NA
tert-Butyl alcohol - DL	28	J D	30	7.3	ug/m3	2		TO-15	Total/NA
n-Hexane - DL	7.0	D	3.5	1.6	ug/m3	2		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	11	D	2.9	1.0	ug/m3	2		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	45	D	0.40	0.26	ug/m3	2		TO-15	Total/NA
Chloroform - DL	27	D	2.0	0.45	ug/m3	2		TO-15	Total/NA
Cyclohexane - DL	2.0	D	1.4	0.24	ug/m3	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	3.5	D	1.9	0.33	ug/m3	2		TO-15	Total/NA
Benzene - DL	4.0	D	1.3	0.47	ug/m3	2		TO-15	Total/NA
n-Heptane - DL	5.7	D	1.6	0.48	ug/m3	2		TO-15	Total/NA
Trichloroethene - DL	25	D	0.40	0.26	ug/m3	2		TO-15	Total/NA
Toluene - DL	5.8	D	1.5	0.70	ug/m3	2		TO-15	Total/NA
Tetrachloroethene - DL	390	D	2.7	0.37	ug/m3	2		TO-15	Total/NA
Ethylbenzene - DL	2.8	D	1.7	0.87	ug/m3	2		TO-15	Total/NA
m,p-Xylene - DL	8.6	D	4.3	1.5	ug/m3	2		TO-15	Total/NA
o-Xylene - DL	2.6	D	1.7	0.82	ug/m3	2		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	1.4	J D	2.0	0.46	ug/m3	2		TO-15	Total/NA
4-Isopropyltoluene - DL	3.5	D	2.2	0.43	ug/m3	2		TO-15	Total/NA
1,3-Dichlorobenzene - DL	2.6	D	2.4	1.1	ug/m3	2		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.47	J	0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.62		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.13	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
n-Butane	11		0.50	0.19	ppb v/v	1		TO-15	Total/NA
1,3-Butadiene	3.0		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.60		0.20	0.052	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.074	J	0.20	0.055	ppb v/v	1		TO-15	Total/NA
Acetone	36		5.0	2.0	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	4.3	J	5.0	0.98	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	1.7		0.50	0.13	ppb v/v	1		TO-15	Total/NA
tert-Butyl alcohol	9.4		5.0	1.2	ppb v/v	1		TO-15	Total/NA
n-Hexane	2.0		0.50	0.23	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	3.9		0.50	0.17	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	11		0.050	0.033	ppb v/v	1		TO-15	Total/NA
Chloroform	5.5		0.20	0.046	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.061	J	0.20	0.039	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.59		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.044		0.035	0.032	ppb v/v	1		TO-15	Total/NA
2,2,4-Trimethylpentane	0.75		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Benzene	1.2		0.20	0.074	ppb v/v	1		TO-15	Total/NA
n-Heptane	1.4		0.20	0.059	ppb v/v	1		TO-15	Total/NA
Trichloroethene	4.7		0.037	0.024	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-05_20221004 (Continued)

Lab Sample ID: 200-65197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.41	J	0.50	0.19	ppb v/v	1		TO-15	Total/NA
Toluene	1.5		0.20	0.093	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	57	E	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.66		0.20	0.10	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	2.1		0.50	0.17	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.60		0.20	0.094	ppb v/v	1		TO-15	Total/NA
Cumene	0.080	J	0.20	0.037	ppb v/v	1		TO-15	Total/NA
n-Propylbenzene	0.056	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.080	J	0.20	0.051	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.078	J	0.20	0.044	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.31		0.20	0.047	ppb v/v	1		TO-15	Total/NA
4-Isopropyltoluene	0.65		0.20	0.039	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.44		0.20	0.089	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	0.49	J D	1.0	0.22	ppb v/v	2		TO-15	Total/NA
Chlorodifluoromethane - DL	0.65	J D	1.0	0.22	ppb v/v	2		TO-15	Total/NA
n-Butane - DL	11	D	1.0	0.38	ppb v/v	2		TO-15	Total/NA
1,3-Butadiene - DL	3.1	D	0.40	0.076	ppb v/v	2		TO-15	Total/NA
Trichlorofluoromethane - DL	0.61	D	0.40	0.10	ppb v/v	2		TO-15	Total/NA
Acetone - DL	36	D	10	4.0	ppb v/v	2		TO-15	Total/NA
Isopropyl alcohol - DL	4.3	J D	10	2.0	ppb v/v	2		TO-15	Total/NA
Carbon disulfide - DL	1.7	D	1.0	0.26	ppb v/v	2		TO-15	Total/NA
tert-Butyl alcohol - DL	9.3	J D	10	2.4	ppb v/v	2		TO-15	Total/NA
n-Hexane - DL	2.0	D	1.0	0.46	ppb v/v	2		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	3.8	D	1.0	0.34	ppb v/v	2		TO-15	Total/NA
cis-1,2-Dichloroethene - DL	11	D	0.10	0.066	ppb v/v	2		TO-15	Total/NA
Chloroform - DL	5.5	D	0.40	0.092	ppb v/v	2		TO-15	Total/NA
Cyclohexane - DL	0.59	D	0.40	0.070	ppb v/v	2		TO-15	Total/NA
2,2,4-Trimethylpentane - DL	0.74	D	0.40	0.070	ppb v/v	2		TO-15	Total/NA
Benzene - DL	1.2	D	0.40	0.15	ppb v/v	2		TO-15	Total/NA
n-Heptane - DL	1.4	D	0.40	0.12	ppb v/v	2		TO-15	Total/NA
Trichloroethene - DL	4.7	D	0.074	0.048	ppb v/v	2		TO-15	Total/NA
Toluene - DL	1.5	D	0.40	0.19	ppb v/v	2		TO-15	Total/NA
Tetrachloroethene - DL	58	D	0.40	0.054	ppb v/v	2		TO-15	Total/NA
Ethylbenzene - DL	0.65	D	0.40	0.20	ppb v/v	2		TO-15	Total/NA
m,p-Xylene - DL	2.0	D	1.0	0.34	ppb v/v	2		TO-15	Total/NA
o-Xylene - DL	0.59	D	0.40	0.19	ppb v/v	2		TO-15	Total/NA
1,2,4-Trimethylbenzene - DL	0.29	J D	0.40	0.094	ppb v/v	2		TO-15	Total/NA
4-Isopropyltoluene - DL	0.64	D	0.40	0.078	ppb v/v	2		TO-15	Total/NA
1,3-Dichlorobenzene - DL	0.44	D	0.40	0.18	ppb v/v	2		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.80	J	2.5	0.54	ug/m3			10/06/22 11:50	1
Chlorodifluoromethane	8.0		1.8	0.39	ug/m3			10/06/22 11:50	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/06/22 11:50	1
Chloromethane	0.43	J	1.0	0.25	ug/m3			10/06/22 11:50	1
n-Butane	8.1		1.2	0.45	ug/m3			10/06/22 11:50	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/06/22 11:50	1
1,3-Butadiene	1.6		0.44	0.084	ug/m3			10/06/22 11:50	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/06/22 11:50	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/06/22 11:50	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/06/22 11:50	1
Trichlorofluoromethane	2.0		1.1	0.29	ug/m3			10/06/22 11:50	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.42	ug/m3			10/06/22 11:50	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/06/22 11:50	1
Acetone	160	E	12	4.8	ug/m3			10/06/22 11:50	1
Isopropyl alcohol	31		12	2.4	ug/m3			10/06/22 11:50	1
Carbon disulfide	1.6		1.6	0.40	ug/m3			10/06/22 11:50	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/06/22 11:50	1
Methylene Chloride	0.65	J	1.7	0.59	ug/m3			10/06/22 11:50	1
tert-Butyl alcohol	8.6	J	15	3.6	ug/m3			10/06/22 11:50	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/06/22 11:50	1
trans-1,2-Dichloroethene	1.0		0.79	0.35	ug/m3			10/06/22 11:50	1
n-Hexane	3.7		1.8	0.81	ug/m3			10/06/22 11:50	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/06/22 11:50	1
Methyl Ethyl Ketone (2-Butanone)	6.0		1.5	0.50	ug/m3			10/06/22 11:50	1
cis-1,2-Dichloroethene	110		0.20	0.13	ug/m3			10/06/22 11:50	1
Chloroform	10		0.98	0.22	ug/m3			10/06/22 11:50	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/06/22 11:50	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/06/22 11:50	1
Cyclohexane	1.0		0.69	0.12	ug/m3			10/06/22 11:50	1
Carbon tetrachloride	0.40		0.22	0.20	ug/m3			10/06/22 11:50	1
2,2,4-Trimethylpentane	1.5		0.93	0.16	ug/m3			10/06/22 11:50	1
Benzene	2.2		0.64	0.24	ug/m3			10/06/22 11:50	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/06/22 11:50	1
n-Heptane	2.4		0.82	0.24	ug/m3			10/06/22 11:50	1
Trichloroethene	34		0.20	0.13	ug/m3			10/06/22 11:50	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/06/22 11:50	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/06/22 11:50	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/06/22 11:50	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/06/22 11:50	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/06/22 11:50	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.78	ug/m3			10/06/22 11:50	1
Toluene	24		0.75	0.35	ug/m3			10/06/22 11:50	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/06/22 11:50	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/06/22 11:50	1
Tetrachloroethene	210		1.4	0.18	ug/m3			10/06/22 11:50	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/06/22 11:50	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/06/22 11:50	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/06/22 11:50	1

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/06/22 11:50	1
Ethylbenzene	4.2		0.87	0.43	ug/m3			10/06/22 11:50	1
m,p-Xylene	17		2.2	0.74	ug/m3			10/06/22 11:50	1
o-Xylene	3.8		0.87	0.41	ug/m3			10/06/22 11:50	1
Styrene	0.30	J	0.85	0.14	ug/m3			10/06/22 11:50	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/06/22 11:50	1
Cumene	0.98	U	0.98	0.18	ug/m3			10/06/22 11:50	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/06/22 11:50	1
n-Propylbenzene	0.38	J	0.98	0.23	ug/m3			10/06/22 11:50	1
4-Ethyltoluene	0.54	J	0.98	0.25	ug/m3			10/06/22 11:50	1
1,3,5-Trimethylbenzene	0.45	J	0.98	0.22	ug/m3			10/06/22 11:50	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/06/22 11:50	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/06/22 11:50	1
1,2,4-Trimethylbenzene	1.8		0.98	0.23	ug/m3			10/06/22 11:50	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/06/22 11:50	1
4-Isopropyltoluene	2.3		1.1	0.21	ug/m3			10/06/22 11:50	1
1,3-Dichlorobenzene	1.6		1.2	0.54	ug/m3			10/06/22 11:50	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/06/22 11:50	1
Benzyl chloride	1.0	U	1.0	0.38	ug/m3			10/06/22 11:50	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/06/22 11:50	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/06/22 11:50	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/06/22 11:50	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/06/22 11:50	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/06/22 11:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.16	J	0.50	0.11	ppb v/v			10/06/22 11:50	1
Chlorodifluoromethane	2.3		0.50	0.11	ppb v/v			10/06/22 11:50	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/06/22 11:50	1
Chloromethane	0.21	J	0.50	0.12	ppb v/v			10/06/22 11:50	1
n-Butane	3.4		0.50	0.19	ppb v/v			10/06/22 11:50	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/06/22 11:50	1
1,3-Butadiene	0.70		0.20	0.038	ppb v/v			10/06/22 11:50	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/06/22 11:50	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/06/22 11:50	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/06/22 11:50	1
Trichlorofluoromethane	0.36		0.20	0.052	ppb v/v			10/06/22 11:50	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.055	ppb v/v			10/06/22 11:50	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/06/22 11:50	1
Acetone	69	E	5.0	2.0	ppb v/v			10/06/22 11:50	1
Isopropyl alcohol	13		5.0	0.98	ppb v/v			10/06/22 11:50	1
Carbon disulfide	0.50		0.50	0.13	ppb v/v			10/06/22 11:50	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/06/22 11:50	1
Methylene Chloride	0.19	J	0.50	0.17	ppb v/v			10/06/22 11:50	1
tert-Butyl alcohol	2.8	J	5.0	1.2	ppb v/v			10/06/22 11:50	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/06/22 11:50	1
trans-1,2-Dichloroethene	0.26		0.20	0.088	ppb v/v			10/06/22 11:50	1
n-Hexane	1.1		0.50	0.23	ppb v/v			10/06/22 11:50	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/06/22 11:50	1

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	2.0		0.50	0.17	ppb v/v			10/06/22 11:50	1
cis-1,2-Dichloroethene	27		0.050	0.033	ppb v/v			10/06/22 11:50	1
Chloroform	2.1		0.20	0.046	ppb v/v			10/06/22 11:50	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/06/22 11:50	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/06/22 11:50	1
Cyclohexane	0.29		0.20	0.035	ppb v/v			10/06/22 11:50	1
Carbon tetrachloride	0.064		0.035	0.032	ppb v/v			10/06/22 11:50	1
2,2,4-Trimethylpentane	0.33		0.20	0.035	ppb v/v			10/06/22 11:50	1
Benzene	0.70		0.20	0.074	ppb v/v			10/06/22 11:50	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/06/22 11:50	1
n-Heptane	0.59		0.20	0.059	ppb v/v			10/06/22 11:50	1
Trichloroethene	6.3		0.037	0.024	ppb v/v			10/06/22 11:50	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/06/22 11:50	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/06/22 11:50	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/06/22 11:50	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/06/22 11:50	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/06/22 11:50	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.19	ppb v/v			10/06/22 11:50	1
Toluene	6.4		0.20	0.093	ppb v/v			10/06/22 11:50	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/06/22 11:50	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/06/22 11:50	1
Tetrachloroethene	32		0.20	0.027	ppb v/v			10/06/22 11:50	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/06/22 11:50	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/06/22 11:50	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/06/22 11:50	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/06/22 11:50	1
Ethylbenzene	0.96		0.20	0.10	ppb v/v			10/06/22 11:50	1
m,p-Xylene	3.9		0.50	0.17	ppb v/v			10/06/22 11:50	1
o-Xylene	0.87		0.20	0.094	ppb v/v			10/06/22 11:50	1
Styrene	0.070	J	0.20	0.032	ppb v/v			10/06/22 11:50	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/06/22 11:50	1
Cumene	0.20	U	0.20	0.037	ppb v/v			10/06/22 11:50	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/06/22 11:50	1
n-Propylbenzene	0.076	J	0.20	0.047	ppb v/v			10/06/22 11:50	1
4-Ethyltoluene	0.11	J	0.20	0.051	ppb v/v			10/06/22 11:50	1
1,3,5-Trimethylbenzene	0.092	J	0.20	0.044	ppb v/v			10/06/22 11:50	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/06/22 11:50	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/06/22 11:50	1
1,2,4-Trimethylbenzene	0.36		0.20	0.047	ppb v/v			10/06/22 11:50	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/06/22 11:50	1
4-Isopropyltoluene	0.42		0.20	0.039	ppb v/v			10/06/22 11:50	1
1,3-Dichlorobenzene	0.27		0.20	0.089	ppb v/v			10/06/22 11:50	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/06/22 11:50	1
Benzyl chloride	0.20	U	0.20	0.074	ppb v/v			10/06/22 11:50	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/06/22 11:50	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/06/22 11:50	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/06/22 11:50	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/06/22 11:50	1

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/06/22 11:50	1

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.0	J D	4.9	1.1	ug/m3			10/06/22 12:43	2
Chlorodifluoromethane	8.0	D	3.5	0.78	ug/m3			10/06/22 12:43	2
1,2-Dichlorotetrafluoroethane	2.8	U	2.8	0.77	ug/m3			10/06/22 12:43	2
Chloromethane	2.1	U	2.1	0.50	ug/m3			10/06/22 12:43	2
n-Butane	13	D	2.4	0.90	ug/m3			10/06/22 12:43	2
Vinyl chloride	0.40	U	0.40	0.14	ug/m3			10/06/22 12:43	2
1,3-Butadiene	1.6	D	0.88	0.17	ug/m3			10/06/22 12:43	2
Bromomethane	1.6	U	1.6	0.40	ug/m3			10/06/22 12:43	2
Chloroethane	2.6	U	2.6	1.3	ug/m3			10/06/22 12:43	2
Bromoethene(Vinyl Bromide)	1.7	U	1.7	0.74	ug/m3			10/06/22 12:43	2
Trichlorofluoromethane	2.0	J D	2.2	0.58	ug/m3			10/06/22 12:43	2
1,1,2-Trichlorotrifluoroethane	3.1	U	3.1	0.84	ug/m3			10/06/22 12:43	2
1,1-Dichloroethene	0.40	U	0.40	0.23	ug/m3			10/06/22 12:43	2
Acetone	170	D	24	9.5	ug/m3			10/06/22 12:43	2
Isopropyl alcohol	31	D	25	4.8	ug/m3			10/06/22 12:43	2
Carbon disulfide	1.6	J D	3.1	0.81	ug/m3			10/06/22 12:43	2
3-Chloropropene	3.1	U	3.1	0.69	ug/m3			10/06/22 12:43	2
Methylene Chloride	3.5	U	3.5	1.2	ug/m3			10/06/22 12:43	2
tert-Butyl alcohol	10	J D	30	7.3	ug/m3			10/06/22 12:43	2
Methyl tert-butyl ether	1.4	U	1.4	0.58	ug/m3			10/06/22 12:43	2
trans-1,2-Dichloroethene	1.0	J D	1.6	0.70	ug/m3			10/06/22 12:43	2
n-Hexane	3.8	D	3.5	1.6	ug/m3			10/06/22 12:43	2
1,1-Dichloroethane	1.6	U	1.6	0.23	ug/m3			10/06/22 12:43	2
Methyl Ethyl Ketone (2-Butanone)	6.1	D	2.9	1.0	ug/m3			10/06/22 12:43	2
cis-1,2-Dichloroethene	110	D	0.40	0.26	ug/m3			10/06/22 12:43	2
Chloroform	10	D	2.0	0.45	ug/m3			10/06/22 12:43	2
Tetrahydrofuran	29	U	29	7.1	ug/m3			10/06/22 12:43	2
1,1,1-Trichloroethane	2.2	U	2.2	0.43	ug/m3			10/06/22 12:43	2
Cyclohexane	0.96	J D	1.4	0.24	ug/m3			10/06/22 12:43	2
Carbon tetrachloride	0.44	U	0.44	0.40	ug/m3			10/06/22 12:43	2
2,2,4-Trimethylpentane	1.4	J D	1.9	0.33	ug/m3			10/06/22 12:43	2
Benzene	2.2	D	1.3	0.47	ug/m3			10/06/22 12:43	2
1,2-Dichloroethane	1.6	U	1.6	1.2	ug/m3			10/06/22 12:43	2
n-Heptane	2.3	D	1.6	0.48	ug/m3			10/06/22 12:43	2
Trichloroethene	33	D	0.40	0.26	ug/m3			10/06/22 12:43	2
Methyl methacrylate	4.1	U	4.1	1.3	ug/m3			10/06/22 12:43	2
1,2-Dichloropropane	1.8	U	1.8	0.80	ug/m3			10/06/22 12:43	2
1,4-Dioxane	36	U	36	12	ug/m3			10/06/22 12:43	2
Bromodichloromethane	2.7	U	2.7	0.54	ug/m3			10/06/22 12:43	2
cis-1,3-Dichloropropene	1.8	U	1.8	0.18	ug/m3			10/06/22 12:43	2
4-Methyl-2-pentanone (Methyl isobutyl ketone)	4.1	U	4.1	1.6	ug/m3			10/06/22 12:43	2
Toluene	24	D	1.5	0.70	ug/m3			10/06/22 12:43	2
trans-1,3-Dichloropropene	1.8	U	1.8	0.81	ug/m3			10/06/22 12:43	2
1,1,2-Trichloroethane	2.2	U	2.2	0.37	ug/m3			10/06/22 12:43	2

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	220	D	2.7	0.37	ug/m3			10/06/22 12:43	2
Methyl Butyl Ketone (2-Hexanone)	4.1	U	4.1	1.6	ug/m3			10/06/22 12:43	2
Dibromochloromethane	3.4	U	3.4	0.53	ug/m3			10/06/22 12:43	2
1,2-Dibromoethane	3.1	U	3.1	0.71	ug/m3			10/06/22 12:43	2
Chlorobenzene	1.8	U	1.8	0.40	ug/m3			10/06/22 12:43	2
Ethylbenzene	4.3	D	1.7	0.87	ug/m3			10/06/22 12:43	2
m,p-Xylene	16	D	4.3	1.5	ug/m3			10/06/22 12:43	2
o-Xylene	3.9	D	1.7	0.82	ug/m3			10/06/22 12:43	2
Styrene	1.7	U	1.7	0.27	ug/m3			10/06/22 12:43	2
Bromoform	4.1	U	4.1	1.2	ug/m3			10/06/22 12:43	2
Cumene	2.0	U	2.0	0.36	ug/m3			10/06/22 12:43	2
1,1,2,2-Tetrachloroethane	2.7	U	2.7	0.59	ug/m3			10/06/22 12:43	2
n-Propylbenzene	2.0	U	2.0	0.46	ug/m3			10/06/22 12:43	2
4-Ethyltoluene	2.0	U	2.0	0.50	ug/m3			10/06/22 12:43	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.43	ug/m3			10/06/22 12:43	2
2-Chlorotoluene	2.1	U	2.1	0.50	ug/m3			10/06/22 12:43	2
tert-Butylbenzene	2.2	U	2.2	0.41	ug/m3			10/06/22 12:43	2
1,2,4-Trimethylbenzene	1.8	J D	2.0	0.46	ug/m3			10/06/22 12:43	2
sec-Butylbenzene	2.2	U	2.2	0.43	ug/m3			10/06/22 12:43	2
4-Isopropyltoluene	2.4	D	2.2	0.43	ug/m3			10/06/22 12:43	2
1,3-Dichlorobenzene	1.6	J D	2.4	1.1	ug/m3			10/06/22 12:43	2
1,4-Dichlorobenzene	2.4	U	2.4	1.1	ug/m3			10/06/22 12:43	2
Benzyl chloride	2.1	U	2.1	0.77	ug/m3			10/06/22 12:43	2
n-Butylbenzene	2.2	U	2.2	0.60	ug/m3			10/06/22 12:43	2
1,2-Dichlorobenzene	2.4	U	2.4	0.84	ug/m3			10/06/22 12:43	2
1,2,4-Trichlorobenzene	7.4	U	7.4	2.8	ug/m3			10/06/22 12:43	2
Hexachlorobutadiene	4.3	U	4.3	0.66	ug/m3			10/06/22 12:43	2
Naphthalene	5.2	U	5.2	1.8	ug/m3			10/06/22 12:43	2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.41	J D	1.0	0.22	ppb v/v			10/06/22 12:43	2
Chlorodifluoromethane	2.3	D	1.0	0.22	ppb v/v			10/06/22 12:43	2
1,2-Dichlorotetrafluoroethane	0.40	U	0.40	0.11	ppb v/v			10/06/22 12:43	2
Chloromethane	1.0	U	1.0	0.24	ppb v/v			10/06/22 12:43	2
n-Butane	5.3	D	1.0	0.38	ppb v/v			10/06/22 12:43	2
Vinyl chloride	0.16	U	0.16	0.056	ppb v/v			10/06/22 12:43	2
1,3-Butadiene	0.72	D	0.40	0.076	ppb v/v			10/06/22 12:43	2
Bromomethane	0.40	U	0.40	0.10	ppb v/v			10/06/22 12:43	2
Chloroethane	1.0	U	1.0	0.50	ppb v/v			10/06/22 12:43	2
Bromoethene(Vinyl Bromide)	0.40	U	0.40	0.17	ppb v/v			10/06/22 12:43	2
Trichlorofluoromethane	0.35	J D	0.40	0.10	ppb v/v			10/06/22 12:43	2
1,1,2-Trichlorotrifluoroethane	0.40	U	0.40	0.11	ppb v/v			10/06/22 12:43	2
1,1-Dichloroethene	0.10	U	0.10	0.058	ppb v/v			10/06/22 12:43	2
Acetone	73	D	10	4.0	ppb v/v			10/06/22 12:43	2
Isopropyl alcohol	12	D	10	2.0	ppb v/v			10/06/22 12:43	2
Carbon disulfide	0.52	J D	1.0	0.26	ppb v/v			10/06/22 12:43	2
3-Chloropropene	1.0	U	1.0	0.22	ppb v/v			10/06/22 12:43	2
Methylene Chloride	1.0	U	1.0	0.34	ppb v/v			10/06/22 12:43	2
tert-Butyl alcohol	3.4	J D	10	2.4	ppb v/v			10/06/22 12:43	2

Client Sample ID: SV-02_20221003
Date Collected: 10/03/22 13:10
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.40	U	0.40	0.16	ppb v/v			10/06/22 12:43	2
trans-1,2-Dichloroethene	0.26	J D	0.40	0.18	ppb v/v			10/06/22 12:43	2
n-Hexane	1.1	D	1.0	0.46	ppb v/v			10/06/22 12:43	2
1,1-Dichloroethane	0.40	U	0.40	0.058	ppb v/v			10/06/22 12:43	2
Methyl Ethyl Ketone (2-Butanone)	2.1	D	1.0	0.34	ppb v/v			10/06/22 12:43	2
cis-1,2-Dichloroethene	27	D	0.10	0.066	ppb v/v			10/06/22 12:43	2
Chloroform	2.1	D	0.40	0.092	ppb v/v			10/06/22 12:43	2
Tetrahydrofuran	10	U	10	2.4	ppb v/v			10/06/22 12:43	2
1,1,1-Trichloroethane	0.40	U	0.40	0.078	ppb v/v			10/06/22 12:43	2
Cyclohexane	0.28	J D	0.40	0.070	ppb v/v			10/06/22 12:43	2
Carbon tetrachloride	0.070	U	0.070	0.064	ppb v/v			10/06/22 12:43	2
2,2,4-Trimethylpentane	0.31	J D	0.40	0.070	ppb v/v			10/06/22 12:43	2
Benzene	0.69	D	0.40	0.15	ppb v/v			10/06/22 12:43	2
1,2-Dichloroethane	0.40	U	0.40	0.30	ppb v/v			10/06/22 12:43	2
n-Heptane	0.56	D	0.40	0.12	ppb v/v			10/06/22 12:43	2
Trichloroethene	6.1	D	0.074	0.048	ppb v/v			10/06/22 12:43	2
Methyl methacrylate	1.0	U	1.0	0.32	ppb v/v			10/06/22 12:43	2
1,2-Dichloropropane	0.40	U	0.40	0.17	ppb v/v			10/06/22 12:43	2
1,4-Dioxane	10	U	10	3.4	ppb v/v			10/06/22 12:43	2
Bromodichloromethane	0.40	U	0.40	0.080	ppb v/v			10/06/22 12:43	2
cis-1,3-Dichloropropene	0.40	U	0.40	0.040	ppb v/v			10/06/22 12:43	2
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.0	U	1.0	0.38	ppb v/v			10/06/22 12:43	2
Toluene	6.5	D	0.40	0.19	ppb v/v			10/06/22 12:43	2
trans-1,3-Dichloropropene	0.40	U	0.40	0.18	ppb v/v			10/06/22 12:43	2
1,1,2-Trichloroethane	0.40	U	0.40	0.068	ppb v/v			10/06/22 12:43	2
Tetrachloroethene	33	D	0.40	0.054	ppb v/v			10/06/22 12:43	2
Methyl Butyl Ketone (2-Hexanone)	1.0	U	1.0	0.40	ppb v/v			10/06/22 12:43	2
Dibromochloromethane	0.40	U	0.40	0.062	ppb v/v			10/06/22 12:43	2
1,2-Dibromoethane	0.40	U	0.40	0.092	ppb v/v			10/06/22 12:43	2
Chlorobenzene	0.40	U	0.40	0.086	ppb v/v			10/06/22 12:43	2
Ethylbenzene	0.98	D	0.40	0.20	ppb v/v			10/06/22 12:43	2
m,p-Xylene	3.7	D	1.0	0.34	ppb v/v			10/06/22 12:43	2
o-Xylene	0.91	D	0.40	0.19	ppb v/v			10/06/22 12:43	2
Styrene	0.40	U	0.40	0.064	ppb v/v			10/06/22 12:43	2
Bromoform	0.40	U	0.40	0.12	ppb v/v			10/06/22 12:43	2
Cumene	0.40	U	0.40	0.074	ppb v/v			10/06/22 12:43	2
1,1,2,2-Tetrachloroethane	0.40	U	0.40	0.086	ppb v/v			10/06/22 12:43	2
n-Propylbenzene	0.40	U	0.40	0.094	ppb v/v			10/06/22 12:43	2
4-Ethyltoluene	0.40	U	0.40	0.10	ppb v/v			10/06/22 12:43	2
1,3,5-Trimethylbenzene	0.40	U	0.40	0.088	ppb v/v			10/06/22 12:43	2
2-Chlorotoluene	0.40	U	0.40	0.096	ppb v/v			10/06/22 12:43	2
tert-Butylbenzene	0.40	U	0.40	0.074	ppb v/v			10/06/22 12:43	2
1,2,4-Trimethylbenzene	0.36	J D	0.40	0.094	ppb v/v			10/06/22 12:43	2
sec-Butylbenzene	0.40	U	0.40	0.078	ppb v/v			10/06/22 12:43	2
4-Isopropyltoluene	0.45	D	0.40	0.078	ppb v/v			10/06/22 12:43	2
1,3-Dichlorobenzene	0.27	J D	0.40	0.18	ppb v/v			10/06/22 12:43	2
1,4-Dichlorobenzene	0.40	U	0.40	0.19	ppb v/v			10/06/22 12:43	2
Benzyl chloride	0.40	U	0.40	0.15	ppb v/v			10/06/22 12:43	2

Client Sample ID: SV-02_20221003

Lab Sample ID: 200-65184-1

Date Collected: 10/03/22 13:10
Matrix: Air
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	0.40	U	0.40	0.11	ppb v/v			10/06/22 12:43	2
1,2-Dichlorobenzene	0.40	U	0.40	0.14	ppb v/v			10/06/22 12:43	2
1,2,4-Trichlorobenzene	1.0	U	1.0	0.38	ppb v/v			10/06/22 12:43	2
Hexachlorobutadiene	0.40	U	0.40	0.062	ppb v/v			10/06/22 12:43	2
Naphthalene	1.0	U	1.0	0.34	ppb v/v			10/06/22 12:43	2

Client Sample ID: SV-04_20221003

Lab Sample ID: 200-65184-2

Date Collected: 10/03/22 15:30
Matrix: Air
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.8**	**J**	2.5	0.54	ug/m3			10/07/22 01:07	1
Chlorodifluoromethane	**0.87**	**J**	1.8	0.39	ug/m3			10/07/22 01:07	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/07/22 01:07	1
Chloromethane	**0.32**	**J**	1.0	0.25	ug/m3			10/07/22 01:07	1
n-Butane	**12**		1.2	0.45	ug/m3			10/07/22 01:07	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/07/22 01:07	1
1,3-Butadiene	**3.9**		0.44	0.084	ug/m3			10/07/22 01:07	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/07/22 01:07	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/07/22 01:07	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/07/22 01:07	1
Trichlorofluoromethane	**1.0**	**J**	1.1	0.29	ug/m3			10/07/22 01:07	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.42	ug/m3			10/07/22 01:07	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/07/22 01:07	1
Acetone	**160**	**E**	12	4.8	ug/m3			10/07/22 01:07	1
Isopropyl alcohol	**24**		12	2.4	ug/m3			10/07/22 01:07	1
Carbon disulfide	**3.0**		1.6	0.40	ug/m3			10/07/22 01:07	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/07/22 01:07	1
Methylene Chloride	**1.2**	**J**	1.7	0.59	ug/m3			10/07/22 01:07	1
tert-Butyl alcohol	**14**	**J**	15	3.6	ug/m3			10/07/22 01:07	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/07/22 01:07	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.35	ug/m3			10/07/22 01:07	1
n-Hexane	**7.1**		1.8	0.81	ug/m3			10/07/22 01:07	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/07/22 01:07	1
Methyl Ethyl Ketone (2-Butanone)	**8.2**		1.5	0.50	ug/m3			10/07/22 01:07	1
cis-1,2-Dichloroethene	**22**		0.20	0.13	ug/m3			10/07/22 01:07	1
Chloroform	**5.9**		0.98	0.22	ug/m3			10/07/22 01:07	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/07/22 01:07	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/07/22 01:07	1
Cyclohexane	**1.1**		0.69	0.12	ug/m3			10/07/22 01:07	1
Carbon tetrachloride	**0.24**		0.22	0.20	ug/m3			10/07/22 01:07	1
2,2,4-Trimethylpentane	**1.2**		0.93	0.16	ug/m3			10/07/22 01:07	1
Benzene	**4.1**		0.64	0.24	ug/m3			10/07/22 01:07	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/07/22 01:07	1
n-Heptane	**3.9**		0.82	0.24	ug/m3			10/07/22 01:07	1
Trichloroethene	**28**		0.20	0.13	ug/m3			10/07/22 01:07	1
Methyl methacrylate	**0.76**	**J**	2.0	0.66	ug/m3			10/07/22 01:07	1

Client Sample ID: SV-04_20221003
Date Collected: 10/03/22 15:30
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/07/22 01:07	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/07/22 01:07	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/07/22 01:07	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/07/22 01:07	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	**1.0**	**J**	2.0	0.78	ug/m3			10/07/22 01:07	1
Toluene	**29**		0.75	0.35	ug/m3			10/07/22 01:07	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/07/22 01:07	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/07/22 01:07	1
Tetrachloroethene	**1400**	**E**	1.4	0.18	ug/m3			10/07/22 01:07	1
Methyl Butyl Ketone (2-Hexanone)	**1.6**	**J**	2.0	0.82	ug/m3			10/07/22 01:07	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/07/22 01:07	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/07/22 01:07	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/07/22 01:07	1
Ethylbenzene	**5.8**		0.87	0.43	ug/m3			10/07/22 01:07	1
m,p-Xylene	**23**		2.2	0.74	ug/m3			10/07/22 01:07	1
o-Xylene	**4.9**		0.87	0.41	ug/m3			10/07/22 01:07	1
Styrene	**0.42**	**J**	0.85	0.14	ug/m3			10/07/22 01:07	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/07/22 01:07	1
Cumene	0.98	U	0.98	0.18	ug/m3			10/07/22 01:07	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/07/22 01:07	1
n-Propylbenzene	**0.53**	**J**	0.98	0.23	ug/m3			10/07/22 01:07	1
4-Ethyltoluene	**0.73**	**J**	0.98	0.25	ug/m3			10/07/22 01:07	1
1,3,5-Trimethylbenzene	**0.49**	**J**	0.98	0.22	ug/m3			10/07/22 01:07	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/07/22 01:07	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/07/22 01:07	1
1,2,4-Trimethylbenzene	**2.1**		0.98	0.23	ug/m3			10/07/22 01:07	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/07/22 01:07	1
4-Isopropyltoluene	**2.7**		1.1	0.21	ug/m3			10/07/22 01:07	1
1,3-Dichlorobenzene	**2.2**		1.2	0.54	ug/m3			10/07/22 01:07	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/07/22 01:07	1
Benzyl chloride	1.0	U	1.0	0.38	ug/m3			10/07/22 01:07	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/07/22 01:07	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/07/22 01:07	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/07/22 01:07	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/07/22 01:07	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/07/22 01:07	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.35**	**J**	0.50	0.11	ppb v/v			10/07/22 01:07	1
Chlorodifluoromethane	**0.24**	**J**	0.50	0.11	ppb v/v			10/07/22 01:07	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 01:07	1
Chloromethane	**0.16**	**J**	0.50	0.12	ppb v/v			10/07/22 01:07	1
n-Butane	**5.0**		0.50	0.19	ppb v/v			10/07/22 01:07	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/07/22 01:07	1
1,3-Butadiene	**1.8**		0.20	0.038	ppb v/v			10/07/22 01:07	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 01:07	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/07/22 01:07	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/07/22 01:07	1

Client Sample ID: SV-04_20221003
Date Collected: 10/03/22 15:30
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	0.18	J	0.20	0.052	ppb v/v			10/07/22 01:07	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 01:07	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/07/22 01:07	1
Acetone	69	E	5.0	2.0	ppb v/v			10/07/22 01:07	1
Isopropyl alcohol	9.9		5.0	0.98	ppb v/v			10/07/22 01:07	1
Carbon disulfide	0.96		0.50	0.13	ppb v/v			10/07/22 01:07	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/07/22 01:07	1
Methylene Chloride	0.35	J	0.50	0.17	ppb v/v			10/07/22 01:07	1
tert-Butyl alcohol	4.5	J	5.0	1.2	ppb v/v			10/07/22 01:07	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/07/22 01:07	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.088	ppb v/v			10/07/22 01:07	1
n-Hexane	2.0		0.50	0.23	ppb v/v			10/07/22 01:07	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/07/22 01:07	1
Methyl Ethyl Ketone (2-Butanone)	2.8		0.50	0.17	ppb v/v			10/07/22 01:07	1
cis-1,2-Dichloroethene	5.5		0.050	0.033	ppb v/v			10/07/22 01:07	1
Chloroform	1.2		0.20	0.046	ppb v/v			10/07/22 01:07	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/07/22 01:07	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/07/22 01:07	1
Cyclohexane	0.31		0.20	0.035	ppb v/v			10/07/22 01:07	1
Carbon tetrachloride	0.038		0.035	0.032	ppb v/v			10/07/22 01:07	1
2,2,4-Trimethylpentane	0.26		0.20	0.035	ppb v/v			10/07/22 01:07	1
Benzene	1.3		0.20	0.074	ppb v/v			10/07/22 01:07	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/07/22 01:07	1
n-Heptane	0.95		0.20	0.059	ppb v/v			10/07/22 01:07	1
Trichloroethene	5.2		0.037	0.024	ppb v/v			10/07/22 01:07	1
Methyl methacrylate	0.18	J	0.50	0.16	ppb v/v			10/07/22 01:07	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/07/22 01:07	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/07/22 01:07	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/07/22 01:07	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/07/22 01:07	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.25	J	0.50	0.19	ppb v/v			10/07/22 01:07	1
Toluene	7.6		0.20	0.093	ppb v/v			10/07/22 01:07	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/07/22 01:07	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/07/22 01:07	1
Tetrachloroethene	200	E	0.20	0.027	ppb v/v			10/07/22 01:07	1
Methyl Butyl Ketone (2-Hexanone)	0.38	J	0.50	0.20	ppb v/v			10/07/22 01:07	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/07/22 01:07	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/07/22 01:07	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/07/22 01:07	1
Ethylbenzene	1.3		0.20	0.10	ppb v/v			10/07/22 01:07	1
m,p-Xylene	5.4		0.50	0.17	ppb v/v			10/07/22 01:07	1
o-Xylene	1.1		0.20	0.094	ppb v/v			10/07/22 01:07	1
Styrene	0.10	J	0.20	0.032	ppb v/v			10/07/22 01:07	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/07/22 01:07	1
Cumene	0.20	U	0.20	0.037	ppb v/v			10/07/22 01:07	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/07/22 01:07	1
n-Propylbenzene	0.11	J	0.20	0.047	ppb v/v			10/07/22 01:07	1
4-Ethyltoluene	0.15	J	0.20	0.051	ppb v/v			10/07/22 01:07	1

Client Sample ID: SV-04_20221003

Lab Sample ID: 200-65184-2

Date Collected: 10/03/22 15:30
Matrix: Air
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	0.099	J	0.20	0.044	ppb v/v			10/07/22 01:07	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/07/22 01:07	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/07/22 01:07	1
1,2,4-Trimethylbenzene	0.42		0.20	0.047	ppb v/v			10/07/22 01:07	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/07/22 01:07	1
4-Isopropyltoluene	0.49		0.20	0.039	ppb v/v			10/07/22 01:07	1
1,3-Dichlorobenzene	0.37		0.20	0.089	ppb v/v			10/07/22 01:07	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/07/22 01:07	1
Benzyl chloride	0.20	U	0.20	0.074	ppb v/v			10/07/22 01:07	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/07/22 01:07	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/07/22 01:07	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/07/22 01:07	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/07/22 01:07	1
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/07/22 01:07	1

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	25	U	25	5.4	ug/m3			10/06/22 14:29	10
Chlorodifluoromethane	18	U	18	3.9	ug/m3			10/06/22 14:29	10
1,2-Dichlorotetrafluoroethane	14	U	14	3.8	ug/m3			10/06/22 14:29	10
Chloromethane	10	U	10	2.5	ug/m3			10/06/22 14:29	10
n-Butane	11	J D	12	4.5	ug/m3			10/06/22 14:29	10
Vinyl chloride	2.0	U	2.0	0.72	ug/m3			10/06/22 14:29	10
1,3-Butadiene	2.7	J D	4.4	0.84	ug/m3			10/06/22 14:29	10
Bromomethane	7.8	U	7.8	2.0	ug/m3			10/06/22 14:29	10
Chloroethane	13	U	13	6.6	ug/m3			10/06/22 14:29	10
Bromoethene(Vinyl Bromide)	8.7	U	8.7	3.7	ug/m3			10/06/22 14:29	10
Trichlorofluoromethane	11	U	11	2.9	ug/m3			10/06/22 14:29	10
1,1,2-Trichlorotrifluoroethane	15	U	15	4.2	ug/m3			10/06/22 14:29	10
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/m3			10/06/22 14:29	10
Acetone	130	D	120	48	ug/m3			10/06/22 14:29	10
Isopropyl alcohol	120	U	120	24	ug/m3			10/06/22 14:29	10
Carbon disulfide	16	U	16	4.0	ug/m3			10/06/22 14:29	10
3-Chloropropene	16	U	16	3.4	ug/m3			10/06/22 14:29	10
Methylene Chloride	17	U	17	5.9	ug/m3			10/06/22 14:29	10
tert-Butyl alcohol	150	U	150	36	ug/m3			10/06/22 14:29	10
Methyl tert-butyl ether	7.2	U	7.2	2.9	ug/m3			10/06/22 14:29	10
trans-1,2-Dichloroethene	7.9	U	7.9	3.5	ug/m3			10/06/22 14:29	10
n-Hexane	18	U	18	8.1	ug/m3			10/06/22 14:29	10
1,1-Dichloroethane	8.1	U	8.1	1.2	ug/m3			10/06/22 14:29	10
Methyl Ethyl Ketone (2-Butanone)	15	U	15	5.0	ug/m3			10/06/22 14:29	10
cis-1,2-Dichloroethene	16	D	2.0	1.3	ug/m3			10/06/22 14:29	10
Chloroform	4.4	J D	9.8	2.2	ug/m3			10/06/22 14:29	10
Tetrahydrofuran	150	U	150	35	ug/m3			10/06/22 14:29	10
1,1,1-Trichloroethane	11	U	11	2.1	ug/m3			10/06/22 14:29	10
Cyclohexane	6.9	U	6.9	1.2	ug/m3			10/06/22 14:29	10
Carbon tetrachloride	2.2	U	2.2	2.0	ug/m3			10/06/22 14:29	10
2,2,4-Trimethylpentane	9.3	U	9.3	1.6	ug/m3			10/06/22 14:29	10
Benzene	4.1	J D	6.4	2.4	ug/m3			10/06/22 14:29	10

Client Sample ID: SV-04_20221003
Date Collected: 10/03/22 15:30
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	8.1	U	8.1	6.1	ug/m3			10/06/22 14:29	10
n-Heptane	3.0	J D	8.2	2.4	ug/m3			10/06/22 14:29	10
Trichloroethene	23	D	2.0	1.3	ug/m3			10/06/22 14:29	10
Methyl methacrylate	20	U	20	6.6	ug/m3			10/06/22 14:29	10
1,2-Dichloropropane	9.2	U	9.2	4.0	ug/m3			10/06/22 14:29	10
1,4-Dioxane	180	U	180	61	ug/m3			10/06/22 14:29	10
Bromodichloromethane	13	U	13	2.7	ug/m3			10/06/22 14:29	10
cis-1,3-Dichloropropene	9.1	U	9.1	0.91	ug/m3			10/06/22 14:29	10
4-Methyl-2-pentanone (Methyl isobutyl ketone)	20	U	20	7.8	ug/m3			10/06/22 14:29	10
Toluene	24	D	7.5	3.5	ug/m3			10/06/22 14:29	10
trans-1,3-Dichloropropene	9.1	U	9.1	4.0	ug/m3			10/06/22 14:29	10
1,1,2-Trichloroethane	11	U	11	1.9	ug/m3			10/06/22 14:29	10
Tetrachloroethene	1900	D	14	1.8	ug/m3			10/06/22 14:29	10
Methyl Butyl Ketone (2-Hexanone)	20	U	20	8.2	ug/m3			10/06/22 14:29	10
Dibromochloromethane	17	U	17	2.6	ug/m3			10/06/22 14:29	10
1,2-Dibromoethane	15	U	15	3.5	ug/m3			10/06/22 14:29	10
Chlorobenzene	9.2	U	9.2	2.0	ug/m3			10/06/22 14:29	10
Ethylbenzene	6.1	J D	8.7	4.3	ug/m3			10/06/22 14:29	10
m,p-Xylene	18	J D	22	7.4	ug/m3			10/06/22 14:29	10
o-Xylene	5.4	J D	8.7	4.1	ug/m3			10/06/22 14:29	10
Styrene	8.5	U	8.5	1.4	ug/m3			10/06/22 14:29	10
Bromoform	21	U	21	6.0	ug/m3			10/06/22 14:29	10
Cumene	9.8	U	9.8	1.8	ug/m3			10/06/22 14:29	10
1,1,2,2-Tetrachloroethane	14	U	14	3.0	ug/m3			10/06/22 14:29	10
n-Propylbenzene	9.8	U	9.8	2.3	ug/m3			10/06/22 14:29	10
4-Ethyltoluene	9.8	U	9.8	2.5	ug/m3			10/06/22 14:29	10
1,3,5-Trimethylbenzene	9.8	U	9.8	2.2	ug/m3			10/06/22 14:29	10
2-Chlorotoluene	10	U	10	2.5	ug/m3			10/06/22 14:29	10
tert-Butylbenzene	11	U	11	2.0	ug/m3			10/06/22 14:29	10
1,2,4-Trimethylbenzene	9.8	U	9.8	2.3	ug/m3			10/06/22 14:29	10
sec-Butylbenzene	11	U	11	2.1	ug/m3			10/06/22 14:29	10
4-Isopropyltoluene	2.1	J D	11	2.1	ug/m3			10/06/22 14:29	10
1,3-Dichlorobenzene	12	U	12	5.4	ug/m3			10/06/22 14:29	10
1,4-Dichlorobenzene	12	U	12	5.7	ug/m3			10/06/22 14:29	10
Benzyl chloride	10	U	10	3.8	ug/m3			10/06/22 14:29	10
n-Butylbenzene	11	U	11	3.0	ug/m3			10/06/22 14:29	10
1,2-Dichlorobenzene	12	U	12	4.2	ug/m3			10/06/22 14:29	10
1,2,4-Trichlorobenzene	37	U	37	14	ug/m3			10/06/22 14:29	10
Hexachlorobutadiene	21	U	21	3.3	ug/m3			10/06/22 14:29	10
Naphthalene	26	U	26	8.9	ug/m3			10/06/22 14:29	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	5.0	U	5.0	1.1	ppb v/v			10/06/22 14:29	10
Chlorodifluoromethane	5.0	U	5.0	1.1	ppb v/v			10/06/22 14:29	10
1,2-Dichlorotetrafluoroethane	2.0	U	2.0	0.55	ppb v/v			10/06/22 14:29	10
Chloromethane	5.0	U	5.0	1.2	ppb v/v			10/06/22 14:29	10
n-Butane	4.6	J D	5.0	1.9	ppb v/v			10/06/22 14:29	10
Vinyl chloride	0.78	U	0.78	0.28	ppb v/v			10/06/22 14:29	10

Client Sample ID: SV-04_20221003
Date Collected: 10/03/22 15:30
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65184-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Butadiene	1.2	J D	2.0	0.38	ppb v/v			10/06/22 14:29	10
Bromomethane	2.0	U	2.0	0.52	ppb v/v			10/06/22 14:29	10
Chloroethane	5.0	U	5.0	2.5	ppb v/v			10/06/22 14:29	10
Bromoethene(Vinyl Bromide)	2.0	U	2.0	0.85	ppb v/v			10/06/22 14:29	10
Trichlorofluoromethane	2.0	U	2.0	0.52	ppb v/v			10/06/22 14:29	10
1,1,2-Trichlorotrifluoroethane	2.0	U	2.0	0.55	ppb v/v			10/06/22 14:29	10
1,1-Dichloroethene	0.50	U	0.50	0.29	ppb v/v			10/06/22 14:29	10
Acetone	53	D	50	20	ppb v/v			10/06/22 14:29	10
Isopropyl alcohol	50	U	50	9.8	ppb v/v			10/06/22 14:29	10
Carbon disulfide	5.0	U	5.0	1.3	ppb v/v			10/06/22 14:29	10
3-Chloropropene	5.0	U	5.0	1.1	ppb v/v			10/06/22 14:29	10
Methylene Chloride	5.0	U	5.0	1.7	ppb v/v			10/06/22 14:29	10
tert-Butyl alcohol	50	U	50	12	ppb v/v			10/06/22 14:29	10
Methyl tert-butyl ether	2.0	U	2.0	0.80	ppb v/v			10/06/22 14:29	10
trans-1,2-Dichloroethene	2.0	U	2.0	0.88	ppb v/v			10/06/22 14:29	10
n-Hexane	5.0	U	5.0	2.3	ppb v/v			10/06/22 14:29	10
1,1-Dichloroethane	2.0	U	2.0	0.29	ppb v/v			10/06/22 14:29	10
Methyl Ethyl Ketone (2-Butanone)	5.0	U	5.0	1.7	ppb v/v			10/06/22 14:29	10
cis-1,2-Dichloroethene	4.2	D	0.50	0.33	ppb v/v			10/06/22 14:29	10
Chloroform	0.90	J D	2.0	0.46	ppb v/v			10/06/22 14:29	10
Tetrahydrofuran	50	U	50	12	ppb v/v			10/06/22 14:29	10
1,1,1-Trichloroethane	2.0	U	2.0	0.39	ppb v/v			10/06/22 14:29	10
Cyclohexane	2.0	U	2.0	0.35	ppb v/v			10/06/22 14:29	10
Carbon tetrachloride	0.35	U	0.35	0.32	ppb v/v			10/06/22 14:29	10
2,2,4-Trimethylpentane	2.0	U	2.0	0.35	ppb v/v			10/06/22 14:29	10
Benzene	1.3	J D	2.0	0.74	ppb v/v			10/06/22 14:29	10
1,2-Dichloroethane	2.0	U	2.0	1.5	ppb v/v			10/06/22 14:29	10
n-Heptane	0.72	J D	2.0	0.59	ppb v/v			10/06/22 14:29	10
Trichloroethene	4.3	D	0.37	0.24	ppb v/v			10/06/22 14:29	10
Methyl methacrylate	5.0	U	5.0	1.6	ppb v/v			10/06/22 14:29	10
1,2-Dichloropropane	2.0	U	2.0	0.87	ppb v/v			10/06/22 14:29	10
1,4-Dioxane	50	U	50	17	ppb v/v			10/06/22 14:29	10
Bromodichloromethane	2.0	U	2.0	0.40	ppb v/v			10/06/22 14:29	10
cis-1,3-Dichloropropene	2.0	U	2.0	0.20	ppb v/v			10/06/22 14:29	10
4-Methyl-2-pentanone (Methyl isobutyl ketone)	5.0	U	5.0	1.9	ppb v/v			10/06/22 14:29	10
Toluene	6.3	D	2.0	0.93	ppb v/v			10/06/22 14:29	10
trans-1,3-Dichloropropene	2.0	U	2.0	0.89	ppb v/v			10/06/22 14:29	10
1,1,2-Trichloroethane	2.0	U	2.0	0.34	ppb v/v			10/06/22 14:29	10
Tetrachloroethene	280	D	2.0	0.27	ppb v/v			10/06/22 14:29	10
Methyl Butyl Ketone (2-Hexanone)	5.0	U	5.0	2.0	ppb v/v			10/06/22 14:29	10
Dibromochloromethane	2.0	U	2.0	0.31	ppb v/v			10/06/22 14:29	10
1,2-Dibromoethane	2.0	U	2.0	0.46	ppb v/v			10/06/22 14:29	10
Chlorobenzene	2.0	U	2.0	0.43	ppb v/v			10/06/22 14:29	10
Ethylbenzene	1.4	J D	2.0	1.0	ppb v/v			10/06/22 14:29	10
m,p-Xylene	4.1	J D	5.0	1.7	ppb v/v			10/06/22 14:29	10
o-Xylene	1.3	J D	2.0	0.94	ppb v/v			10/06/22 14:29	10
Styrene	2.0	U	2.0	0.32	ppb v/v			10/06/22 14:29	10
Bromoform	2.0	U	2.0	0.58	ppb v/v			10/06/22 14:29	10

Client Sample ID: SV-04_20221003

Lab Sample ID: 200-65184-2

Date Collected: 10/03/22 15:30
Matrix: Air
Date Received: 10/04/22 13:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cumene	2.0	U	2.0	0.37	ppb v/v			10/06/22 14:29	10
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.43	ppb v/v			10/06/22 14:29	10
n-Propylbenzene	2.0	U	2.0	0.47	ppb v/v			10/06/22 14:29	10
4-Ethyltoluene	2.0	U	2.0	0.51	ppb v/v			10/06/22 14:29	10
1,3,5-Trimethylbenzene	2.0	U	2.0	0.44	ppb v/v			10/06/22 14:29	10
2-Chlorotoluene	2.0	U	2.0	0.48	ppb v/v			10/06/22 14:29	10
tert-Butylbenzene	2.0	U	2.0	0.37	ppb v/v			10/06/22 14:29	10
1,2,4-Trimethylbenzene	2.0	U	2.0	0.47	ppb v/v			10/06/22 14:29	10
sec-Butylbenzene	2.0	U	2.0	0.39	ppb v/v			10/06/22 14:29	10
4-Isopropyltoluene	**0.38**	**J D**	2.0	0.39	ppb v/v			10/06/22 14:29	10
1,3-Dichlorobenzene	2.0	U	2.0	0.89	ppb v/v			10/06/22 14:29	10
1,4-Dichlorobenzene	2.0	U	2.0	0.95	ppb v/v			10/06/22 14:29	10
Benzyl chloride	2.0	U	2.0	0.74	ppb v/v			10/06/22 14:29	10
n-Butylbenzene	2.0	U	2.0	0.55	ppb v/v			10/06/22 14:29	10
1,2-Dichlorobenzene	2.0	U	2.0	0.70	ppb v/v			10/06/22 14:29	10
1,2,4-Trichlorobenzene	5.0	U	5.0	1.9	ppb v/v			10/06/22 14:29	10
Hexachlorobutadiene	2.0	U	2.0	0.31	ppb v/v			10/06/22 14:29	10
Naphthalene	5.0	U	5.0	1.7	ppb v/v			10/06/22 14:29	10

Client Sample ID: SV-01_20221004

Lab Sample ID: 200-65197-1

Date Collected: 10/04/22 15:30
Matrix: Air
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**1.8**	**J**	2.5	0.54	ug/m3			10/07/22 14:34	1
Chlorodifluoromethane	**4.0**		1.8	0.39	ug/m3			10/07/22 14:34	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/07/22 14:34	1
Chloromethane	**0.80**	**J**	1.0	0.25	ug/m3			10/07/22 14:34	1
n-Butane	**12**		1.2	0.45	ug/m3			10/07/22 14:34	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/07/22 14:34	1
1,3-Butadiene	**3.6**		0.44	0.084	ug/m3			10/07/22 14:34	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/07/22 14:34	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/07/22 14:34	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/07/22 14:34	1
Trichlorofluoromethane	**1.6**		1.1	0.29	ug/m3			10/07/22 14:34	1
1,1,2-Trichlorotrifluoroethane	**0.48**	**J**	1.5	0.42	ug/m3			10/07/22 14:34	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/07/22 14:34	1
Acetone	**85**		12	4.8	ug/m3			10/07/22 14:34	1
Isopropyl alcohol	**24**		12	2.4	ug/m3			10/07/22 14:34	1
Carbon disulfide	**4.1**		1.6	0.40	ug/m3			10/07/22 14:34	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/07/22 14:34	1
Methylene Chloride	**3.9**		1.7	0.59	ug/m3			10/07/22 14:34	1
tert-Butyl alcohol	**14**	**J**	15	3.6	ug/m3			10/07/22 14:34	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/07/22 14:34	1
trans-1,2-Dichloroethene	**1.1**		0.79	0.35	ug/m3			10/07/22 14:34	1
n-Hexane	**3.3**		1.8	0.81	ug/m3			10/07/22 14:34	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/07/22 14:34	1

Client Sample ID: SV-01_20221004
Date Collected: 10/04/22 15:30
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	10		1.5	0.50	ug/m3			10/07/22 14:34	1
cis-1,2-Dichloroethene	180	E	0.20	0.13	ug/m3			10/07/22 14:34	1
Chloroform	8.6		0.98	0.22	ug/m3			10/07/22 14:34	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/07/22 14:34	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/07/22 14:34	1
Cyclohexane	1.1		0.69	0.12	ug/m3			10/07/22 14:34	1
Carbon tetrachloride	0.32		0.22	0.20	ug/m3			10/07/22 14:34	1
2,2,4-Trimethylpentane	1.2		0.93	0.16	ug/m3			10/07/22 14:34	1
Benzene	2.0		0.64	0.24	ug/m3			10/07/22 14:34	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/07/22 14:34	1
n-Heptane	2.9		0.82	0.24	ug/m3			10/07/22 14:34	1
Trichloroethene	30		0.20	0.13	ug/m3			10/07/22 14:34	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/07/22 14:34	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/07/22 14:34	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/07/22 14:34	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/07/22 14:34	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/07/22 14:34	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.2	J	2.0	0.78	ug/m3			10/07/22 14:34	1
Toluene	11		0.75	0.35	ug/m3			10/07/22 14:34	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/07/22 14:34	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/07/22 14:34	1
Tetrachloroethene	730	E	1.4	0.18	ug/m3			10/07/22 14:34	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/07/22 14:34	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/07/22 14:34	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/07/22 14:34	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/07/22 14:34	1
Ethylbenzene	1.4		0.87	0.43	ug/m3			10/07/22 14:34	1
m,p-Xylene	5.3		2.2	0.74	ug/m3			10/07/22 14:34	1
o-Xylene	2.0		0.87	0.41	ug/m3			10/07/22 14:34	1
Styrene	0.41	J	0.85	0.14	ug/m3			10/07/22 14:34	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/07/22 14:34	1
Cumene	0.28	J	0.98	0.18	ug/m3			10/07/22 14:34	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/07/22 14:34	1
n-Propylbenzene	0.26	J	0.98	0.23	ug/m3			10/07/22 14:34	1
4-Ethyltoluene	0.33	J	0.98	0.25	ug/m3			10/07/22 14:34	1
1,3,5-Trimethylbenzene	0.33	J	0.98	0.22	ug/m3			10/07/22 14:34	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/07/22 14:34	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/07/22 14:34	1
1,2,4-Trimethylbenzene	1.7		0.98	0.23	ug/m3			10/07/22 14:34	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/07/22 14:34	1
4-Isopropyltoluene	3.0		1.1	0.21	ug/m3			10/07/22 14:34	1
1,3-Dichlorobenzene	1.9		1.2	0.54	ug/m3			10/07/22 14:34	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/07/22 14:34	1
Benzyl chloride	1.0	U *+	1.0	0.38	ug/m3			10/07/22 14:34	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/07/22 14:34	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/07/22 14:34	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/07/22 14:34	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/07/22 14:34	1

Client Sample ID: SV-01_20221004
Date Collected: 10/04/22 15:30
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/07/22 14:34	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.37	J	0.50	0.11	ppb v/v			10/07/22 14:34	1
Chlorodifluoromethane	1.1		0.50	0.11	ppb v/v			10/07/22 14:34	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 14:34	1
Chloromethane	0.39	J	0.50	0.12	ppb v/v			10/07/22 14:34	1
n-Butane	5.1		0.50	0.19	ppb v/v			10/07/22 14:34	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/07/22 14:34	1
1,3-Butadiene	1.6		0.20	0.038	ppb v/v			10/07/22 14:34	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 14:34	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/07/22 14:34	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/07/22 14:34	1
Trichlorofluoromethane	0.28		0.20	0.052	ppb v/v			10/07/22 14:34	1
1,1,2-Trichlorotrifluoroethane	0.063	J	0.20	0.055	ppb v/v			10/07/22 14:34	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/07/22 14:34	1
Acetone	36		5.0	2.0	ppb v/v			10/07/22 14:34	1
Isopropyl alcohol	10		5.0	0.98	ppb v/v			10/07/22 14:34	1
Carbon disulfide	1.3		0.50	0.13	ppb v/v			10/07/22 14:34	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/07/22 14:34	1
Methylene Chloride	1.1		0.50	0.17	ppb v/v			10/07/22 14:34	1
tert-Butyl alcohol	4.6	J	5.0	1.2	ppb v/v			10/07/22 14:34	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/07/22 14:34	1
trans-1,2-Dichloroethene	0.27		0.20	0.088	ppb v/v			10/07/22 14:34	1
n-Hexane	0.93		0.50	0.23	ppb v/v			10/07/22 14:34	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/07/22 14:34	1
Methyl Ethyl Ketone (2-Butanone)	3.6		0.50	0.17	ppb v/v			10/07/22 14:34	1
cis-1,2-Dichloroethene	45	E	0.050	0.033	ppb v/v			10/07/22 14:34	1
Chloroform	1.8		0.20	0.046	ppb v/v			10/07/22 14:34	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/07/22 14:34	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/07/22 14:34	1
Cyclohexane	0.31		0.20	0.035	ppb v/v			10/07/22 14:34	1
Carbon tetrachloride	0.051		0.035	0.032	ppb v/v			10/07/22 14:34	1
2,2,4-Trimethylpentane	0.25		0.20	0.035	ppb v/v			10/07/22 14:34	1
Benzene	0.61		0.20	0.074	ppb v/v			10/07/22 14:34	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/07/22 14:34	1
n-Heptane	0.70		0.20	0.059	ppb v/v			10/07/22 14:34	1
Trichloroethene	5.5		0.037	0.024	ppb v/v			10/07/22 14:34	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/07/22 14:34	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/07/22 14:34	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/07/22 14:34	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/07/22 14:34	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/07/22 14:34	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.29	J	0.50	0.19	ppb v/v			10/07/22 14:34	1
Toluene	3.0		0.20	0.093	ppb v/v			10/07/22 14:34	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/07/22 14:34	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/07/22 14:34	1
Tetrachloroethene	110	E	0.20	0.027	ppb v/v			10/07/22 14:34	1

Client Sample ID: SV-01_20221004
Date Collected: 10/04/22 15:30
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/07/22 14:34	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/07/22 14:34	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/07/22 14:34	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/07/22 14:34	1
Ethylbenzene	**0.32**		0.20	0.10	ppb v/v			10/07/22 14:34	1
m,p-Xylene	**1.2**		0.50	0.17	ppb v/v			10/07/22 14:34	1
o-Xylene	**0.47**		0.20	0.094	ppb v/v			10/07/22 14:34	1
Styrene	**0.097**	**J**	0.20	0.032	ppb v/v			10/07/22 14:34	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/07/22 14:34	1
Cumene	**0.057**	**J**	0.20	0.037	ppb v/v			10/07/22 14:34	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/07/22 14:34	1
n-Propylbenzene	**0.053**	**J**	0.20	0.047	ppb v/v			10/07/22 14:34	1
4-Ethyltoluene	**0.067**	**J**	0.20	0.051	ppb v/v			10/07/22 14:34	1
1,3,5-Trimethylbenzene	**0.068**	**J**	0.20	0.044	ppb v/v			10/07/22 14:34	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/07/22 14:34	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/07/22 14:34	1
1,2,4-Trimethylbenzene	**0.36**		0.20	0.047	ppb v/v			10/07/22 14:34	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/07/22 14:34	1
4-Isopropyltoluene	**0.54**		0.20	0.039	ppb v/v			10/07/22 14:34	1
1,3-Dichlorobenzene	**0.32**		0.20	0.089	ppb v/v			10/07/22 14:34	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/07/22 14:34	1
Benzyl chloride	0.20	U *+	0.20	0.074	ppb v/v			10/07/22 14:34	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/07/22 14:34	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/07/22 14:34	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/07/22 14:34	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/07/22 14:34	1
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/07/22 14:34	1

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	15	U	15	3.3	ug/m3			10/07/22 15:26	6.14
Chlorodifluoromethane	**4.6**	**J D**	11	2.4	ug/m3			10/07/22 15:26	6.14
1,2-Dichlorotetrafluoroethane	8.6	U	8.6	2.4	ug/m3			10/07/22 15:26	6.14
Chloromethane	6.3	U	6.3	1.5	ug/m3			10/07/22 15:26	6.14
n-Butane	**13**	**D**	7.3	2.8	ug/m3			10/07/22 15:26	6.14
Vinyl chloride	1.2	U	1.2	0.44	ug/m3			10/07/22 15:26	6.14
1,3-Butadiene	**4.2**	**D**	2.7	0.52	ug/m3			10/07/22 15:26	6.14
Bromomethane	4.8	U	4.8	1.2	ug/m3			10/07/22 15:26	6.14
Chloroethane	8.1	U	8.1	4.1	ug/m3			10/07/22 15:26	6.14
Bromoethene(Vinyl Bromide)	5.4	U	5.4	2.3	ug/m3			10/07/22 15:26	6.14
Trichlorofluoromethane	**1.9**	**J D**	6.9	1.8	ug/m3			10/07/22 15:26	6.14
1,1,2-Trichlorotrifluoroethane	9.4	U	9.4	2.6	ug/m3			10/07/22 15:26	6.14
1,1-Dichloroethene	1.2	U	1.2	0.71	ug/m3			10/07/22 15:26	6.14
Acetone	**95**	**D**	73	29	ug/m3			10/07/22 15:26	6.14
Isopropyl alcohol	**28**	**J D**	75	15	ug/m3			10/07/22 15:26	6.14
Carbon disulfide	**4.5**	**J D**	9.6	2.5	ug/m3			10/07/22 15:26	6.14
3-Chloropropene	9.6	U	9.6	2.1	ug/m3			10/07/22 15:26	6.14
Methylene Chloride	**4.9**	**J D**	11	3.6	ug/m3			10/07/22 15:26	6.14
tert-Butyl alcohol	93	U	93	22	ug/m3			10/07/22 15:26	6.14

Client Sample ID: SV-01_20221004
Date Collected: 10/04/22 15:30
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	4.4	U	4.4	1.8	ug/m3			10/07/22 15:26	6.14
trans-1,2-Dichloroethene	4.9	U	4.9	2.1	ug/m3			10/07/22 15:26	6.14
n-Hexane	11	U	11	5.0	ug/m3			10/07/22 15:26	6.14
1,1-Dichloroethane	5.0	U	5.0	0.72	ug/m3			10/07/22 15:26	6.14
Methyl Ethyl Ketone (2-Butanone)	12	D	9.1	3.1	ug/m3			10/07/22 15:26	6.14
cis-1,2-Dichloroethene	200	D	1.2	0.80	ug/m3			10/07/22 15:26	6.14
Chloroform	9.5	D	6.0	1.4	ug/m3			10/07/22 15:26	6.14
Tetrahydrofuran	91	U	91	22	ug/m3			10/07/22 15:26	6.14
1,1,1-Trichloroethane	6.7	U	6.7	1.3	ug/m3			10/07/22 15:26	6.14
Cyclohexane	1.2	J D	4.2	0.74	ug/m3			10/07/22 15:26	6.14
Carbon tetrachloride	1.4	U	1.4	1.2	ug/m3			10/07/22 15:26	6.14
2,2,4-Trimethylpentane	1.3	J D	5.7	1.0	ug/m3			10/07/22 15:26	6.14
Benzene	2.2	J D	3.9	1.5	ug/m3			10/07/22 15:26	6.14
1,2-Dichloroethane	5.0	U	5.0	3.7	ug/m3			10/07/22 15:26	6.14
n-Heptane	3.2	J D	5.0	1.5	ug/m3			10/07/22 15:26	6.14
Trichloroethene	31	D	1.2	0.79	ug/m3			10/07/22 15:26	6.14
Methyl methacrylate	13	U	13	4.0	ug/m3			10/07/22 15:26	6.14
1,2-Dichloropropane	5.7	U	5.7	2.5	ug/m3			10/07/22 15:26	6.14
1,4-Dioxane	110	U	110	38	ug/m3			10/07/22 15:26	6.14
Bromodichloromethane	8.2	U	8.2	1.6	ug/m3			10/07/22 15:26	6.14
cis-1,3-Dichloropropene	5.6	U	5.6	0.56	ug/m3			10/07/22 15:26	6.14
4-Methyl-2-pentanone (Methyl isobutyl ketone)	13	U	13	4.8	ug/m3			10/07/22 15:26	6.14
Toluene	11	D	4.6	2.2	ug/m3			10/07/22 15:26	6.14
trans-1,3-Dichloropropene	5.6	U	5.6	2.5	ug/m3			10/07/22 15:26	6.14
1,1,2-Trichloroethane	6.7	U	6.7	1.1	ug/m3			10/07/22 15:26	6.14
Tetrachloroethene	780	D	8.3	1.1	ug/m3			10/07/22 15:26	6.14
Methyl Butyl Ketone (2-Hexanone)	13	U	13	5.0	ug/m3			10/07/22 15:26	6.14
Dibromochloromethane	10	U	10	1.6	ug/m3			10/07/22 15:26	6.14
1,2-Dibromoethane	9.4	U	9.4	2.2	ug/m3			10/07/22 15:26	6.14
Chlorobenzene	5.7	U	5.7	1.2	ug/m3			10/07/22 15:26	6.14
Ethylbenzene	5.3	U	5.3	2.7	ug/m3			10/07/22 15:26	6.14
m,p-Xylene	5.1	J D	13	4.5	ug/m3			10/07/22 15:26	6.14
o-Xylene	5.3	U	5.3	2.5	ug/m3			10/07/22 15:26	6.14
Styrene	5.2	U	5.2	0.84	ug/m3			10/07/22 15:26	6.14
Bromoform	13	U	13	3.7	ug/m3			10/07/22 15:26	6.14
Cumene	6.0	U	6.0	1.1	ug/m3			10/07/22 15:26	6.14
1,1,2,2-Tetrachloroethane	8.4	U	8.4	1.8	ug/m3			10/07/22 15:26	6.14
n-Propylbenzene	6.0	U	6.0	1.4	ug/m3			10/07/22 15:26	6.14
4-Ethyltoluene	6.0	U	6.0	1.5	ug/m3			10/07/22 15:26	6.14
1,3,5-Trimethylbenzene	6.0	U	6.0	1.3	ug/m3			10/07/22 15:26	6.14
2-Chlorotoluene	6.4	U	6.4	1.5	ug/m3			10/07/22 15:26	6.14
tert-Butylbenzene	6.7	U	6.7	1.2	ug/m3			10/07/22 15:26	6.14
1,2,4-Trimethylbenzene	1.4	J D	6.0	1.4	ug/m3			10/07/22 15:26	6.14
sec-Butylbenzene	6.7	U	6.7	1.3	ug/m3			10/07/22 15:26	6.14
4-Isopropyltoluene	2.9	J D	6.7	1.3	ug/m3			10/07/22 15:26	6.14
1,3-Dichlorobenzene	7.4	U	7.4	3.3	ug/m3			10/07/22 15:26	6.14
1,4-Dichlorobenzene	7.4	U	7.4	3.5	ug/m3			10/07/22 15:26	6.14
Benzyl chloride	6.4	U *+	6.4	2.4	ug/m3			10/07/22 15:26	6.14

Client Sample ID: SV-01_20221004
Date Collected: 10/04/22 15:30
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	6.7	U	6.7	1.9	ug/m3			10/07/22 15:26	6.14
1,2-Dichlorobenzene	7.4	U	7.4	2.6	ug/m3			10/07/22 15:26	6.14
1,2,4-Trichlorobenzene	23	U	23	8.7	ug/m3			10/07/22 15:26	6.14
Hexachlorobutadiene	13	U	13	2.0	ug/m3			10/07/22 15:26	6.14
Naphthalene	16	U	16	5.5	ug/m3			10/07/22 15:26	6.14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	3.1	U	3.1	0.68	ppb v/v			10/07/22 15:26	6.14
Chlorodifluoromethane	**1.3**	**J D**	3.1	0.68	ppb v/v			10/07/22 15:26	6.14
1,2-Dichlorotetrafluoroethane	1.2	U	1.2	0.34	ppb v/v			10/07/22 15:26	6.14
Chloromethane	3.1	U	3.1	0.74	ppb v/v			10/07/22 15:26	6.14
n-Butane	**5.3**	**D**	3.1	1.2	ppb v/v			10/07/22 15:26	6.14
Vinyl chloride	0.48	U	0.48	0.17	ppb v/v			10/07/22 15:26	6.14
1,3-Butadiene	**1.9**	**D**	1.2	0.23	ppb v/v			10/07/22 15:26	6.14
Bromomethane	1.2	U	1.2	0.32	ppb v/v			10/07/22 15:26	6.14
Chloroethane	3.1	U	3.1	1.5	ppb v/v			10/07/22 15:26	6.14
Bromoethene(Vinyl Bromide)	1.2	U	1.2	0.52	ppb v/v			10/07/22 15:26	6.14
Trichlorofluoromethane	**0.34**	**J D**	1.2	0.32	ppb v/v			10/07/22 15:26	6.14
1,1,2-Trichlorotrifluoroethane	1.2	U	1.2	0.34	ppb v/v			10/07/22 15:26	6.14
1,1-Dichloroethene	0.31	U	0.31	0.18	ppb v/v			10/07/22 15:26	6.14
Acetone	**40**	**D**	31	12	ppb v/v			10/07/22 15:26	6.14
Isopropyl alcohol	**11**	**J D**	31	6.0	ppb v/v			10/07/22 15:26	6.14
Carbon disulfide	**1.5**	**J D**	3.1	0.80	ppb v/v			10/07/22 15:26	6.14
3-Chloropropene	3.1	U	3.1	0.68	ppb v/v			10/07/22 15:26	6.14
Methylene Chloride	**1.4**	**J D**	3.1	1.0	ppb v/v			10/07/22 15:26	6.14
tert-Butyl alcohol	31	U	31	7.4	ppb v/v			10/07/22 15:26	6.14
Methyl tert-butyl ether	1.2	U	1.2	0.49	ppb v/v			10/07/22 15:26	6.14
trans-1,2-Dichloroethene	1.2	U	1.2	0.54	ppb v/v			10/07/22 15:26	6.14
n-Hexane	3.1	U	3.1	1.4	ppb v/v			10/07/22 15:26	6.14
1,1-Dichloroethane	1.2	U	1.2	0.18	ppb v/v			10/07/22 15:26	6.14
Methyl Ethyl Ketone (2-Butanone)	**4.0**	**D**	3.1	1.0	ppb v/v			10/07/22 15:26	6.14
cis-1,2-Dichloroethene	**50**	**D**	0.31	0.20	ppb v/v			10/07/22 15:26	6.14
Chloroform	**1.9**	**D**	1.2	0.28	ppb v/v			10/07/22 15:26	6.14
Tetrahydrofuran	31	U	31	7.4	ppb v/v			10/07/22 15:26	6.14
1,1,1-Trichloroethane	1.2	U	1.2	0.24	ppb v/v			10/07/22 15:26	6.14
Cyclohexane	**0.34**	**J D**	1.2	0.21	ppb v/v			10/07/22 15:26	6.14
Carbon tetrachloride	0.21	U	0.21	0.20	ppb v/v			10/07/22 15:26	6.14
2,2,4-Trimethylpentane	**0.27**	**J D**	1.2	0.21	ppb v/v			10/07/22 15:26	6.14
Benzene	**0.69**	**J D**	1.2	0.45	ppb v/v			10/07/22 15:26	6.14
1,2-Dichloroethane	1.2	U	1.2	0.92	ppb v/v			10/07/22 15:26	6.14
n-Heptane	**0.78**	**J D**	1.2	0.36	ppb v/v			10/07/22 15:26	6.14
Trichloroethene	**5.7**	**D**	0.23	0.15	ppb v/v			10/07/22 15:26	6.14
Methyl methacrylate	3.1	U	3.1	0.98	ppb v/v			10/07/22 15:26	6.14
1,2-Dichloropropane	1.2	U	1.2	0.53	ppb v/v			10/07/22 15:26	6.14
1,4-Dioxane	31	U	31	10	ppb v/v			10/07/22 15:26	6.14
Bromodichloromethane	1.2	U	1.2	0.25	ppb v/v			10/07/22 15:26	6.14
cis-1,3-Dichloropropene	1.2	U	1.2	0.12	ppb v/v			10/07/22 15:26	6.14
4-Methyl-2-pentanone (Methyl isobutyl ketone)	3.1	U	3.1	1.2	ppb v/v			10/07/22 15:26	6.14

Client Sample ID: SV-01_20221004

Lab Sample ID: 200-65197-1

Date Collected: 10/04/22 15:30
Matrix: Air
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	2.9	D	1.2	0.57	ppb v/v			10/07/22 15:26	6.14
trans-1,3-Dichloropropene	1.2	U	1.2	0.55	ppb v/v			10/07/22 15:26	6.14
1,1,2-Trichloroethane	1.2	U	1.2	0.21	ppb v/v			10/07/22 15:26	6.14
Tetrachloroethene	120	D	1.2	0.17	ppb v/v			10/07/22 15:26	6.14
Methyl Butyl Ketone (2-Hexanone)	3.1	U	3.1	1.2	ppb v/v			10/07/22 15:26	6.14
Dibromochloromethane	1.2	U	1.2	0.19	ppb v/v			10/07/22 15:26	6.14
1,2-Dibromoethane	1.2	U	1.2	0.28	ppb v/v			10/07/22 15:26	6.14
Chlorobenzene	1.2	U	1.2	0.26	ppb v/v			10/07/22 15:26	6.14
Ethylbenzene	1.2	U	1.2	0.61	ppb v/v			10/07/22 15:26	6.14
m,p-Xylene	1.2	J D	3.1	1.0	ppb v/v			10/07/22 15:26	6.14
o-Xylene	1.2	U	1.2	0.58	ppb v/v			10/07/22 15:26	6.14
Styrene	1.2	U	1.2	0.20	ppb v/v			10/07/22 15:26	6.14
Bromoform	1.2	U	1.2	0.36	ppb v/v			10/07/22 15:26	6.14
Cumene	1.2	U	1.2	0.23	ppb v/v			10/07/22 15:26	6.14
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.26	ppb v/v			10/07/22 15:26	6.14
n-Propylbenzene	1.2	U	1.2	0.29	ppb v/v			10/07/22 15:26	6.14
4-Ethyltoluene	1.2	U	1.2	0.31	ppb v/v			10/07/22 15:26	6.14
1,3,5-Trimethylbenzene	1.2	U	1.2	0.27	ppb v/v			10/07/22 15:26	6.14
2-Chlorotoluene	1.2	U	1.2	0.29	ppb v/v			10/07/22 15:26	6.14
tert-Butylbenzene	1.2	U	1.2	0.23	ppb v/v			10/07/22 15:26	6.14
1,2,4-Trimethylbenzene	0.29	J D	1.2	0.29	ppb v/v			10/07/22 15:26	6.14
sec-Butylbenzene	1.2	U	1.2	0.24	ppb v/v			10/07/22 15:26	6.14
4-Isopropyltoluene	0.53	J D	1.2	0.24	ppb v/v			10/07/22 15:26	6.14
1,3-Dichlorobenzene	1.2	U	1.2	0.55	ppb v/v			10/07/22 15:26	6.14
1,4-Dichlorobenzene	1.2	U	1.2	0.58	ppb v/v			10/07/22 15:26	6.14
Benzyl chloride	1.2	U *+	1.2	0.45	ppb v/v			10/07/22 15:26	6.14
n-Butylbenzene	1.2	U	1.2	0.34	ppb v/v			10/07/22 15:26	6.14
1,2-Dichlorobenzene	1.2	U	1.2	0.43	ppb v/v			10/07/22 15:26	6.14
1,2,4-Trichlorobenzene	3.1	U	3.1	1.2	ppb v/v			10/07/22 15:26	6.14
Hexachlorobutadiene	1.2	U	1.2	0.19	ppb v/v			10/07/22 15:26	6.14
Naphthalene	3.1	U	3.1	1.0	ppb v/v			10/07/22 15:26	6.14

Client Sample ID: SV-03_20221004

Lab Sample ID: 200-65197-2

Date Collected: 10/04/22 11:00
Matrix: Air
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.3	J	2.5	0.54	ug/m3			10/07/22 16:19	1
Chlorodifluoromethane	8.3		1.8	0.39	ug/m3			10/07/22 16:19	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/07/22 16:19	1
Chloromethane	0.41	J	1.0	0.25	ug/m3			10/07/22 16:19	1
n-Butane	9.9		1.2	0.45	ug/m3			10/07/22 16:19	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/07/22 16:19	1
1,3-Butadiene	2.6		0.44	0.084	ug/m3			10/07/22 16:19	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/07/22 16:19	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/07/22 16:19	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/07/22 16:19	1

Client Sample ID: SV-03_20221004
Date Collected: 10/04/22 11:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.4		1.1	0.29	ug/m3			10/07/22 16:19	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.42	ug/m3			10/07/22 16:19	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/07/22 16:19	1
Acetone	82		12	4.8	ug/m3			10/07/22 16:19	1
Isopropyl alcohol	24		12	2.4	ug/m3			10/07/22 16:19	1
Carbon disulfide	2.3		1.6	0.40	ug/m3			10/07/22 16:19	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/07/22 16:19	1
Methylene Chloride	1.7	U	1.7	0.59	ug/m3			10/07/22 16:19	1
tert-Butyl alcohol	36		15	3.6	ug/m3			10/07/22 16:19	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/07/22 16:19	1
trans-1,2-Dichloroethene	0.61	J	0.79	0.35	ug/m3			10/07/22 16:19	1
n-Hexane	3.3		1.8	0.81	ug/m3			10/07/22 16:19	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/07/22 16:19	1
Methyl Ethyl Ketone (2-Butanone)	1.5	U	1.5	0.50	ug/m3			10/07/22 16:19	1
cis-1,2-Dichloroethene	96		0.20	0.13	ug/m3			10/07/22 16:19	1
Chloroform	9.5		0.98	0.22	ug/m3			10/07/22 16:19	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/07/22 16:19	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/07/22 16:19	1
Cyclohexane	0.65	J	0.69	0.12	ug/m3			10/07/22 16:19	1
Carbon tetrachloride	0.26		0.22	0.20	ug/m3			10/07/22 16:19	1
2,2,4-Trimethylpentane	3.3		0.93	0.16	ug/m3			10/07/22 16:19	1
Benzene	2.2		0.64	0.24	ug/m3			10/07/22 16:19	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/07/22 16:19	1
n-Heptane	2.5		0.82	0.24	ug/m3			10/07/22 16:19	1
Trichloroethene	45		0.20	0.13	ug/m3			10/07/22 16:19	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/07/22 16:19	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/07/22 16:19	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/07/22 16:19	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/07/22 16:19	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/07/22 16:19	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.3	J	2.0	0.78	ug/m3			10/07/22 16:19	1
Toluene	6.1		0.75	0.35	ug/m3			10/07/22 16:19	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/07/22 16:19	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/07/22 16:19	1
Tetrachloroethene	130		1.4	0.18	ug/m3			10/07/22 16:19	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/07/22 16:19	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/07/22 16:19	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/07/22 16:19	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/07/22 16:19	1
Ethylbenzene	2.2		0.87	0.43	ug/m3			10/07/22 16:19	1
m,p-Xylene	8.5		2.2	0.74	ug/m3			10/07/22 16:19	1
o-Xylene	2.4		0.87	0.41	ug/m3			10/07/22 16:19	1
Styrene	0.85	U	0.85	0.14	ug/m3			10/07/22 16:19	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/07/22 16:19	1
Cumene	0.98	U	0.98	0.18	ug/m3			10/07/22 16:19	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/07/22 16:19	1
n-Propylbenzene	0.27	J	0.98	0.23	ug/m3			10/07/22 16:19	1
4-Ethyltoluene	0.39	J	0.98	0.25	ug/m3			10/07/22 16:19	1

Client Sample ID: SV-03_20221004
Date Collected: 10/04/22 11:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-2
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	0.39	J	0.98	0.22	ug/m3			10/07/22 16:19	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/07/22 16:19	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/07/22 16:19	1
1,2,4-Trimethylbenzene	1.6		0.98	0.23	ug/m3			10/07/22 16:19	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/07/22 16:19	1
4-Isopropyltoluene	1.9		1.1	0.21	ug/m3			10/07/22 16:19	1
1,3-Dichlorobenzene	1.5		1.2	0.54	ug/m3			10/07/22 16:19	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/07/22 16:19	1
Benzyl chloride	1.0	U *+	1.0	0.38	ug/m3			10/07/22 16:19	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/07/22 16:19	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/07/22 16:19	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/07/22 16:19	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/07/22 16:19	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/07/22 16:19	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.46	J	0.50	0.11	ppb v/v			10/07/22 16:19	1
Chlorodifluoromethane	2.3		0.50	0.11	ppb v/v			10/07/22 16:19	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 16:19	1
Chloromethane	0.20	J	0.50	0.12	ppb v/v			10/07/22 16:19	1
n-Butane	4.2		0.50	0.19	ppb v/v			10/07/22 16:19	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/07/22 16:19	1
1,3-Butadiene	1.2		0.20	0.038	ppb v/v			10/07/22 16:19	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 16:19	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/07/22 16:19	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/07/22 16:19	1
Trichlorofluoromethane	0.25		0.20	0.052	ppb v/v			10/07/22 16:19	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 16:19	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/07/22 16:19	1
Acetone	34		5.0	2.0	ppb v/v			10/07/22 16:19	1
Isopropyl alcohol	9.6		5.0	0.98	ppb v/v			10/07/22 16:19	1
Carbon disulfide	0.75		0.50	0.13	ppb v/v			10/07/22 16:19	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/07/22 16:19	1
Methylene Chloride	0.50	U	0.50	0.17	ppb v/v			10/07/22 16:19	1
tert-Butyl alcohol	12		5.0	1.2	ppb v/v			10/07/22 16:19	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/07/22 16:19	1
trans-1,2-Dichloroethene	0.15	J	0.20	0.088	ppb v/v			10/07/22 16:19	1
n-Hexane	0.93		0.50	0.23	ppb v/v			10/07/22 16:19	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/07/22 16:19	1
Methyl Ethyl Ketone (2-Butanone)	0.50	U	0.50	0.17	ppb v/v			10/07/22 16:19	1
cis-1,2-Dichloroethene	24		0.050	0.033	ppb v/v			10/07/22 16:19	1
Chloroform	2.0		0.20	0.046	ppb v/v			10/07/22 16:19	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/07/22 16:19	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/07/22 16:19	1
Cyclohexane	0.19	J	0.20	0.035	ppb v/v			10/07/22 16:19	1
Carbon tetrachloride	0.042		0.035	0.032	ppb v/v			10/07/22 16:19	1
2,2,4-Trimethylpentane	0.71		0.20	0.035	ppb v/v			10/07/22 16:19	1
Benzene	0.69		0.20	0.074	ppb v/v			10/07/22 16:19	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/07/22 16:19	1

Client Sample ID: SV-03_20221004

Lab Sample ID: 200-65197-2

Date Collected: 10/04/22 11:00
Matrix: Air
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	0.61		0.20	0.059	ppb v/v			10/07/22 16:19	1
Trichloroethene	8.4		0.037	0.024	ppb v/v			10/07/22 16:19	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/07/22 16:19	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/07/22 16:19	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/07/22 16:19	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/07/22 16:19	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/07/22 16:19	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.31	J	0.50	0.19	ppb v/v			10/07/22 16:19	1
Toluene	1.6		0.20	0.093	ppb v/v			10/07/22 16:19	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/07/22 16:19	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/07/22 16:19	1
Tetrachloroethene	19		0.20	0.027	ppb v/v			10/07/22 16:19	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/07/22 16:19	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/07/22 16:19	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/07/22 16:19	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/07/22 16:19	1
Ethylbenzene	0.51		0.20	0.10	ppb v/v			10/07/22 16:19	1
m,p-Xylene	1.9		0.50	0.17	ppb v/v			10/07/22 16:19	1
o-Xylene	0.56		0.20	0.094	ppb v/v			10/07/22 16:19	1
Styrene	0.20	U	0.20	0.032	ppb v/v			10/07/22 16:19	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/07/22 16:19	1
Cumene	0.20	U	0.20	0.037	ppb v/v			10/07/22 16:19	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/07/22 16:19	1
n-Propylbenzene	0.054	J	0.20	0.047	ppb v/v			10/07/22 16:19	1
4-Ethyltoluene	0.080	J	0.20	0.051	ppb v/v			10/07/22 16:19	1
1,3,5-Trimethylbenzene	0.078	J	0.20	0.044	ppb v/v			10/07/22 16:19	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/07/22 16:19	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/07/22 16:19	1
1,2,4-Trimethylbenzene	0.32		0.20	0.047	ppb v/v			10/07/22 16:19	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/07/22 16:19	1
4-Isopropyltoluene	0.35		0.20	0.039	ppb v/v			10/07/22 16:19	1
1,3-Dichlorobenzene	0.25		0.20	0.089	ppb v/v			10/07/22 16:19	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/07/22 16:19	1
Benzyl chloride	0.20	U *+	0.20	0.074	ppb v/v			10/07/22 16:19	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/07/22 16:19	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/07/22 16:19	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/07/22 16:19	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/07/22 16:19	1
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/07/22 16:19	1

Client Sample ID: SV-05_20221004

Lab Sample ID: 200-65197-3

Date Collected: 10/04/22 14:00
Matrix: Air
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.3	J	2.5	0.54	ug/m3			10/07/22 17:11	1

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodifluoromethane	2.2		1.8	0.39	ug/m3			10/07/22 17:11	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/07/22 17:11	1
Chloromethane	0.27	J	1.0	0.25	ug/m3			10/07/22 17:11	1
n-Butane	25		1.2	0.45	ug/m3			10/07/22 17:11	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/07/22 17:11	1
1,3-Butadiene	6.6		0.44	0.084	ug/m3			10/07/22 17:11	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/07/22 17:11	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/07/22 17:11	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/07/22 17:11	1
Trichlorofluoromethane	3.3		1.1	0.29	ug/m3			10/07/22 17:11	1
1,1,2-Trichlorotrifluoroethane	0.56	J	1.5	0.42	ug/m3			10/07/22 17:11	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/07/22 17:11	1
Acetone	87		12	4.8	ug/m3			10/07/22 17:11	1
Isopropyl alcohol	11	J	12	2.4	ug/m3			10/07/22 17:11	1
Carbon disulfide	5.4		1.6	0.40	ug/m3			10/07/22 17:11	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/07/22 17:11	1
Methylene Chloride	1.7	U	1.7	0.59	ug/m3			10/07/22 17:11	1
tert-Butyl alcohol	28		15	3.6	ug/m3			10/07/22 17:11	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/07/22 17:11	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.35	ug/m3			10/07/22 17:11	1
n-Hexane	7.0		1.8	0.81	ug/m3			10/07/22 17:11	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/07/22 17:11	1
Methyl Ethyl Ketone (2-Butanone)	11		1.5	0.50	ug/m3			10/07/22 17:11	1
cis-1,2-Dichloroethene	45		0.20	0.13	ug/m3			10/07/22 17:11	1
Chloroform	27		0.98	0.22	ug/m3			10/07/22 17:11	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/07/22 17:11	1
1,1,1-Trichloroethane	0.33	J	1.1	0.21	ug/m3			10/07/22 17:11	1
Cyclohexane	2.0		0.69	0.12	ug/m3			10/07/22 17:11	1
Carbon tetrachloride	0.28		0.22	0.20	ug/m3			10/07/22 17:11	1
2,2,4-Trimethylpentane	3.5		0.93	0.16	ug/m3			10/07/22 17:11	1
Benzene	3.9		0.64	0.24	ug/m3			10/07/22 17:11	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/07/22 17:11	1
n-Heptane	5.8		0.82	0.24	ug/m3			10/07/22 17:11	1
Trichloroethene	25		0.20	0.13	ug/m3			10/07/22 17:11	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/07/22 17:11	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/07/22 17:11	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/07/22 17:11	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/07/22 17:11	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/07/22 17:11	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.7	J	2.0	0.78	ug/m3			10/07/22 17:11	1
Toluene	5.8		0.75	0.35	ug/m3			10/07/22 17:11	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/07/22 17:11	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/07/22 17:11	1
Tetrachloroethene	380	E	1.4	0.18	ug/m3			10/07/22 17:11	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/07/22 17:11	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/07/22 17:11	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/07/22 17:11	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/07/22 17:11	1

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	2.9		0.87	0.43	ug/m3			10/07/22 17:11	1
m,p-Xylene	9.0		2.2	0.74	ug/m3			10/07/22 17:11	1
o-Xylene	2.6		0.87	0.41	ug/m3			10/07/22 17:11	1
Styrene	0.85	U	0.85	0.14	ug/m3			10/07/22 17:11	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/07/22 17:11	1
Cumene	0.39	J	0.98	0.18	ug/m3			10/07/22 17:11	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/07/22 17:11	1
n-Propylbenzene	0.28	J	0.98	0.23	ug/m3			10/07/22 17:11	1
4-Ethyltoluene	0.39	J	0.98	0.25	ug/m3			10/07/22 17:11	1
1,3,5-Trimethylbenzene	0.38	J	0.98	0.22	ug/m3			10/07/22 17:11	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/07/22 17:11	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/07/22 17:11	1
1,2,4-Trimethylbenzene	1.5		0.98	0.23	ug/m3			10/07/22 17:11	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/07/22 17:11	1
4-Isopropyltoluene	3.6		1.1	0.21	ug/m3			10/07/22 17:11	1
1,3-Dichlorobenzene	2.6		1.2	0.54	ug/m3			10/07/22 17:11	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/07/22 17:11	1
Benzyl chloride	1.0	U *+	1.0	0.38	ug/m3			10/07/22 17:11	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/07/22 17:11	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/07/22 17:11	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/07/22 17:11	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/07/22 17:11	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/07/22 17:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.47	J	0.50	0.11	ppb v/v			10/07/22 17:11	1
Chlorodifluoromethane	0.62		0.50	0.11	ppb v/v			10/07/22 17:11	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 17:11	1
Chloromethane	0.13	J	0.50	0.12	ppb v/v			10/07/22 17:11	1
n-Butane	11		0.50	0.19	ppb v/v			10/07/22 17:11	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/07/22 17:11	1
1,3-Butadiene	3.0		0.20	0.038	ppb v/v			10/07/22 17:11	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 17:11	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/07/22 17:11	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/07/22 17:11	1
Trichlorofluoromethane	0.60		0.20	0.052	ppb v/v			10/07/22 17:11	1
1,1,2-Trichlorotrifluoroethane	0.074	J	0.20	0.055	ppb v/v			10/07/22 17:11	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/07/22 17:11	1
Acetone	36		5.0	2.0	ppb v/v			10/07/22 17:11	1
Isopropyl alcohol	4.3	J	5.0	0.98	ppb v/v			10/07/22 17:11	1
Carbon disulfide	1.7		0.50	0.13	ppb v/v			10/07/22 17:11	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/07/22 17:11	1
Methylene Chloride	0.50	U	0.50	0.17	ppb v/v			10/07/22 17:11	1
tert-Butyl alcohol	9.4		5.0	1.2	ppb v/v			10/07/22 17:11	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/07/22 17:11	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.088	ppb v/v			10/07/22 17:11	1
n-Hexane	2.0		0.50	0.23	ppb v/v			10/07/22 17:11	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/07/22 17:11	1
Methyl Ethyl Ketone (2-Butanone)	3.9		0.50	0.17	ppb v/v			10/07/22 17:11	1

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	11		0.050	0.033	ppb v/v			10/07/22 17:11	1
Chloroform	5.5		0.20	0.046	ppb v/v			10/07/22 17:11	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/07/22 17:11	1
1,1,1-Trichloroethane	0.061	J	0.20	0.039	ppb v/v			10/07/22 17:11	1
Cyclohexane	0.59		0.20	0.035	ppb v/v			10/07/22 17:11	1
Carbon tetrachloride	0.044		0.035	0.032	ppb v/v			10/07/22 17:11	1
2,2,4-Trimethylpentane	0.75		0.20	0.035	ppb v/v			10/07/22 17:11	1
Benzene	1.2		0.20	0.074	ppb v/v			10/07/22 17:11	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/07/22 17:11	1
n-Heptane	1.4		0.20	0.059	ppb v/v			10/07/22 17:11	1
Trichloroethene	4.7		0.037	0.024	ppb v/v			10/07/22 17:11	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/07/22 17:11	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/07/22 17:11	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/07/22 17:11	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/07/22 17:11	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/07/22 17:11	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.41	J	0.50	0.19	ppb v/v			10/07/22 17:11	1
Toluene	1.5		0.20	0.093	ppb v/v			10/07/22 17:11	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/07/22 17:11	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/07/22 17:11	1
Tetrachloroethene	57	E	0.20	0.027	ppb v/v			10/07/22 17:11	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/07/22 17:11	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/07/22 17:11	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/07/22 17:11	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/07/22 17:11	1
Ethylbenzene	0.66		0.20	0.10	ppb v/v			10/07/22 17:11	1
m,p-Xylene	2.1		0.50	0.17	ppb v/v			10/07/22 17:11	1
o-Xylene	0.60		0.20	0.094	ppb v/v			10/07/22 17:11	1
Styrene	0.20	U	0.20	0.032	ppb v/v			10/07/22 17:11	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/07/22 17:11	1
Cumene	0.080	J	0.20	0.037	ppb v/v			10/07/22 17:11	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/07/22 17:11	1
n-Propylbenzene	0.056	J	0.20	0.047	ppb v/v			10/07/22 17:11	1
4-Ethyltoluene	0.080	J	0.20	0.051	ppb v/v			10/07/22 17:11	1
1,3,5-Trimethylbenzene	0.078	J	0.20	0.044	ppb v/v			10/07/22 17:11	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/07/22 17:11	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/07/22 17:11	1
1,2,4-Trimethylbenzene	0.31		0.20	0.047	ppb v/v			10/07/22 17:11	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/07/22 17:11	1
4-Isopropyltoluene	0.65		0.20	0.039	ppb v/v			10/07/22 17:11	1
1,3-Dichlorobenzene	0.44		0.20	0.089	ppb v/v			10/07/22 17:11	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/07/22 17:11	1
Benzyl chloride	0.20	U *+	0.20	0.074	ppb v/v			10/07/22 17:11	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/07/22 17:11	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/07/22 17:11	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/07/22 17:11	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/07/22 17:11	1
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/07/22 17:11	1

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.4	J D	4.9	1.1	ug/m3			10/07/22 18:03	2
Chlorodifluoromethane	2.3	J D	3.5	0.78	ug/m3			10/07/22 18:03	2
1,2-Dichlorotetrafluoroethane	2.8	U	2.8	0.77	ug/m3			10/07/22 18:03	2
Chloromethane	2.1	U	2.1	0.50	ug/m3			10/07/22 18:03	2
n-Butane	26	D	2.4	0.90	ug/m3			10/07/22 18:03	2
Vinyl chloride	0.40	U	0.40	0.14	ug/m3			10/07/22 18:03	2
1,3-Butadiene	7.0	D	0.88	0.17	ug/m3			10/07/22 18:03	2
Bromomethane	1.6	U	1.6	0.40	ug/m3			10/07/22 18:03	2
Chloroethane	2.6	U	2.6	1.3	ug/m3			10/07/22 18:03	2
Bromoethene(Vinyl Bromide)	1.7	U	1.7	0.74	ug/m3			10/07/22 18:03	2
Trichlorofluoromethane	3.4	D	2.2	0.58	ug/m3			10/07/22 18:03	2
1,1,2-Trichlorotrifluoroethane	3.1	U	3.1	0.84	ug/m3			10/07/22 18:03	2
1,1-Dichloroethene	0.40	U	0.40	0.23	ug/m3			10/07/22 18:03	2
Acetone	87	D	24	9.5	ug/m3			10/07/22 18:03	2
Isopropyl alcohol	10	J D	25	4.8	ug/m3			10/07/22 18:03	2
Carbon disulfide	5.4	D	3.1	0.81	ug/m3			10/07/22 18:03	2
3-Chloropropene	3.1	U	3.1	0.69	ug/m3			10/07/22 18:03	2
Methylene Chloride	3.5	U	3.5	1.2	ug/m3			10/07/22 18:03	2
tert-Butyl alcohol	28	J D	30	7.3	ug/m3			10/07/22 18:03	2
Methyl tert-butyl ether	1.4	U	1.4	0.58	ug/m3			10/07/22 18:03	2
trans-1,2-Dichloroethene	1.6	U	1.6	0.70	ug/m3			10/07/22 18:03	2
n-Hexane	7.0	D	3.5	1.6	ug/m3			10/07/22 18:03	2
1,1-Dichloroethane	1.6	U	1.6	0.23	ug/m3			10/07/22 18:03	2
Methyl Ethyl Ketone (2-Butanone)	11	D	2.9	1.0	ug/m3			10/07/22 18:03	2
cis-1,2-Dichloroethene	45	D	0.40	0.26	ug/m3			10/07/22 18:03	2
Chloroform	27	D	2.0	0.45	ug/m3			10/07/22 18:03	2
Tetrahydrofuran	29	U	29	7.1	ug/m3			10/07/22 18:03	2
1,1,1-Trichloroethane	2.2	U	2.2	0.43	ug/m3			10/07/22 18:03	2
Cyclohexane	2.0	D	1.4	0.24	ug/m3			10/07/22 18:03	2
Carbon tetrachloride	0.44	U	0.44	0.40	ug/m3			10/07/22 18:03	2
2,2,4-Trimethylpentane	3.5	D	1.9	0.33	ug/m3			10/07/22 18:03	2
Benzene	4.0	D	1.3	0.47	ug/m3			10/07/22 18:03	2
1,2-Dichloroethane	1.6	U	1.6	1.2	ug/m3			10/07/22 18:03	2
n-Heptane	5.7	D	1.6	0.48	ug/m3			10/07/22 18:03	2
Trichloroethene	25	D	0.40	0.26	ug/m3			10/07/22 18:03	2
Methyl methacrylate	4.1	U	4.1	1.3	ug/m3			10/07/22 18:03	2
1,2-Dichloropropane	1.8	U	1.8	0.80	ug/m3			10/07/22 18:03	2
1,4-Dioxane	36	U	36	12	ug/m3			10/07/22 18:03	2
Bromodichloromethane	2.7	U	2.7	0.54	ug/m3			10/07/22 18:03	2
cis-1,3-Dichloropropene	1.8	U	1.8	0.18	ug/m3			10/07/22 18:03	2
4-Methyl-2-pentanone (Methyl isobutyl ketone)	4.1	U	4.1	1.6	ug/m3			10/07/22 18:03	2
Toluene	5.8	D	1.5	0.70	ug/m3			10/07/22 18:03	2
trans-1,3-Dichloropropene	1.8	U	1.8	0.81	ug/m3			10/07/22 18:03	2
1,1,2-Trichloroethane	2.2	U	2.2	0.37	ug/m3			10/07/22 18:03	2
Tetrachloroethene	390	D	2.7	0.37	ug/m3			10/07/22 18:03	2
Methyl Butyl Ketone (2-Hexanone)	4.1	U	4.1	1.6	ug/m3			10/07/22 18:03	2
Dibromochloromethane	3.4	U	3.4	0.53	ug/m3			10/07/22 18:03	2
1,2-Dibromoethane	3.1	U	3.1	0.71	ug/m3			10/07/22 18:03	2

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1.8	U	1.8	0.40	ug/m3			10/07/22 18:03	2
Ethylbenzene	**2.8**	**D**	1.7	0.87	ug/m3			10/07/22 18:03	2
m,p-Xylene	**8.6**	**D**	4.3	1.5	ug/m3			10/07/22 18:03	2
o-Xylene	**2.6**	**D**	1.7	0.82	ug/m3			10/07/22 18:03	2
Styrene	1.7	U	1.7	0.27	ug/m3			10/07/22 18:03	2
Bromoform	4.1	U	4.1	1.2	ug/m3			10/07/22 18:03	2
Cumene	2.0	U	2.0	0.36	ug/m3			10/07/22 18:03	2
1,1,2,2-Tetrachloroethane	2.7	U	2.7	0.59	ug/m3			10/07/22 18:03	2
n-Propylbenzene	2.0	U	2.0	0.46	ug/m3			10/07/22 18:03	2
4-Ethyltoluene	2.0	U	2.0	0.50	ug/m3			10/07/22 18:03	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.43	ug/m3			10/07/22 18:03	2
2-Chlorotoluene	2.1	U	2.1	0.50	ug/m3			10/07/22 18:03	2
tert-Butylbenzene	2.2	U	2.2	0.41	ug/m3			10/07/22 18:03	2
1,2,4-Trimethylbenzene	**1.4**	**J D**	2.0	0.46	ug/m3			10/07/22 18:03	2
sec-Butylbenzene	2.2	U	2.2	0.43	ug/m3			10/07/22 18:03	2
4-Isopropyltoluene	**3.5**	**D**	2.2	0.43	ug/m3			10/07/22 18:03	2
1,3-Dichlorobenzene	**2.6**	**D**	2.4	1.1	ug/m3			10/07/22 18:03	2
1,4-Dichlorobenzene	2.4	U	2.4	1.1	ug/m3			10/07/22 18:03	2
Benzyl chloride	2.1	U *+	2.1	0.77	ug/m3			10/07/22 18:03	2
n-Butylbenzene	2.2	U	2.2	0.60	ug/m3			10/07/22 18:03	2
1,2-Dichlorobenzene	2.4	U	2.4	0.84	ug/m3			10/07/22 18:03	2
1,2,4-Trichlorobenzene	7.4	U	7.4	2.8	ug/m3			10/07/22 18:03	2
Hexachlorobutadiene	4.3	U	4.3	0.66	ug/m3			10/07/22 18:03	2
Naphthalene	5.2	U	5.2	1.8	ug/m3			10/07/22 18:03	2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**0.49**	**J D**	1.0	0.22	ppb v/v			10/07/22 18:03	2
Chlorodifluoromethane	**0.65**	**J D**	1.0	0.22	ppb v/v			10/07/22 18:03	2
1,2-Dichlorotetrafluoroethane	0.40	U	0.40	0.11	ppb v/v			10/07/22 18:03	2
Chloromethane	1.0	U	1.0	0.24	ppb v/v			10/07/22 18:03	2
n-Butane	**11**	**D**	1.0	0.38	ppb v/v			10/07/22 18:03	2
Vinyl chloride	0.16	U	0.16	0.056	ppb v/v			10/07/22 18:03	2
1,3-Butadiene	**3.1**	**D**	0.40	0.076	ppb v/v			10/07/22 18:03	2
Bromomethane	0.40	U	0.40	0.10	ppb v/v			10/07/22 18:03	2
Chloroethane	1.0	U	1.0	0.50	ppb v/v			10/07/22 18:03	2
Bromoethene(Vinyl Bromide)	0.40	U	0.40	0.17	ppb v/v			10/07/22 18:03	2
Trichlorofluoromethane	**0.61**	**D**	0.40	0.10	ppb v/v			10/07/22 18:03	2
1,1,2-Trichlorotrifluoroethane	0.40	U	0.40	0.11	ppb v/v			10/07/22 18:03	2
1,1-Dichloroethene	0.10	U	0.10	0.058	ppb v/v			10/07/22 18:03	2
Acetone	**36**	**D**	10	4.0	ppb v/v			10/07/22 18:03	2
Isopropyl alcohol	**4.3**	**J D**	10	2.0	ppb v/v			10/07/22 18:03	2
Carbon disulfide	**1.7**	**D**	1.0	0.26	ppb v/v			10/07/22 18:03	2
3-Chloropropene	1.0	U	1.0	0.22	ppb v/v			10/07/22 18:03	2
Methylene Chloride	1.0	U	1.0	0.34	ppb v/v			10/07/22 18:03	2
tert-Butyl alcohol	**9.3**	**J D**	10	2.4	ppb v/v			10/07/22 18:03	2
Methyl tert-butyl ether	0.40	U	0.40	0.16	ppb v/v			10/07/22 18:03	2
trans-1,2-Dichloroethene	0.40	U	0.40	0.18	ppb v/v			10/07/22 18:03	2
n-Hexane	**2.0**	**D**	1.0	0.46	ppb v/v			10/07/22 18:03	2
1,1-Dichloroethane	0.40	U	0.40	0.058	ppb v/v			10/07/22 18:03	2

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	3.8	D	1.0	0.34	ppb v/v			10/07/22 18:03	2
cis-1,2-Dichloroethene	11	D	0.10	0.066	ppb v/v			10/07/22 18:03	2
Chloroform	5.5	D	0.40	0.092	ppb v/v			10/07/22 18:03	2
Tetrahydrofuran	10	U	10	2.4	ppb v/v			10/07/22 18:03	2
1,1,1-Trichloroethane	0.40	U	0.40	0.078	ppb v/v			10/07/22 18:03	2
Cyclohexane	0.59	D	0.40	0.070	ppb v/v			10/07/22 18:03	2
Carbon tetrachloride	0.070	U	0.070	0.064	ppb v/v			10/07/22 18:03	2
2,2,4-Trimethylpentane	0.74	D	0.40	0.070	ppb v/v			10/07/22 18:03	2
Benzene	1.2	D	0.40	0.15	ppb v/v			10/07/22 18:03	2
1,2-Dichloroethane	0.40	U	0.40	0.30	ppb v/v			10/07/22 18:03	2
n-Heptane	1.4	D	0.40	0.12	ppb v/v			10/07/22 18:03	2
Trichloroethene	4.7	D	0.074	0.048	ppb v/v			10/07/22 18:03	2
Methyl methacrylate	1.0	U	1.0	0.32	ppb v/v			10/07/22 18:03	2
1,2-Dichloropropane	0.40	U	0.40	0.17	ppb v/v			10/07/22 18:03	2
1,4-Dioxane	10	U	10	3.4	ppb v/v			10/07/22 18:03	2
Bromodichloromethane	0.40	U	0.40	0.080	ppb v/v			10/07/22 18:03	2
cis-1,3-Dichloropropene	0.40	U	0.40	0.040	ppb v/v			10/07/22 18:03	2
4-Methyl-2-pentanone (Methyl isobutyl ketone)	1.0	U	1.0	0.38	ppb v/v			10/07/22 18:03	2
Toluene	1.5	D	0.40	0.19	ppb v/v			10/07/22 18:03	2
trans-1,3-Dichloropropene	0.40	U	0.40	0.18	ppb v/v			10/07/22 18:03	2
1,1,2-Trichloroethane	0.40	U	0.40	0.068	ppb v/v			10/07/22 18:03	2
Tetrachloroethene	58	D	0.40	0.054	ppb v/v			10/07/22 18:03	2
Methyl Butyl Ketone (2-Hexanone)	1.0	U	1.0	0.40	ppb v/v			10/07/22 18:03	2
Dibromochloromethane	0.40	U	0.40	0.062	ppb v/v			10/07/22 18:03	2
1,2-Dibromoethane	0.40	U	0.40	0.092	ppb v/v			10/07/22 18:03	2
Chlorobenzene	0.40	U	0.40	0.086	ppb v/v			10/07/22 18:03	2
Ethylbenzene	0.65	D	0.40	0.20	ppb v/v			10/07/22 18:03	2
m,p-Xylene	2.0	D	1.0	0.34	ppb v/v			10/07/22 18:03	2
o-Xylene	0.59	D	0.40	0.19	ppb v/v			10/07/22 18:03	2
Styrene	0.40	U	0.40	0.064	ppb v/v			10/07/22 18:03	2
Bromoform	0.40	U	0.40	0.12	ppb v/v			10/07/22 18:03	2
Cumene	0.40	U	0.40	0.074	ppb v/v			10/07/22 18:03	2
1,1,2,2-Tetrachloroethane	0.40	U	0.40	0.086	ppb v/v			10/07/22 18:03	2
n-Propylbenzene	0.40	U	0.40	0.094	ppb v/v			10/07/22 18:03	2
4-Ethyltoluene	0.40	U	0.40	0.10	ppb v/v			10/07/22 18:03	2
1,3,5-Trimethylbenzene	0.40	U	0.40	0.088	ppb v/v			10/07/22 18:03	2
2-Chlorotoluene	0.40	U	0.40	0.096	ppb v/v			10/07/22 18:03	2
tert-Butylbenzene	0.40	U	0.40	0.074	ppb v/v			10/07/22 18:03	2
1,2,4-Trimethylbenzene	0.29	J D	0.40	0.094	ppb v/v			10/07/22 18:03	2
sec-Butylbenzene	0.40	U	0.40	0.078	ppb v/v			10/07/22 18:03	2
4-Isopropyltoluene	0.64	D	0.40	0.078	ppb v/v			10/07/22 18:03	2
1,3-Dichlorobenzene	0.44	D	0.40	0.18	ppb v/v			10/07/22 18:03	2
1,4-Dichlorobenzene	0.40	U	0.40	0.19	ppb v/v			10/07/22 18:03	2
Benzyl chloride	0.40	U *+	0.40	0.15	ppb v/v			10/07/22 18:03	2
n-Butylbenzene	0.40	U	0.40	0.11	ppb v/v			10/07/22 18:03	2
1,2-Dichlorobenzene	0.40	U	0.40	0.14	ppb v/v			10/07/22 18:03	2
1,2,4-Trichlorobenzene	1.0	U	1.0	0.38	ppb v/v			10/07/22 18:03	2
Hexachlorobutadiene	0.40	U	0.40	0.062	ppb v/v			10/07/22 18:03	2

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Client Sample ID: SV-05_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/05/22 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-65197-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	1.0	U	1.0	0.34	ppb v/v			10/07/22 18:03	2

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-184353/4
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.54	ug/m3			10/06/22 10:05	1
Chlorodifluoromethane	1.8	U	1.8	0.39	ug/m3			10/06/22 10:05	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/06/22 10:05	1
Chloromethane	1.0	U	1.0	0.25	ug/m3			10/06/22 10:05	1
n-Butane	1.2	U	1.2	0.45	ug/m3			10/06/22 10:05	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/06/22 10:05	1
1,3-Butadiene	0.44	U	0.44	0.084	ug/m3			10/06/22 10:05	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/06/22 10:05	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/06/22 10:05	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/06/22 10:05	1
Trichlorofluoromethane	1.1	U	1.1	0.29	ug/m3			10/06/22 10:05	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.42	ug/m3			10/06/22 10:05	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/06/22 10:05	1
Acetone	12	U	12	4.8	ug/m3			10/06/22 10:05	1
Isopropyl alcohol	12	U	12	2.4	ug/m3			10/06/22 10:05	1
Carbon disulfide	1.6	U	1.6	0.40	ug/m3			10/06/22 10:05	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/06/22 10:05	1
Methylene Chloride	1.7	U	1.7	0.59	ug/m3			10/06/22 10:05	1
tert-Butyl alcohol	15	U	15	3.6	ug/m3			10/06/22 10:05	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/06/22 10:05	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.35	ug/m3			10/06/22 10:05	1
n-Hexane	1.8	U	1.8	0.81	ug/m3			10/06/22 10:05	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/06/22 10:05	1
Methyl Ethyl Ketone (2-Butanone)	1.5	U	1.5	0.50	ug/m3			10/06/22 10:05	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.13	ug/m3			10/06/22 10:05	1
Chloroform	0.98	U	0.98	0.22	ug/m3			10/06/22 10:05	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/06/22 10:05	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/06/22 10:05	1
Cyclohexane	0.69	U	0.69	0.12	ug/m3			10/06/22 10:05	1
Carbon tetrachloride	0.22	U	0.22	0.20	ug/m3			10/06/22 10:05	1
2,2,4-Trimethylpentane	0.93	U	0.93	0.16	ug/m3			10/06/22 10:05	1
Benzene	0.64	U	0.64	0.24	ug/m3			10/06/22 10:05	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/06/22 10:05	1
n-Heptane	0.82	U	0.82	0.24	ug/m3			10/06/22 10:05	1
Trichloroethene	0.20	U	0.20	0.13	ug/m3			10/06/22 10:05	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/06/22 10:05	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/06/22 10:05	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/06/22 10:05	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/06/22 10:05	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/06/22 10:05	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.78	ug/m3			10/06/22 10:05	1
Toluene	0.75	U	0.75	0.35	ug/m3			10/06/22 10:05	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/06/22 10:05	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/06/22 10:05	1
Tetrachloroethene	1.4	U	1.4	0.18	ug/m3			10/06/22 10:05	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/06/22 10:05	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/06/22 10:05	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/06/22 10:05	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184353/4
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/06/22 10:05	1
Ethylbenzene	0.87	U	0.87	0.43	ug/m3			10/06/22 10:05	1
m,p-Xylene	2.2	U	2.2	0.74	ug/m3			10/06/22 10:05	1
o-Xylene	0.87	U	0.87	0.41	ug/m3			10/06/22 10:05	1
Styrene	0.85	U	0.85	0.14	ug/m3			10/06/22 10:05	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/06/22 10:05	1
Cumene	0.98	U	0.98	0.18	ug/m3			10/06/22 10:05	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/06/22 10:05	1
n-Propylbenzene	0.98	U	0.98	0.23	ug/m3			10/06/22 10:05	1
4-Ethyltoluene	0.98	U	0.98	0.25	ug/m3			10/06/22 10:05	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.22	ug/m3			10/06/22 10:05	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/06/22 10:05	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/06/22 10:05	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.23	ug/m3			10/06/22 10:05	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/06/22 10:05	1
4-Isopropyltoluene	1.1	U	1.1	0.21	ug/m3			10/06/22 10:05	1
1,3-Dichlorobenzene	1.2	U	1.2	0.54	ug/m3			10/06/22 10:05	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/06/22 10:05	1
Benzyl chloride	1.0	U	1.0	0.38	ug/m3			10/06/22 10:05	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/06/22 10:05	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/06/22 10:05	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/06/22 10:05	1
Hexachlorobutadiene	0.368	J	2.1	0.33	ug/m3			10/06/22 10:05	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/06/22 10:05	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.11	ppb v/v			10/06/22 10:05	1
Chlorodifluoromethane	0.50	U	0.50	0.11	ppb v/v			10/06/22 10:05	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/06/22 10:05	1
Chloromethane	0.50	U	0.50	0.12	ppb v/v			10/06/22 10:05	1
n-Butane	0.50	U	0.50	0.19	ppb v/v			10/06/22 10:05	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/06/22 10:05	1
1,3-Butadiene	0.20	U	0.20	0.038	ppb v/v			10/06/22 10:05	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/06/22 10:05	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/06/22 10:05	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/06/22 10:05	1
Trichlorofluoromethane	0.20	U	0.20	0.052	ppb v/v			10/06/22 10:05	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.055	ppb v/v			10/06/22 10:05	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/06/22 10:05	1
Acetone	5.0	U	5.0	2.0	ppb v/v			10/06/22 10:05	1
Isopropyl alcohol	5.0	U	5.0	0.98	ppb v/v			10/06/22 10:05	1
Carbon disulfide	0.50	U	0.50	0.13	ppb v/v			10/06/22 10:05	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/06/22 10:05	1
Methylene Chloride	0.50	U	0.50	0.17	ppb v/v			10/06/22 10:05	1
tert-Butyl alcohol	5.0	U	5.0	1.2	ppb v/v			10/06/22 10:05	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/06/22 10:05	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.088	ppb v/v			10/06/22 10:05	1
n-Hexane	0.50	U	0.50	0.23	ppb v/v			10/06/22 10:05	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/06/22 10:05	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184353/4
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	0.50	U	0.50	0.17	ppb v/v			10/06/22 10:05	1
cis-1,2-Dichloroethene	0.050	U	0.050	0.033	ppb v/v			10/06/22 10:05	1
Chloroform	0.20	U	0.20	0.046	ppb v/v			10/06/22 10:05	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/06/22 10:05	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/06/22 10:05	1
Cyclohexane	0.20	U	0.20	0.035	ppb v/v			10/06/22 10:05	1
Carbon tetrachloride	0.035	U	0.035	0.032	ppb v/v			10/06/22 10:05	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.035	ppb v/v			10/06/22 10:05	1
Benzene	0.20	U	0.20	0.074	ppb v/v			10/06/22 10:05	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/06/22 10:05	1
n-Heptane	0.20	U	0.20	0.059	ppb v/v			10/06/22 10:05	1
Trichloroethene	0.037	U	0.037	0.024	ppb v/v			10/06/22 10:05	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/06/22 10:05	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/06/22 10:05	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/06/22 10:05	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/06/22 10:05	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/06/22 10:05	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.19	ppb v/v			10/06/22 10:05	1
Toluene	0.20	U	0.20	0.093	ppb v/v			10/06/22 10:05	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/06/22 10:05	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/06/22 10:05	1
Tetrachloroethene	0.20	U	0.20	0.027	ppb v/v			10/06/22 10:05	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/06/22 10:05	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/06/22 10:05	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/06/22 10:05	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/06/22 10:05	1
Ethylbenzene	0.20	U	0.20	0.10	ppb v/v			10/06/22 10:05	1
m,p-Xylene	0.50	U	0.50	0.17	ppb v/v			10/06/22 10:05	1
o-Xylene	0.20	U	0.20	0.094	ppb v/v			10/06/22 10:05	1
Styrene	0.20	U	0.20	0.032	ppb v/v			10/06/22 10:05	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/06/22 10:05	1
Cumene	0.20	U	0.20	0.037	ppb v/v			10/06/22 10:05	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/06/22 10:05	1
n-Propylbenzene	0.20	U	0.20	0.047	ppb v/v			10/06/22 10:05	1
4-Ethyltoluene	0.20	U	0.20	0.051	ppb v/v			10/06/22 10:05	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.044	ppb v/v			10/06/22 10:05	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/06/22 10:05	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/06/22 10:05	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.047	ppb v/v			10/06/22 10:05	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/06/22 10:05	1
4-Isopropyltoluene	0.20	U	0.20	0.039	ppb v/v			10/06/22 10:05	1
1,3-Dichlorobenzene	0.20	U	0.20	0.089	ppb v/v			10/06/22 10:05	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/06/22 10:05	1
Benzyl chloride	0.20	U	0.20	0.074	ppb v/v			10/06/22 10:05	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/06/22 10:05	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/06/22 10:05	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/06/22 10:05	1
Hexachlorobutadiene	0.0345	J	0.20	0.031	ppb v/v			10/06/22 10:05	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184353/4
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/06/22 10:05	1

Lab Sample ID: LCS 200-184353/3
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	49.4	50.9		ug/m3		103	61 - 142
Chlorodifluoromethane	35.4	37.1		ug/m3		105	60 - 147
1,2-Dichlorotetrafluoroethane	69.9	71.0		ug/m3		102	71 - 141
Chloromethane	20.6	21.2		ug/m3		102	56 - 141
n-Butane	23.8	24.3		ug/m3		102	53 - 151
Vinyl chloride	25.6	27.0		ug/m3		106	61 - 135
1,3-Butadiene	22.1	22.9		ug/m3		104	58 - 139
Bromomethane	38.8	39.4		ug/m3		101	72 - 124
Chloroethane	26.4	27.9		ug/m3		106	68 - 130
Bromoethene(Vinyl Bromide)	43.7	45.5		ug/m3		104	75 - 125
Trichlorofluoromethane	56.2	57.0		ug/m3		102	70 - 129
1,1,2-Trichlorotrifluoroethane	76.6	75.6		ug/m3		99	70 - 121
1,1-Dichloroethene	39.6	36.3		ug/m3		92	68 - 120
Acetone	23.7	24.6		ug/m3		104	54 - 154
Isopropyl alcohol	24.6	25.3		ug/m3		103	53 - 142
Carbon disulfide	31.1	31.7		ug/m3		102	71 - 138
3-Chloropropene	31.3	30.4		ug/m3		97	50 - 150
Methylene Chloride	34.7	35.3		ug/m3		102	59 - 137
tert-Butyl alcohol	30.3	30.9		ug/m3		102	66 - 132
Methyl tert-butyl ether	36.0	34.9		ug/m3		97	70 - 127
trans-1,2-Dichloroethene	39.6	41.1		ug/m3		104	69 - 137
n-Hexane	35.2	34.3		ug/m3		97	63 - 138
1,1-Dichloroethane	40.5	43.1		ug/m3		106	66 - 130
Methyl Ethyl Ketone (2-Butanone)	29.5	28.7		ug/m3		97	72 - 124
cis-1,2-Dichloroethene	39.6	41.5		ug/m3		105	72 - 121
Chloroform	48.8	48.2		ug/m3		99	73 - 124
Tetrahydrofuran	29.5	27.7		ug/m3		94	60 - 149
1,1,1-Trichloroethane	54.6	50.0		ug/m3		92	72 - 127
Cyclohexane	34.4	31.0		ug/m3		90	76 - 124
Carbon tetrachloride	62.9	62.0		ug/m3		99	71 - 133
2,2,4-Trimethylpentane	46.7	41.8		ug/m3		89	68 - 131
Benzene	31.9	27.4		ug/m3		86	73 - 119
1,2-Dichloroethane	40.5	36.5		ug/m3		90	68 - 135
n-Heptane	41.0	34.7		ug/m3		85	60 - 142
Trichloroethene	53.7	50.0		ug/m3		93	73 - 122
Methyl methacrylate	40.9	36.7		ug/m3		90	73 - 129
1,2-Dichloropropane	46.2	39.8		ug/m3		86	69 - 128
1,4-Dioxane	36.0	31.3		ug/m3		87	66 - 129
Bromodichloromethane	67.0	62.8		ug/m3		94	75 - 127
cis-1,3-Dichloropropene	45.4	39.9		ug/m3		88	74 - 125

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184353/3
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	36.6		ug/m3		89	58 - 144
Toluene	37.7	33.5		ug/m3		89	75 - 122
trans-1,3-Dichloropropene	45.4	40.7		ug/m3		90	74 - 128
1,1,2-Trichloroethane	54.6	50.4		ug/m3		92	75 - 126
Tetrachloroethene	67.8	63.1		ug/m3		93	70 - 125
Methyl Butyl Ketone (2-Hexanone)	41.0	38.3		ug/m3		94	57 - 143
Dibromochloromethane	85.2	81.2		ug/m3		95	73 - 125
1,2-Dibromoethane	76.8	70.2		ug/m3		91	78 - 122
Chlorobenzene	46.0	41.9		ug/m3		91	76 - 119
Ethylbenzene	43.4	38.1		ug/m3		88	74 - 122
m,p-Xylene	86.8	80.2		ug/m3		92	76 - 121
o-Xylene	43.4	37.8		ug/m3		87	73 - 123
Styrene	42.6	39.0		ug/m3		92	74 - 125
Bromoform	103	97.7		ug/m3		95	53 - 149
Cumene	49.1	44.2		ug/m3		90	73 - 123
1,1,2,2-Tetrachloroethane	68.6	62.0		ug/m3		90	74 - 126
n-Propylbenzene	49.1	43.6		ug/m3		89	73 - 127
4-Ethyltoluene	49.2	43.5		ug/m3		88	75 - 129
1,3,5-Trimethylbenzene	49.2	42.3		ug/m3		86	72 - 126
2-Chlorotoluene	51.8	46.7		ug/m3		90	74 - 126
tert-Butylbenzene	54.9	46.5		ug/m3		85	71 - 125
1,2,4-Trimethylbenzene	49.2	41.2		ug/m3		84	71 - 129
sec-Butylbenzene	54.9	45.8		ug/m3		84	70 - 128
4-Isopropyltoluene	54.9	45.3		ug/m3		83	68 - 130
1,3-Dichlorobenzene	60.1	51.7		ug/m3		86	69 - 131
1,4-Dichlorobenzene	60.1	51.7		ug/m3		86	67 - 132
Benzyl chloride	51.8	46.7		ug/m3		90	60 - 136
n-Butylbenzene	54.9	43.9		ug/m3		80	65 - 137
1,2-Dichlorobenzene	60.1	50.6		ug/m3		84	68 - 129
1,2,4-Trichlorobenzene	74.2	56.0		ug/m3		75	50 - 150
Hexachlorobutadiene	107	74.8		ug/m3		70	58 - 130
Naphthalene	52.4	39.4		ug/m3		75	50 - 150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10	10.3		ppb v/v		103	61 - 142
Chlorodifluoromethane	10	10.5		ppb v/v		105	60 - 147
1,2-Dichlorotetrafluoroethane	10	10.2		ppb v/v		102	71 - 141
Chloromethane	10	10.2		ppb v/v		102	56 - 141
n-Butane	10	10.2		ppb v/v		102	53 - 151
Vinyl chloride	10	10.6		ppb v/v		106	61 - 135
1,3-Butadiene	10	10.4		ppb v/v		104	58 - 139
Bromomethane	10	10.1		ppb v/v		101	72 - 124
Chloroethane	10	10.6		ppb v/v		106	68 - 130
Bromoethene(Vinyl Bromide)	10	10.4		ppb v/v		104	75 - 125
Trichlorofluoromethane	10	10.2		ppb v/v		102	70 - 129
1,1,2-Trichlorotrifluoroethane	10	9.87		ppb v/v		99	70 - 121
1,1-Dichloroethene	10	9.16		ppb v/v		92	68 - 120

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184353/3
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	10	10.4		ppb v/v		104	54 - 154
Isopropyl alcohol	10	10.3		ppb v/v		103	53 - 142
Carbon disulfide	10	10.2		ppb v/v		102	71 - 138
3-Chloropropene	10	9.72		ppb v/v		97	50 - 150
Methylene Chloride	10	10.2		ppb v/v		102	59 - 137
tert-Butyl alcohol	10	10.2		ppb v/v		102	66 - 132
Methyl tert-butyl ether	10	9.69		ppb v/v		97	70 - 127
trans-1,2-Dichloroethene	10	10.4		ppb v/v		104	69 - 137
n-Hexane	10	9.73		ppb v/v		97	63 - 138
1,1-Dichloroethane	10	10.6		ppb v/v		106	66 - 130
Methyl Ethyl Ketone (2-Butanone)	10	9.73		ppb v/v		97	72 - 124
cis-1,2-Dichloroethene	10	10.5		ppb v/v		105	72 - 121
Chloroform	10	9.87		ppb v/v		99	73 - 124
Tetrahydrofuran	10	9.40		ppb v/v		94	60 - 149
1,1,1-Trichloroethane	10	9.16		ppb v/v		92	72 - 127
Cyclohexane	10	9.00		ppb v/v		90	76 - 124
Carbon tetrachloride	10	9.85		ppb v/v		99	71 - 133
2,2,4-Trimethylpentane	10	8.94		ppb v/v		89	68 - 131
Benzene	10	8.57		ppb v/v		86	73 - 119
1,2-Dichloroethane	10	9.02		ppb v/v		90	68 - 135
n-Heptane	10	8.47		ppb v/v		85	60 - 142
Trichloroethene	10	9.30		ppb v/v		93	73 - 122
Methyl methacrylate	10	8.97		ppb v/v		90	73 - 129
1,2-Dichloropropane	10	8.60		ppb v/v		86	69 - 128
1,4-Dioxane	10	8.69		ppb v/v		87	66 - 129
Bromodichloromethane	10	9.37		ppb v/v		94	75 - 127
cis-1,3-Dichloropropene	10	8.79		ppb v/v		88	74 - 125
4-Methyl-2-pentanone (Methyl isobutyl ketone)	10	8.93		ppb v/v		89	58 - 144
Toluene	10	8.89		ppb v/v		89	75 - 122
trans-1,3-Dichloropropene	10	8.97		ppb v/v		90	74 - 128
1,1,2-Trichloroethane	10	9.24		ppb v/v		92	75 - 126
Tetrachloroethene	10	9.30		ppb v/v		93	70 - 125
Methyl Butyl Ketone (2-Hexanone)	10	9.36		ppb v/v		94	57 - 143
Dibromochloromethane	10	9.53		ppb v/v		95	73 - 125
1,2-Dibromoethane	10	9.14		ppb v/v		91	78 - 122
Chlorobenzene	10	9.10		ppb v/v		91	76 - 119
Ethylbenzene	10	8.78		ppb v/v		88	74 - 122
m,p-Xylene	20	18.5		ppb v/v		92	76 - 121
o-Xylene	10	8.70		ppb v/v		87	73 - 123
Styrene	10	9.15		ppb v/v		92	74 - 125
Bromoform	10	9.45		ppb v/v		95	53 - 149
Cumene	10	9.00		ppb v/v		90	73 - 123
1,1,2,2-Tetrachloroethane	10	9.03		ppb v/v		90	74 - 126
n-Propylbenzene	10	8.87		ppb v/v		89	73 - 127
4-Ethyltoluene	10	8.84		ppb v/v		88	75 - 129
1,3,5-Trimethylbenzene	10	8.61		ppb v/v		86	72 - 126

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184353/3
Matrix: Air
Analysis Batch: 184353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	10	9.02		ppb v/v		90	74 - 126
tert-Butylbenzene	10	8.47		ppb v/v		85	71 - 125
1,2,4-Trimethylbenzene	10	8.39		ppb v/v		84	71 - 129
sec-Butylbenzene	10	8.35		ppb v/v		84	70 - 128
4-Isopropyltoluene	10	8.25		ppb v/v		83	68 - 130
1,3-Dichlorobenzene	10	8.59		ppb v/v		86	69 - 131
1,4-Dichlorobenzene	10	8.61		ppb v/v		86	67 - 132
Benzyl chloride	10	9.03		ppb v/v		90	60 - 136
n-Butylbenzene	10	7.99		ppb v/v		80	65 - 137
1,2-Dichlorobenzene	10	8.41		ppb v/v		84	68 - 129
1,2,4-Trichlorobenzene	10	7.54		ppb v/v		75	50 - 150
Hexachlorobutadiene	10	7.02		ppb v/v		70	58 - 130
Naphthalene	10	7.53		ppb v/v		75	50 - 150

Lab Sample ID: MB 200-184402/4
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	2.5	U	2.5	0.54	ug/m3			10/07/22 09:52	1
Chlorodifluoromethane	1.8	U	1.8	0.39	ug/m3			10/07/22 09:52	1
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	0.38	ug/m3			10/07/22 09:52	1
Chloromethane	1.0	U	1.0	0.25	ug/m3			10/07/22 09:52	1
n-Butane	1.2	U	1.2	0.45	ug/m3			10/07/22 09:52	1
Vinyl chloride	0.20	U	0.20	0.072	ug/m3			10/07/22 09:52	1
1,3-Butadiene	0.44	U	0.44	0.084	ug/m3			10/07/22 09:52	1
Bromomethane	0.78	U	0.78	0.20	ug/m3			10/07/22 09:52	1
Chloroethane	1.3	U	1.3	0.66	ug/m3			10/07/22 09:52	1
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.37	ug/m3			10/07/22 09:52	1
Trichlorofluoromethane	1.1	U	1.1	0.29	ug/m3			10/07/22 09:52	1
1,1,2-Trichlorotrifluoroethane	1.5	U	1.5	0.42	ug/m3			10/07/22 09:52	1
1,1-Dichloroethene	0.20	U	0.20	0.11	ug/m3			10/07/22 09:52	1
Acetone	12	U	12	4.8	ug/m3			10/07/22 09:52	1
Isopropyl alcohol	12	U	12	2.4	ug/m3			10/07/22 09:52	1
Carbon disulfide	1.6	U	1.6	0.40	ug/m3			10/07/22 09:52	1
3-Chloropropene	1.6	U	1.6	0.34	ug/m3			10/07/22 09:52	1
Methylene Chloride	1.7	U	1.7	0.59	ug/m3			10/07/22 09:52	1
tert-Butyl alcohol	15	U	15	3.6	ug/m3			10/07/22 09:52	1
Methyl tert-butyl ether	0.72	U	0.72	0.29	ug/m3			10/07/22 09:52	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.35	ug/m3			10/07/22 09:52	1
n-Hexane	1.8	U	1.8	0.81	ug/m3			10/07/22 09:52	1
1,1-Dichloroethane	0.81	U	0.81	0.12	ug/m3			10/07/22 09:52	1
Methyl Ethyl Ketone (2-Butanone)	1.5	U	1.5	0.50	ug/m3			10/07/22 09:52	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.13	ug/m3			10/07/22 09:52	1
Chloroform	0.98	U	0.98	0.22	ug/m3			10/07/22 09:52	1
Tetrahydrofuran	15	U	15	3.5	ug/m3			10/07/22 09:52	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/m3			10/07/22 09:52	1
Cyclohexane	0.69	U	0.69	0.12	ug/m3			10/07/22 09:52	1
Carbon tetrachloride	0.22	U	0.22	0.20	ug/m3			10/07/22 09:52	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184402/4
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2,4-Trimethylpentane	0.93	U	0.93	0.16	ug/m3			10/07/22 09:52	1
Benzene	0.64	U	0.64	0.24	ug/m3			10/07/22 09:52	1
1,2-Dichloroethane	0.81	U	0.81	0.61	ug/m3			10/07/22 09:52	1
n-Heptane	0.82	U	0.82	0.24	ug/m3			10/07/22 09:52	1
Trichloroethene	0.20	U	0.20	0.13	ug/m3			10/07/22 09:52	1
Methyl methacrylate	2.0	U	2.0	0.66	ug/m3			10/07/22 09:52	1
1,2-Dichloropropane	0.92	U	0.92	0.40	ug/m3			10/07/22 09:52	1
1,4-Dioxane	18	U	18	6.1	ug/m3			10/07/22 09:52	1
Bromodichloromethane	1.3	U	1.3	0.27	ug/m3			10/07/22 09:52	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.091	ug/m3			10/07/22 09:52	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	2.0	U	2.0	0.78	ug/m3			10/07/22 09:52	1
Toluene	0.75	U	0.75	0.35	ug/m3			10/07/22 09:52	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.40	ug/m3			10/07/22 09:52	1
1,1,2-Trichloroethane	1.1	U	1.1	0.19	ug/m3			10/07/22 09:52	1
Tetrachloroethene	1.4	U	1.4	0.18	ug/m3			10/07/22 09:52	1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	0.82	ug/m3			10/07/22 09:52	1
Dibromochloromethane	1.7	U	1.7	0.26	ug/m3			10/07/22 09:52	1
1,2-Dibromoethane	1.5	U	1.5	0.35	ug/m3			10/07/22 09:52	1
Chlorobenzene	0.92	U	0.92	0.20	ug/m3			10/07/22 09:52	1
Ethylbenzene	0.87	U	0.87	0.43	ug/m3			10/07/22 09:52	1
m,p-Xylene	2.2	U	2.2	0.74	ug/m3			10/07/22 09:52	1
o-Xylene	0.87	U	0.87	0.41	ug/m3			10/07/22 09:52	1
Styrene	0.85	U	0.85	0.14	ug/m3			10/07/22 09:52	1
Bromoform	2.1	U	2.1	0.60	ug/m3			10/07/22 09:52	1
Cumene	0.98	U	0.98	0.18	ug/m3			10/07/22 09:52	1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	0.30	ug/m3			10/07/22 09:52	1
n-Propylbenzene	0.98	U	0.98	0.23	ug/m3			10/07/22 09:52	1
4-Ethyltoluene	0.98	U	0.98	0.25	ug/m3			10/07/22 09:52	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.22	ug/m3			10/07/22 09:52	1
2-Chlorotoluene	1.0	U	1.0	0.25	ug/m3			10/07/22 09:52	1
tert-Butylbenzene	1.1	U	1.1	0.20	ug/m3			10/07/22 09:52	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.23	ug/m3			10/07/22 09:52	1
sec-Butylbenzene	1.1	U	1.1	0.21	ug/m3			10/07/22 09:52	1
4-Isopropyltoluene	1.1	U	1.1	0.21	ug/m3			10/07/22 09:52	1
1,3-Dichlorobenzene	1.2	U	1.2	0.54	ug/m3			10/07/22 09:52	1
1,4-Dichlorobenzene	1.2	U	1.2	0.57	ug/m3			10/07/22 09:52	1
Benzyl chloride	1.0	U	1.0	0.38	ug/m3			10/07/22 09:52	1
n-Butylbenzene	1.1	U	1.1	0.30	ug/m3			10/07/22 09:52	1
1,2-Dichlorobenzene	1.2	U	1.2	0.42	ug/m3			10/07/22 09:52	1
1,2,4-Trichlorobenzene	3.7	U	3.7	1.4	ug/m3			10/07/22 09:52	1
Hexachlorobutadiene	2.1	U	2.1	0.33	ug/m3			10/07/22 09:52	1
Naphthalene	2.6	U	2.6	0.89	ug/m3			10/07/22 09:52	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.50	U	0.50	0.11	ppb v/v			10/07/22 09:52	1
Chlorodifluoromethane	0.50	U	0.50	0.11	ppb v/v			10/07/22 09:52	1
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 09:52	1
Chloromethane	0.50	U	0.50	0.12	ppb v/v			10/07/22 09:52	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184402/4
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butane	0.50	U	0.50	0.19	ppb v/v			10/07/22 09:52	1
Vinyl chloride	0.078	U	0.078	0.028	ppb v/v			10/07/22 09:52	1
1,3-Butadiene	0.20	U	0.20	0.038	ppb v/v			10/07/22 09:52	1
Bromomethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 09:52	1
Chloroethane	0.50	U	0.50	0.25	ppb v/v			10/07/22 09:52	1
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.085	ppb v/v			10/07/22 09:52	1
Trichlorofluoromethane	0.20	U	0.20	0.052	ppb v/v			10/07/22 09:52	1
1,1,2-Trichlorotrifluoroethane	0.20	U	0.20	0.055	ppb v/v			10/07/22 09:52	1
1,1-Dichloroethene	0.050	U	0.050	0.029	ppb v/v			10/07/22 09:52	1
Acetone	5.0	U	5.0	2.0	ppb v/v			10/07/22 09:52	1
Isopropyl alcohol	5.0	U	5.0	0.98	ppb v/v			10/07/22 09:52	1
Carbon disulfide	0.50	U	0.50	0.13	ppb v/v			10/07/22 09:52	1
3-Chloropropene	0.50	U	0.50	0.11	ppb v/v			10/07/22 09:52	1
Methylene Chloride	0.50	U	0.50	0.17	ppb v/v			10/07/22 09:52	1
tert-Butyl alcohol	5.0	U	5.0	1.2	ppb v/v			10/07/22 09:52	1
Methyl tert-butyl ether	0.20	U	0.20	0.080	ppb v/v			10/07/22 09:52	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.088	ppb v/v			10/07/22 09:52	1
n-Hexane	0.50	U	0.50	0.23	ppb v/v			10/07/22 09:52	1
1,1-Dichloroethane	0.20	U	0.20	0.029	ppb v/v			10/07/22 09:52	1
Methyl Ethyl Ketone (2-Butanone)	0.50	U	0.50	0.17	ppb v/v			10/07/22 09:52	1
cis-1,2-Dichloroethene	0.050	U	0.050	0.033	ppb v/v			10/07/22 09:52	1
Chloroform	0.20	U	0.20	0.046	ppb v/v			10/07/22 09:52	1
Tetrahydrofuran	5.0	U	5.0	1.2	ppb v/v			10/07/22 09:52	1
1,1,1-Trichloroethane	0.20	U	0.20	0.039	ppb v/v			10/07/22 09:52	1
Cyclohexane	0.20	U	0.20	0.035	ppb v/v			10/07/22 09:52	1
Carbon tetrachloride	0.035	U	0.035	0.032	ppb v/v			10/07/22 09:52	1
2,2,4-Trimethylpentane	0.20	U	0.20	0.035	ppb v/v			10/07/22 09:52	1
Benzene	0.20	U	0.20	0.074	ppb v/v			10/07/22 09:52	1
1,2-Dichloroethane	0.20	U	0.20	0.15	ppb v/v			10/07/22 09:52	1
n-Heptane	0.20	U	0.20	0.059	ppb v/v			10/07/22 09:52	1
Trichloroethene	0.037	U	0.037	0.024	ppb v/v			10/07/22 09:52	1
Methyl methacrylate	0.50	U	0.50	0.16	ppb v/v			10/07/22 09:52	1
1,2-Dichloropropane	0.20	U	0.20	0.087	ppb v/v			10/07/22 09:52	1
1,4-Dioxane	5.0	U	5.0	1.7	ppb v/v			10/07/22 09:52	1
Bromodichloromethane	0.20	U	0.20	0.040	ppb v/v			10/07/22 09:52	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.020	ppb v/v			10/07/22 09:52	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	0.50	U	0.50	0.19	ppb v/v			10/07/22 09:52	1
Toluene	0.20	U	0.20	0.093	ppb v/v			10/07/22 09:52	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.089	ppb v/v			10/07/22 09:52	1
1,1,2-Trichloroethane	0.20	U	0.20	0.034	ppb v/v			10/07/22 09:52	1
Tetrachloroethene	0.20	U	0.20	0.027	ppb v/v			10/07/22 09:52	1
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.20	ppb v/v			10/07/22 09:52	1
Dibromochloromethane	0.20	U	0.20	0.031	ppb v/v			10/07/22 09:52	1
1,2-Dibromoethane	0.20	U	0.20	0.046	ppb v/v			10/07/22 09:52	1
Chlorobenzene	0.20	U	0.20	0.043	ppb v/v			10/07/22 09:52	1
Ethylbenzene	0.20	U	0.20	0.10	ppb v/v			10/07/22 09:52	1
m,p-Xylene	0.50	U	0.50	0.17	ppb v/v			10/07/22 09:52	1
o-Xylene	0.20	U	0.20	0.094	ppb v/v			10/07/22 09:52	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-184402/4
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.20	U	0.20	0.032	ppb v/v			10/07/22 09:52	1
Bromoform	0.20	U	0.20	0.058	ppb v/v			10/07/22 09:52	1
Cumene	0.20	U	0.20	0.037	ppb v/v			10/07/22 09:52	1
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.043	ppb v/v			10/07/22 09:52	1
n-Propylbenzene	0.20	U	0.20	0.047	ppb v/v			10/07/22 09:52	1
4-Ethyltoluene	0.20	U	0.20	0.051	ppb v/v			10/07/22 09:52	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.044	ppb v/v			10/07/22 09:52	1
2-Chlorotoluene	0.20	U	0.20	0.048	ppb v/v			10/07/22 09:52	1
tert-Butylbenzene	0.20	U	0.20	0.037	ppb v/v			10/07/22 09:52	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.047	ppb v/v			10/07/22 09:52	1
sec-Butylbenzene	0.20	U	0.20	0.039	ppb v/v			10/07/22 09:52	1
4-Isopropyltoluene	0.20	U	0.20	0.039	ppb v/v			10/07/22 09:52	1
1,3-Dichlorobenzene	0.20	U	0.20	0.089	ppb v/v			10/07/22 09:52	1
1,4-Dichlorobenzene	0.20	U	0.20	0.095	ppb v/v			10/07/22 09:52	1
Benzyl chloride	0.20	U	0.20	0.074	ppb v/v			10/07/22 09:52	1
n-Butylbenzene	0.20	U	0.20	0.055	ppb v/v			10/07/22 09:52	1
1,2-Dichlorobenzene	0.20	U	0.20	0.070	ppb v/v			10/07/22 09:52	1
1,2,4-Trichlorobenzene	0.50	U	0.50	0.19	ppb v/v			10/07/22 09:52	1
Hexachlorobutadiene	0.20	U	0.20	0.031	ppb v/v			10/07/22 09:52	1
Naphthalene	0.50	U	0.50	0.17	ppb v/v			10/07/22 09:52	1

Lab Sample ID: LCS 200-184402/3
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	49.4	54.8		ug/m3		111	61 - 142
Chlorodifluoromethane	35.4	38.3		ug/m3		108	60 - 147
1,2-Dichlorotetrafluoroethane	69.9	74.0		ug/m3		106	71 - 141
Chloromethane	20.6	21.9		ug/m3		106	56 - 141
n-Butane	23.8	23.8		ug/m3		100	53 - 151
Vinyl chloride	25.6	22.9		ug/m3		89	61 - 135
1,3-Butadiene	22.1	18.8		ug/m3		85	58 - 139
Bromomethane	38.8	39.8		ug/m3		103	72 - 124
Chloroethane	26.4	27.3		ug/m3		103	68 - 130
Bromoethene(Vinyl Bromide)	43.7	45.2		ug/m3		103	75 - 125
Trichlorofluoromethane	56.2	58.3		ug/m3		104	70 - 129
1,1,2-Trichlorotrifluoroethane	76.6	79.1		ug/m3		103	70 - 121
1,1-Dichloroethene	39.6	36.9		ug/m3		93	68 - 120
Acetone	23.7	26.1		ug/m3		110	54 - 154
Isopropyl alcohol	24.6	25.6		ug/m3		104	53 - 142
Carbon disulfide	31.1	32.5		ug/m3		104	71 - 138
3-Chloropropene	31.3	31.3		ug/m3		100	50 - 150
Methylene Chloride	34.7	36.1		ug/m3		104	59 - 137
tert-Butyl alcohol	30.3	32.1		ug/m3		106	66 - 132
Methyl tert-butyl ether	36.0	37.7		ug/m3		105	70 - 127
trans-1,2-Dichloroethene	39.6	38.6		ug/m3		97	69 - 137
n-Hexane	35.2	35.1		ug/m3		100	63 - 138
1,1-Dichloroethane	40.5	38.5		ug/m3		95	66 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184402/3
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl Ethyl Ketone (2-Butanone)	29.5	30.9		ug/m3		105	72 - 124
cis-1,2-Dichloroethene	39.6	37.6		ug/m3		95	72 - 121
Chloroform	48.8	49.9		ug/m3		102	73 - 124
Tetrahydrofuran	29.5	31.1		ug/m3		105	60 - 149
1,1,1-Trichloroethane	54.6	56.2		ug/m3		103	72 - 127
Cyclohexane	34.4	34.6		ug/m3		101	76 - 124
Carbon tetrachloride	62.9	63.1		ug/m3		100	71 - 133
2,2,4-Trimethylpentane	46.7	46.7		ug/m3		100	68 - 131
Benzene	31.9	31.5		ug/m3		99	73 - 119
1,2-Dichloroethane	40.5	41.0		ug/m3		101	68 - 135
n-Heptane	41.0	40.5		ug/m3		99	60 - 142
Trichloroethene	53.7	52.0		ug/m3		97	73 - 122
Methyl methacrylate	40.9	42.9		ug/m3		105	73 - 129
1,2-Dichloropropane	46.2	46.5		ug/m3		101	69 - 128
1,4-Dioxane	36.0	35.2		ug/m3		98	66 - 129
Bromodichloromethane	67.0	70.9		ug/m3		106	75 - 127
cis-1,3-Dichloropropene	45.4	47.9		ug/m3		106	74 - 125
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	43.6		ug/m3		106	58 - 144
Toluene	37.7	38.2		ug/m3		101	75 - 122
trans-1,3-Dichloropropene	45.4	49.6		ug/m3		109	74 - 128
1,1,2-Trichloroethane	54.6	55.7		ug/m3		102	75 - 126
Tetrachloroethene	67.8	66.3		ug/m3		98	70 - 125
Methyl Butyl Ketone (2-Hexanone)	41.0	41.1		ug/m3		100	57 - 143
Dibromochloromethane	85.2	94.3		ug/m3		111	73 - 125
1,2-Dibromoethane	76.8	80.4		ug/m3		105	78 - 122
Chlorobenzene	46.0	47.5		ug/m3		103	76 - 119
Ethylbenzene	43.4	44.9		ug/m3		103	74 - 122
m,p-Xylene	86.8	90.4		ug/m3		104	76 - 121
o-Xylene	43.4	45.2		ug/m3		104	73 - 123
Styrene	42.6	47.4		ug/m3		111	74 - 125
Bromoform	103	121		ug/m3		117	53 - 149
Cumene	49.1	51.5		ug/m3		105	73 - 123
1,1,2,2-Tetrachloroethane	68.6	70.5		ug/m3		103	74 - 126
n-Propylbenzene	49.1	51.8		ug/m3		105	73 - 127
4-Ethyltoluene	49.2	52.2		ug/m3		106	75 - 129
1,3,5-Trimethylbenzene	49.2	51.4		ug/m3		105	72 - 126
2-Chlorotoluene	51.8	54.0		ug/m3		104	74 - 126
tert-Butylbenzene	54.9	57.6		ug/m3		105	71 - 125
1,2,4-Trimethylbenzene	49.2	51.8		ug/m3		105	71 - 129
sec-Butylbenzene	54.9	57.7		ug/m3		105	70 - 128
4-Isopropyltoluene	54.9	58.4		ug/m3		106	68 - 130
1,3-Dichlorobenzene	60.1	65.0		ug/m3		108	69 - 131
1,4-Dichlorobenzene	60.1	65.4		ug/m3		109	67 - 132
Benzyl chloride	51.8	75.5	*+	ug/m3		146	60 - 136
n-Butylbenzene	54.9	58.4		ug/m3		106	65 - 137
1,2-Dichlorobenzene	60.1	63.3		ug/m3		105	68 - 129

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184402/3
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	74.2	74.4		ug/m3		100	50 - 150
Hexachlorobutadiene	107	114		ug/m3		107	58 - 130
Naphthalene	52.4	53.3		ug/m3		102	50 - 150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10	11.1		ppb v/v		111	61 - 142
Chlorodifluoromethane	10	10.8		ppb v/v		108	60 - 147
1,2-Dichlorotetrafluoroethane	10	10.6		ppb v/v		106	71 - 141
Chloromethane	10	10.6		ppb v/v		106	56 - 141
n-Butane	10	10.0		ppb v/v		100	53 - 151
Vinyl chloride	10	8.94		ppb v/v		89	61 - 135
1,3-Butadiene	10	8.51		ppb v/v		85	58 - 139
Bromomethane	10	10.2		ppb v/v		103	72 - 124
Chloroethane	10	10.3		ppb v/v		103	68 - 130
Bromoethene(Vinyl Bromide)	10	10.3		ppb v/v		103	75 - 125
Trichlorofluoromethane	10	10.4		ppb v/v		104	70 - 129
1,1,2-Trichlorotrifluoroethane	10	10.3		ppb v/v		103	70 - 121
1,1-Dichloroethene	10	9.31		ppb v/v		93	68 - 120
Acetone	10	11.0		ppb v/v		110	54 - 154
Isopropyl alcohol	10	10.4		ppb v/v		104	53 - 142
Carbon disulfide	10	10.4		ppb v/v		104	71 - 138
3-Chloropropene	10	10.0		ppb v/v		100	50 - 150
Methylene Chloride	10	10.4		ppb v/v		104	59 - 137
tert-Butyl alcohol	10	10.6		ppb v/v		106	66 - 132
Methyl tert-butyl ether	10	10.5		ppb v/v		105	70 - 127
trans-1,2-Dichloroethene	10	9.73		ppb v/v		97	69 - 137
n-Hexane	10	9.95		ppb v/v		100	63 - 138
1,1-Dichloroethane	10	9.52		ppb v/v		95	66 - 130
Methyl Ethyl Ketone (2-Butanone)	10	10.5		ppb v/v		105	72 - 124
cis-1,2-Dichloroethene	10	9.48		ppb v/v		95	72 - 121
Chloroform	10	10.2		ppb v/v		102	73 - 124
Tetrahydrofuran	10	10.5		ppb v/v		105	60 - 149
1,1,1-Trichloroethane	10	10.3		ppb v/v		103	72 - 127
Cyclohexane	10	10.1		ppb v/v		101	76 - 124
Carbon tetrachloride	10	10.0		ppb v/v		100	71 - 133
2,2,4-Trimethylpentane	10	9.99		ppb v/v		100	68 - 131
Benzene	10	9.87		ppb v/v		99	73 - 119
1,2-Dichloroethane	10	10.1		ppb v/v		101	68 - 135
n-Heptane	10	9.87		ppb v/v		99	60 - 142
Trichloroethene	10	9.67		ppb v/v		97	73 - 122
Methyl methacrylate	10	10.5		ppb v/v		105	73 - 129
1,2-Dichloropropane	10	10.1		ppb v/v		101	69 - 128
1,4-Dioxane	10	9.77		ppb v/v		98	66 - 129
Bromodichloromethane	10	10.6		ppb v/v		106	75 - 127
cis-1,3-Dichloropropene	10	10.6		ppb v/v		106	74 - 125
4-Methyl-2-pentanone (Methyl isobutyl ketone)	10	10.6		ppb v/v		106	58 - 144
Toluene	10	10.1		ppb v/v		101	75 - 122

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-184402/3
Matrix: Air
Analysis Batch: 184402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,3-Dichloropropene	10	10.9		ppb v/v		109	74 - 128
1,1,2-Trichloroethane	10	10.2		ppb v/v		102	75 - 126
Tetrachloroethene	10	9.77		ppb v/v		98	70 - 125
Methyl Butyl Ketone (2-Hexanone)	10	10.0		ppb v/v		100	57 - 143
Dibromochloromethane	10	11.1		ppb v/v		111	73 - 125
1,2-Dibromoethane	10	10.5		ppb v/v		105	78 - 122
Chlorobenzene	10	10.3		ppb v/v		103	76 - 119
Ethylbenzene	10	10.3		ppb v/v		103	74 - 122
m,p-Xylene	20	20.8		ppb v/v		104	76 - 121
o-Xylene	10	10.4		ppb v/v		104	73 - 123
Styrene	10	11.1		ppb v/v		111	74 - 125
Bromoform	10	11.7		ppb v/v		117	53 - 149
Cumene	10	10.5		ppb v/v		105	73 - 123
1,1,2,2-Tetrachloroethane	10	10.3		ppb v/v		103	74 - 126
n-Propylbenzene	10	10.5		ppb v/v		105	73 - 127
4-Ethyltoluene	10	10.6		ppb v/v		106	75 - 129
1,3,5-Trimethylbenzene	10	10.5		ppb v/v		105	72 - 126
2-Chlorotoluene	10	10.4		ppb v/v		104	74 - 126
tert-Butylbenzene	10	10.5		ppb v/v		105	71 - 125
1,2,4-Trimethylbenzene	10	10.5		ppb v/v		105	71 - 129
sec-Butylbenzene	10	10.5		ppb v/v		105	70 - 128
4-Isopropyltoluene	10	10.6		ppb v/v		106	68 - 130
1,3-Dichlorobenzene	10	10.8		ppb v/v		108	69 - 131
1,4-Dichlorobenzene	10	10.9		ppb v/v		109	67 - 132
Benzyl chloride	10	14.6	*+	ppb v/v		146	60 - 136
n-Butylbenzene	10	10.6		ppb v/v		106	65 - 137
1,2-Dichlorobenzene	10	10.5		ppb v/v		105	68 - 129
1,2,4-Trichlorobenzene	10	10.0		ppb v/v		100	50 - 150
Hexachlorobutadiene	10	10.7		ppb v/v		107	58 - 130
Naphthalene	10	10.2		ppb v/v		102	50 - 150

QC Association Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Air - GC/MS VOA

Analysis Batch: 184353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-65184-1	SV-02_20221003	Total/NA	Air	TO-15	
200-65184-1 - DL	SV-02_20221003	Total/NA	Air	TO-15	
200-65184-2 - DL	SV-04_20221003	Total/NA	Air	TO-15	
200-65184-2	SV-04_20221003	Total/NA	Air	TO-15	
MB 200-184353/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-184353/3	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 184402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-65197-1	SV-01_20221004	Total/NA	Air	TO-15	
200-65197-1 - DL	SV-01_20221004	Total/NA	Air	TO-15	
200-65197-2	SV-03_20221004	Total/NA	Air	TO-15	
200-65197-3	SV-05_20221004	Total/NA	Air	TO-15	
200-65197-3 - DL	SV-05_20221004	Total/NA	Air	TO-15	
MB 200-184402/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-184402/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: AKRF Inc
Job ID: 200-65184-1
Project/Site: Ikos Senior Living

Client Sample ID: SV-02_20221003
Lab Sample ID: 200-65184-1
Date Collected: 10/03/22 13:10
Matrix: Air
Date Received: 10/04/22 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	184353	A1B	EET BUR	10/06/22 11:50
Total/NA	Analysis	TO-15	DL	2	184353	A1B	EET BUR	10/06/22 12:43

Client Sample ID: SV-04_20221003
Lab Sample ID: 200-65184-2
Date Collected: 10/03/22 15:30
Matrix: Air
Date Received: 10/04/22 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15	DL	10	184353	A1B	EET BUR	10/06/22 14:29
Total/NA	Analysis	TO-15		1	184353	A1B	EET BUR	10/07/22 01:07

Client Sample ID: SV-01_20221004
Lab Sample ID: 200-65197-1
Date Collected: 10/04/22 15:30
Matrix: Air
Date Received: 10/05/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	184402	K1P	EET BUR	10/07/22 14:34
Total/NA	Analysis	TO-15	DL	6.14	184402	K1P	EET BUR	10/07/22 15:26

Client Sample ID: SV-03_20221004
Lab Sample ID: 200-65197-2
Date Collected: 10/04/22 11:00
Matrix: Air
Date Received: 10/05/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	184402	K1P	EET BUR	10/07/22 16:19

Client Sample ID: SV-05_20221004
Lab Sample ID: 200-65197-3
Date Collected: 10/04/22 14:00
Matrix: Air
Date Received: 10/05/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	184402	K1P	EET BUR	10/07/22 17:11
Total/NA	Analysis	TO-15	DL	2	184402	K1P	EET BUR	10/07/22 18:03

Laboratory References:
EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: AKRF Inc
Job ID: 200-65184-1
Project/Site: Ikos Senior Living

Laboratory: Eurofins Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	VT972	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,4-Dioxane
TO-15		Air	4-Isopropyltoluene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	m,p-Xylene
TO-15		Air	n-Butane
TO-15		Air	n-Butylbenzene
TO-15		Air	n-Propylbenzene
TO-15		Air	sec-Butylbenzene
TO-15		Air	tert-Butylbenzene

Method Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 200-65184-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-65184-1	SV-02_20221003	Air	10/03/22 13:10	10/04/22 13:30	Air Canister (6-Liter) #6266
200-65184-2	SV-04_20221003	Air	10/03/22 15:30	10/04/22 13:30	Air Canister (6-Liter) #5058
200-65197-1	SV-01_20221004	Air	10/04/22 15:30	10/05/22 10:30	Air Canister (6-Liter) #5630
200-65197-2	SV-03_20221004	Air	10/04/22 11:00	10/05/22 10:30	Air Canister (6-Liter) #3642
200-65197-3	SV-05_20221004	Air	10/04/22 14:00	10/05/22 10:30	Air Canister (6-Liter) #6309

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-65184	10/05/22	14:58	29.7	21	G34	CC

Sampling Information and Return Equipment Check	Yes	No	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		No	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		No	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-65184-A-1	6266	-2.6	N	11564	91/80	Y	9196-52552	
200-65184-A-2	5058	-4.7	N	7051	91/79	Y	9196-52552	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-65197	10/06/22	9:13	29.6	21	G34	ZK

Sampling Information and Return Equipment Check	Yes	No	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		No	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		No	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-65197-A-1	5630	-12.2	Y	10655	91/79	Y	4570-52552	
200-65197-A-2	3642	-3.0	N	10652	91/79	Y	9196-52552	
200-65197-A-3	6309	-7.1	N	3979	92/74	Y	9196-52552	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

NYC 222

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples

eurofins | Environment Testing America

Eurofins TestAmerica, Burlington
530 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802 660 1990 fax 802.660.1919

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Asya Bychkov	**Samples Collected By:** T. Giordano
Company Name AKRF, Inc.	**Phone:**	COC No 1 of 1 COCs
Address 440 Park Avenue South, 7th Fl	**Email:** abychkov@akrf.com	TALS Project #
City/State/Zip New York, NY 10016		**For Lab Use Only:**
Phone 646 388 9553	**Site Contact:** Tom Giordano	Walk-in Client:
FAX	**Tel/Fax** 914 602 6956	Lab Sampling
Project Name IHOS	**Analysis Turnaround Time**	
Site/Location Astoria, Queens, NY	Standard (Specific): ✓	Job / SDG No
P O # 210124	Rush (Specifiy)	(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14A (Standard) / Low Level	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-02_20221003	10/3/22	1200	10/3/22	1310	-30	-5	11564	6366	X														
SV-04_20221003	↓	1330	↓	1530	-30	-7	7051	5058	X														

200-65184 COC

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:
Category A / Equis Edd

Samples Shipped by: Tom Giordano	Date / Time: 10/3/2022	**Samples Received by:**	
Samples Relinquished by:	Date / Time: 10/3/22 17:00	**Received by:**	EA-Bur 10/4/22 1330
Relinquished by:	Date / Time:	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.28, dated 1/8/2021



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
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Warning Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Chain of Custody Record

611420

eurofins | Environment Testing America

Address: NYC 2022

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Anya Bychkov	Site Contact: Tom Gordon	Date: 10/4/2022	COC No:
Company Name: AKRF, Inc.	Tel/Email: abychkov@akrf.com	Lab Contact: M. Hines	Carrier:	3 of 3 COCs
Address: 440 Park Avenue South 7th Fl	Analysis Turnaround Time			Sampler:
City/State/Zip: New York, NY 10016	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
Phone: 646-388-9433	TAT if different from Below Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: IHOS	☑ 1 week			
Site: Astoria, Queens, NY	☐ 2 days			Job / SDG No.:
P O # 210174	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TO-15, Standard	Sample Specific Notes:
SV-01_20221004	10/4/2022	1350/1530	G	A	1			X	-14 in Hg Can 5638 Controller 10695
SV-03_20221004	↓	0900/1100	—	A	1			X	-7 in Hg Can 3643 Controller 10652
SV-05_20221004	↓	1355/1440	—	A	1			X	-8 in Hg Can 6307 Controller 3979

200-65197 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Category A Deliverables - EQuIS EDD

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Tom Gordon	AKRF, Inc	10/4/22 1600		T.A.	10/4/22 16:60
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	T.A.	10/4/22		ETA Buffalo	10/5/2022 1030
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

10/11/2022

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 200-65184-1

Login Number: 65184
List Number: 1
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 200-65184-1

Login Number: 65197
List Number: 1
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pre-Shipment Clean Canist ertification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	10	22	9/21/2022	1200	23		TPB	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	34002081	15.04	15.04	0	29.6	G26	9/22/22	1105	DTB	22	G26	9/23/22	1514		22.0
2	4383		15.04	0		G26					G26				
3	2892		15.04	0		G26					G26				
4	3217		15.04	0		G26					G26				
5	4347		15.17	15.13		G26					G26				
6	6309		15.04	0		G26					G26				
7	6266		15.04	0		G26					G26				
8	3233		15.04	0		G26					G26				
9	3642		15.04	0		G26					G26				
10	5058		15.04	0		G26					G26				
11	5434	✓	15.04	0		G26	✓	✓	✓	✓	G26	✓	✓	✓	✓
12	9196	15.04	15.05	15.01	29.9	G26	9/23/22	1555	—	22.0	G26	10/3/22	1444	TDB	22

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☒ TO15 Routine ☐ TO15 LL 9/23/22

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
9196	9/23/22	52552	VTP		xxxx				9/23/22	DTB

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

Page 72 of 96

10/11/2022

9196

200-1657058

200-65006-A-12

Pre-Shipment Clean Canist ertification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):	Technician	Can Size	Certification Type:
Oven 1/2	10	25	9/21/2022	1200	23	TPB	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5717	.04	.04	0	29.6	G26	9/22/22	1400	TPB	22	G26	9/23/22	1420	—	22.0
2	9239		.10	.06		G26					G26				
3	5629		.04	0		G26					G26				
4	5630		.04	0		G26					G26				
5	9216		.04	0		G26					G26				
6	9228		.15	.11		G26					G26				
7	5983		.17	.13		G26					G26				
8	9259		.04	0		G26					G26				
9	5624		.28	.24		G26					G26				
10	5638		.04	.00		G26					G26				
11	4789		.04	0		G26					G26				
12	4570	.04	.04	0	29.9	G26	9/23/22	1500	—	22.0	G26	10/3/22	1445	TPB	22

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

 # time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
4570	9/23/22	52552	VTP		xxxx				9/23/22	TPB

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

TestAmerica Burlington

4570
200-1657090
200-65008-A-12
Summa Canister 6L

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-65006-1

SDG No.:

Client Sample ID: 9196 Lab Sample ID: 200-65006-12

Matrix: Air Lab File ID: 52552-006.d

Analysis Method: TO-15 Date Collected: 09/21/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 09/23/2022 14:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 183859 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.040	U	0.040	0.020
100-42-5	Styrene	0.040	U	0.040	0.0064
10061-01-5	1,3-Dichloropropene, cis-	0.040	U	0.040	0.0040
10061-02-6	1,3-Dichloropropene, trans-	0.040	U	0.040	0.018
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.019
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.0092
106-99-0	1,3-Butadiene	0.040	U	0.040	0.0076
107-05-1	Allyl chloride	0.10	U	0.10	0.022
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.030
108-10-1	Methyl isobutyl ketone (MIBK)	0.10	U	0.10	0.038
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.0088
108-88-3	Toluene	0.040	U	0.040	0.019
108-90-7	Chlorobenzene	0.040	U	0.040	0.0086
109-99-9	Tetrahydrofuran	1.0	U	1.0	0.24
110-54-3	Hexane	0.10	U	0.10	0.046
110-82-7	Cyclohexane	0.040	U	0.040	0.0070
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.038
123-91-1	1,4-Dioxane	0.040	U	0.040	0.032
124-48-1	Dibromochloromethane	0.040	U	0.040	0.0062
127-18-4	Tetrachloroethene	0.040	U	0.040	0.0054
142-82-5	n-Heptane	0.040	U	0.040	0.012
156-59-2	1,2-Dichloroethene, cis-	0.040	U	0.040	0.0066
156-60-5	1,2-Dichloroethene, trans-	0.040	U	0.040	0.018
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.016
179601-23-1	m,p-Xylene	0.10	U	0.10	0.034
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.0070
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.018
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.0064
593-60-2	Vinyl bromide	0.040	U	0.040	0.017
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.010
64-17-5	Ethanol	1.0	U	1.0	0.13
67-63-0	Isopropanol	1.0	U	1.0	0.20
67-64-1	Acetone	1.0	U	1.0	0.40
67-66-3	Chloroform	0.040	U	0.040	0.0092

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-65006-1

SDG No.:

Client Sample ID: 9196 Lab Sample ID: 200-65006-12

Matrix: Air Lab File ID: 52552-006.d

Analysis Method: TO-15 Date Collected: 09/21/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 09/23/2022 14:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 183859 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.040	U	0.040	0.015
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.0078
74-83-9	Bromomethane	0.040	U	0.040	0.010
74-87-3	Chloromethane	0.10	U	0.10	0.024
75-00-3	Chloroethane	0.10	U	0.10	0.050
75-01-4	Vinyl chloride	0.040	U	0.040	0.0056
75-09-2	Methylene Chloride	0.10	U	0.10	0.034
75-15-0	Carbon disulfide	0.10	U	0.10	0.026
75-25-2	Bromoform	0.040	U	0.040	0.012
75-27-4	Bromodichloromethane	0.040	U	0.040	0.0080
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.0058
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.0058
75-65-0	tert-Butyl alcohol	1.0	U	1.0	0.24
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.010
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.040	U	0.040	0.011
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.011
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.017
78-93-3	Methyl ethyl ketone (MEK)	0.10	U	0.10	0.034
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.0068
79-01-6	Trichloroethene	0.0099	J	0.040	0.0048
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.0086
80-62-6	Methyl methacrylate	0.10	U	0.10	0.032
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.0062
91-20-3	Naphthalene	0.10	U	0.10	0.034
95-47-6	Xylene, o-	0.040	U	0.040	0.019
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.0096
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.014
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.0094
591-78-6	2-Hexanone	0.10	U	0.10	0.040

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-006.d
Lims ID: 200-65006-A-12
Client ID: 9196
Sample Type: Client
Inject. Date: 23-Sep-2022 14:02:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0052552-006
Misc. Info.: 65006-12
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Sep-2022 16:46:34 Calib Date: 09-Jul-2022 01:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20220708-51593.b\51593-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1679

First Level Reviewer: bunmaa Date: 25-Sep-2022 16:46:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		4.067				ND	7
2 Dichlorodifluoromethane	85		4.163				ND	
3 Chlorodifluoromethane	51		4.206				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.511				ND	
5 Chloromethane	50		4.624				ND	7
6 Vinyl chloride	62		4.923				ND	
7 Butane	43		4.923				ND	7
8 Butadiene	54		5.035				ND	
9 Bromomethane	94		5.742				ND	
10 Chloroethane	64		6.004				ND	
13 Vinyl bromide	106		6.421				ND	
14 Trichlorofluoromethane	101		6.587				ND	
16 Ethanol	45		6.956				ND	7
20 1,1-Dichloroethene	96		7.635				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	
22 Acetone	43		7.721				ND	7
23 Isopropyl alcohol	45		8.015				ND	7
24 Carbon disulfide	76	8.037	8.047	-0.005	69	2486	0.0324	
26 3-Chloro-1-propene	41		8.331				ND	7
27 Methylene Chloride	49	8.572	8.572	0.011	42	1756	0.0534	7M
28 2-Methyl-2-propanol	59		8.786				ND	
30 trans-1,2-Dichloroethene	61		9.058				ND	7
31 Methyl tert-butyl ether	73		9.074				ND	7
32 Hexane	57	9.556	9.556	-0.005	59	376	0.0102	7M
33 1,1-Dichloroethane	63		9.813				ND	
34 Vinyl acetate	43		9.829				ND	7
S 35 1,2-Dichloroethene, Total	61		10.200				ND	7
36 2-Butanone (MEK)	72		10.776				ND	
37 cis-1,2-Dichloroethene	96		10.797				ND	
38 Ethyl acetate	88		10.867				ND	
* 39 Chlorobromomethane	128	11.204	11.209	-0.005	73	224985	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.257				ND	7
	41 Chloroform	83		11.386				ND	
	42 1,1,1-Trichloroethane	97		11.685				ND	
	43 Cyclohexane	84		11.830				ND	7
	44 Carbon tetrachloride	117		11.969				ND	
	45 Benzene	78		12.311				ND	7
	46 1,2-Dichloroethane	62		12.386				ND	
	47 Isooctane	57		12.536				ND	
	48 n-Heptane	43		12.846				ND	7
*	49 1,4-Difluorobenzene	114	13.049	13.049	0.000	95	1166926	10.0	
	51 Trichloroethene	95	13.483	13.483	0.006	89	2733	0.0496	M
	53 1,2-Dichloropropane	63		13.932				ND	
	54 Methyl methacrylate	69		14.028				ND	
	55 1,4-Dioxane	88		14.076				ND	
	57 Dibromomethane	174		14.087				ND	7
	58 Dichlorobromomethane	83		14.397				ND	
	59 cis-1,3-Dichloropropene	75		15.200				ND	7
	61 4-Methyl-2-pentanone (MIBK)	43		15.467				ND	7
	62 Toluene	92		15.842				ND	7
	66 trans-1,3-Dichloropropene	75		16.259				ND	
	67 1,1,2-Trichloroethane	83		16.634				ND	
	68 Tetrachloroethene	166		16.832				ND	
	69 2-Hexanone	43		17.051				ND	7
	70 Chlorodibromomethane	129		17.367				ND	
	71 Ethylene Dibromide	107		17.602				ND	
*	73 Chlorobenzene-d5	117	18.511	18.517	-0.006	91	942938	10.0	
	74 Chlorobenzene	112		18.576				ND	
	75 Ethylbenzene	91		18.773				ND	7
	76 m-Xylene & p-Xylene	106		19.036				ND	
	78 o-Xylene	106		19.806				ND	
	79 Styrene	104		19.843				ND	
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.196				ND	
	82 Isopropylbenzene	105		20.534				ND	
	83 1,1,2,2-Tetrachloroethane	83		21.063				ND	7
	85 N-Propylbenzene	91		21.272				ND	MU
	86 2-Chlorotoluene	91		21.416				ND	7
	87 4-Ethyltoluene	105		21.475				ND	7
	88 1,3,5-Trimethylbenzene	105		21.571				ND	7
	91 tert-Butylbenzene	119		22.064				ND	
	92 1,2,4-Trimethylbenzene	105		22.149				ND	7
	93 sec-Butylbenzene	105		22.390				ND	7
	94 1,3-Dichlorobenzene	146		22.561				ND	7
	95 4-Isopropyltoluene	119		22.609				ND	7
	96 1,4-Dichlorobenzene	146		22.706				ND	MU
	97 Benzyl chloride	91		22.855				ND	7
	98 n-Butylbenzene	91		23.166				ND	7
	99 1,2-Dichlorobenzene	146	23.192	23.192	0.000	10	1004	0.009401	
	102 1,2,4-Trichlorobenzene	180		25.573				ND	7
	103 Hexachlorobutadiene	225		25.814				ND	
	104 Naphthalene	128		26.033				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15WISs_00009 Amount Added: 20.00 Units: mL Run Reagent

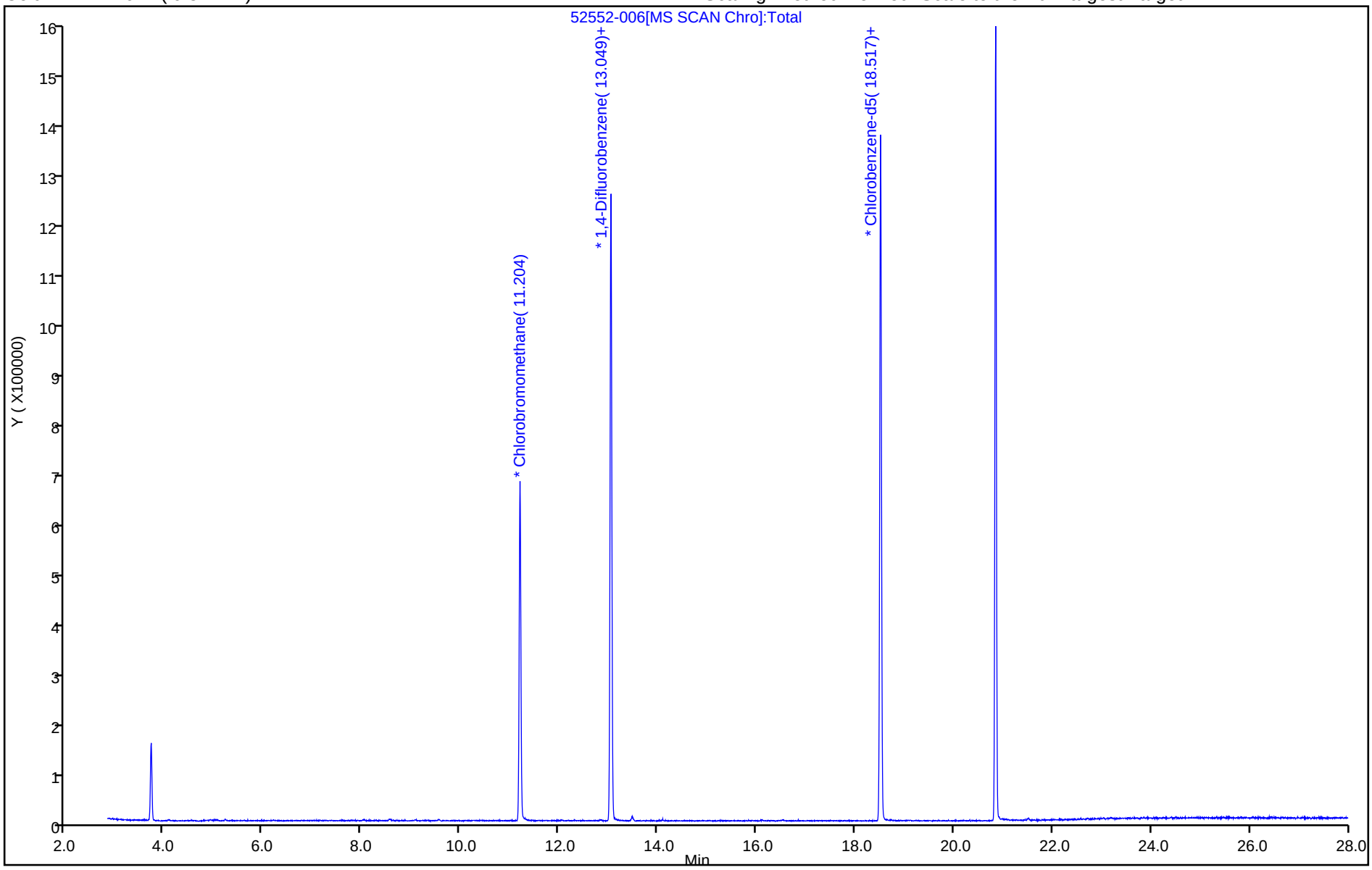
Report Date: 25-Sep-2022 16:46:35 Chrom Revision: 2.3 22-Sep-2022 21:23:26

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-006.d

Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12	Worklist Smp#:	6
Client ID:	9196				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	6
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

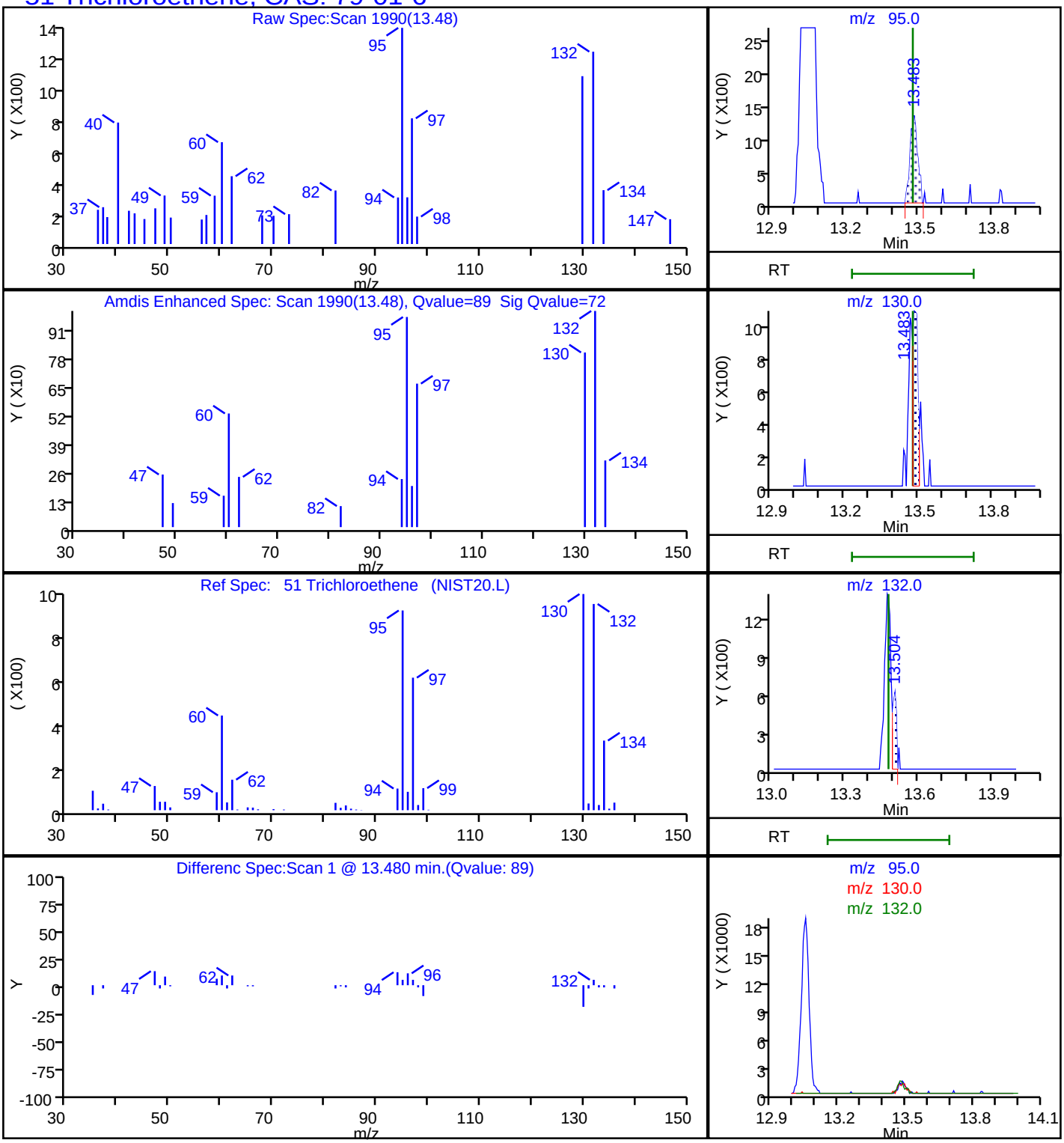


Report Date: 25-Sep-2022 16:46:35 Chrom Revision: 2.3 22-Sep-2022 21:23:26

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-006.d				
Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i		
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12		
Client ID:	9196				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6



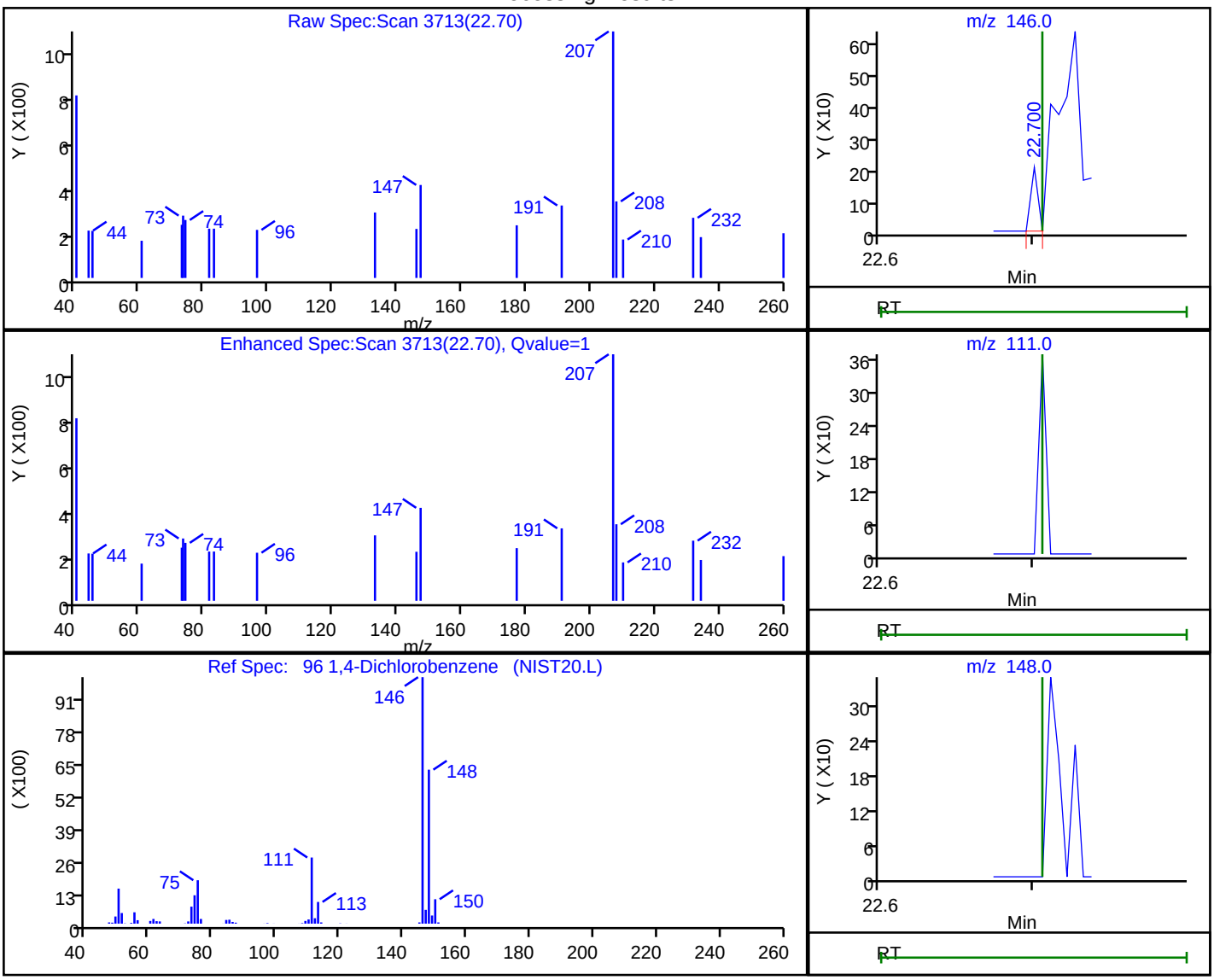
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-006.d				
Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i		
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12		
Client ID:	9196				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.70	146.00	65	0.000660
22.71	111.00	0	
22.71	148.00	0	

Reviewer: bunmaa, 25-Sep-2022 16:46:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

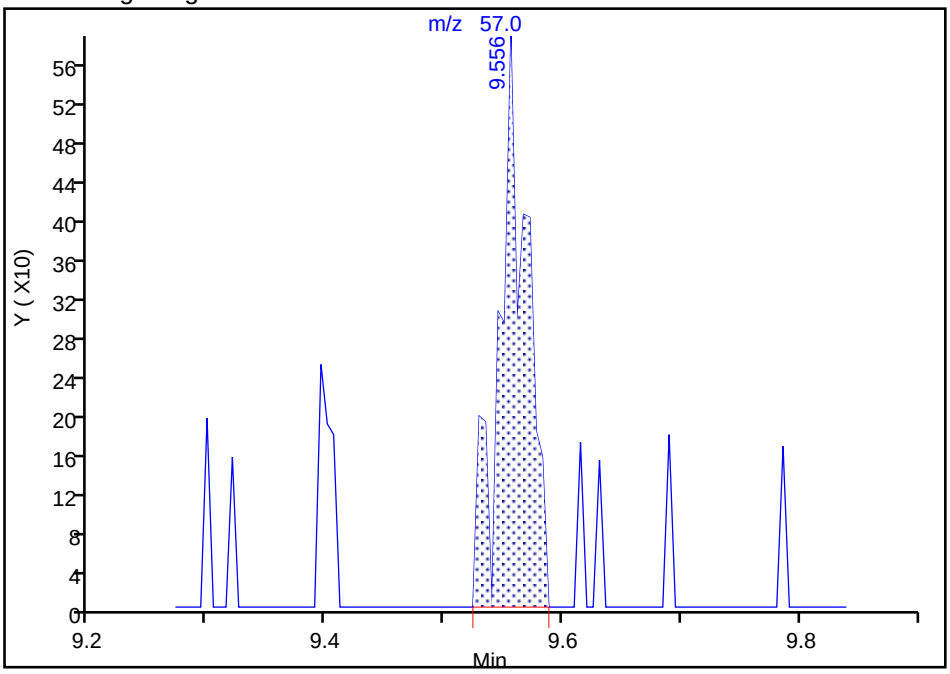
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Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i		
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12		
Client ID:	9196				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Hexane, CAS: 110-54-3

Signal: 1

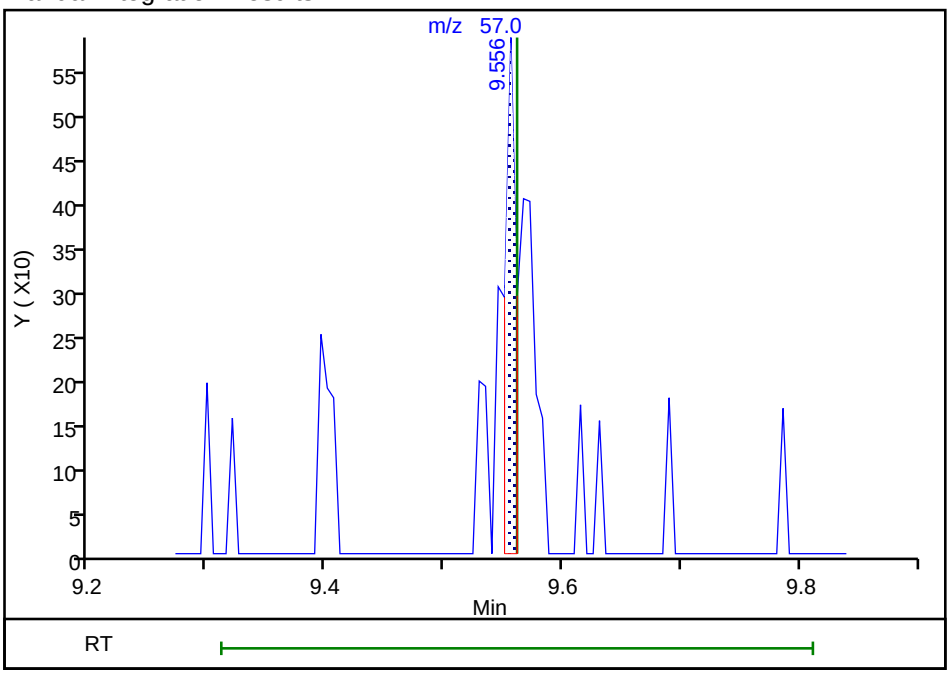
Processing Integration Results

RT: 9.56
Area: 962
Amount: 0.026151
Amount Units: ppb v/v



Manual Integration Results

RT: 9.56
Area: 376
Amount: 0.010221
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:44:26

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

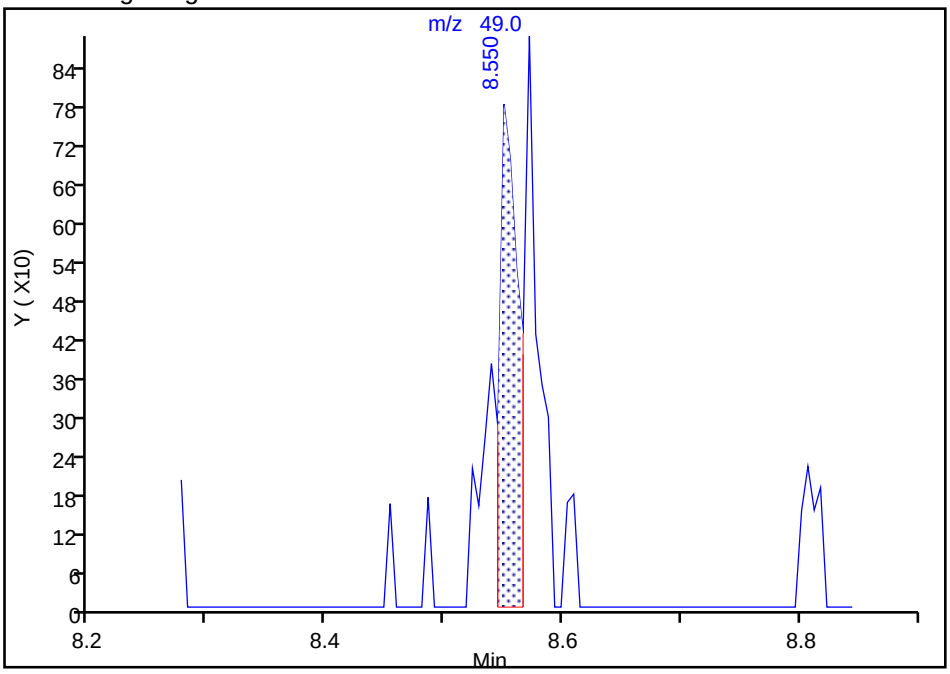
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Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i		
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12		
Client ID:	9196				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

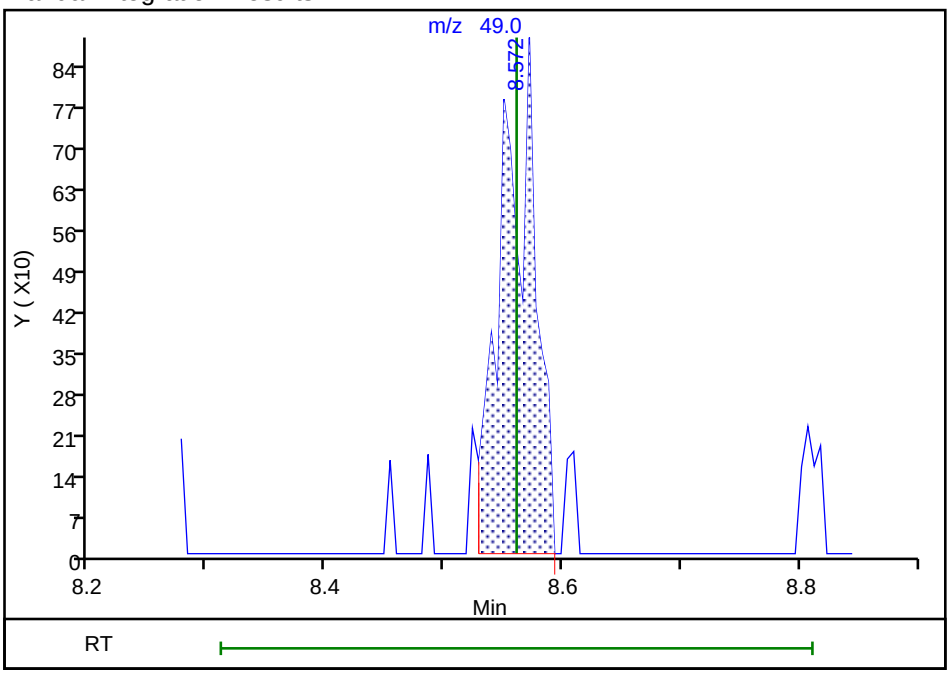
Processing Integration Results

RT: 8.55
Area: 871
Amount: 0.026471
Amount Units: ppb v/v



Manual Integration Results

RT: 8.57
Area: 1756
Amount: 0.053367
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:43:46

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

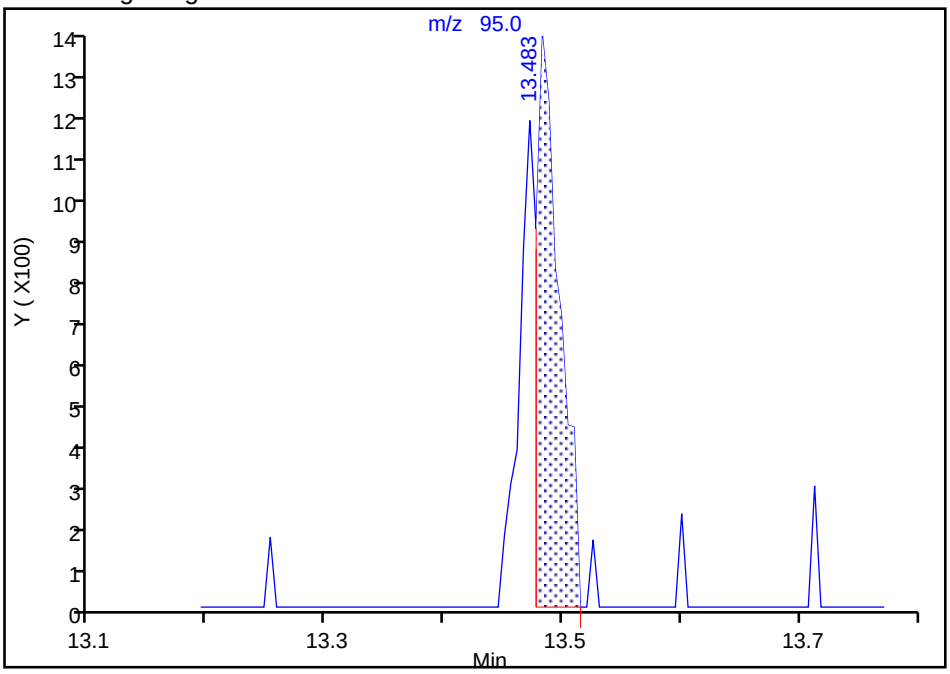
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Injection Date:	23-Sep-2022 14:02:30	Instrument ID:	CHW.i		
Lims ID:	200-65006-A-12	Lab Sample ID:	200-65006-12		
Client ID:	9196				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Signal: 1

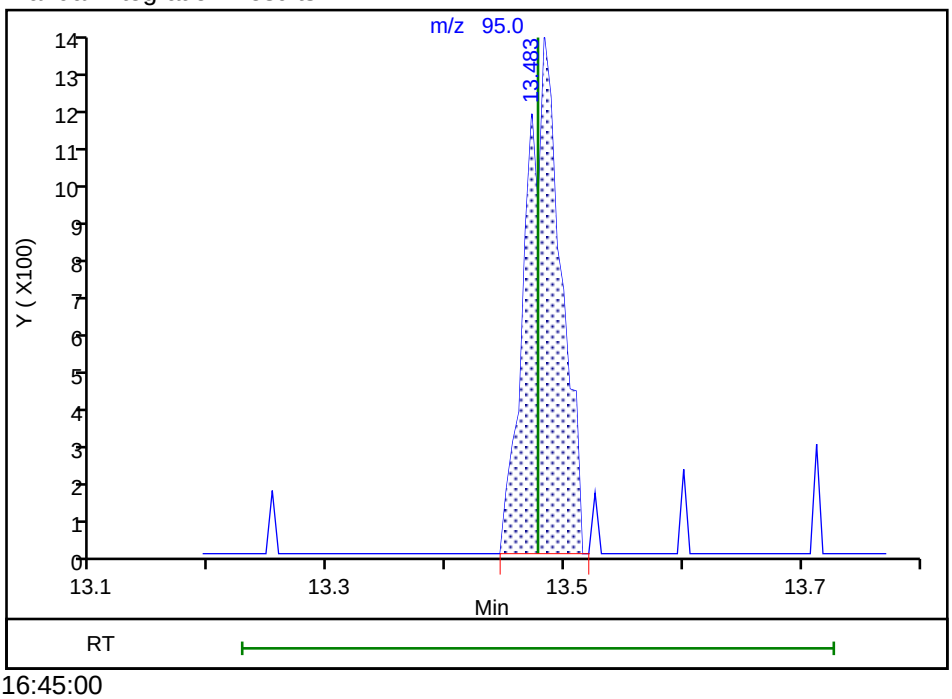
Processing Integration Results

RT: 13.48
Area: 1835
Amount: 0.033331
Amount Units: ppb v/v



Manual Integration Results

RT: 13.48
Area: 2733
Amount: 0.049642
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:45:00

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-65008-1

SDG No.:

Client Sample ID: 4570 Lab Sample ID: 200-65008-12

Matrix: Air Lab File ID: 52552-005.d

Analysis Method: TO-15 Date Collected: 09/21/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 09/23/2022 12:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 183859 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.040	U	0.040	0.020
100-42-5	Styrene	0.040	U	0.040	0.0064
10061-01-5	1,3-Dichloropropene, cis-	0.040	U	0.040	0.0040
10061-02-6	1,3-Dichloropropene, trans-	0.040	U	0.040	0.018
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.019
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.0092
106-99-0	1,3-Butadiene	0.040	U	0.040	0.0076
107-05-1	Allyl chloride	0.10	U	0.10	0.022
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.030
108-10-1	Methyl isobutyl ketone (MIBK)	0.10	U	0.10	0.038
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.0088
108-88-3	Toluene	0.040	U	0.040	0.019
108-90-7	Chlorobenzene	0.040	U	0.040	0.0086
109-99-9	Tetrahydrofuran	1.0	U	1.0	0.24
110-54-3	Hexane	0.10	U	0.10	0.046
110-82-7	Cyclohexane	0.040	U	0.040	0.0070
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.038
123-91-1	1,4-Dioxane	0.040	U	0.040	0.032
124-48-1	Dibromochloromethane	0.040	U	0.040	0.0062
127-18-4	Tetrachloroethene	0.040	U	0.040	0.0054
142-82-5	n-Heptane	0.040	U	0.040	0.012
156-59-2	1,2-Dichloroethene, cis-	0.040	U	0.040	0.0066
156-60-5	1,2-Dichloroethene, trans-	0.040	U	0.040	0.018
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.016
179601-23-1	m,p-Xylene	0.10	U	0.10	0.034
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.0070
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.018
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.0064
593-60-2	Vinyl bromide	0.040	U	0.040	0.017
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.010
64-17-5	Ethanol	1.0	U	1.0	0.13
67-63-0	Isopropanol	1.0	U	1.0	0.20
67-64-1	Acetone	1.0	U	1.0	0.40
67-66-3	Chloroform	0.040	U	0.040	0.0092

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-65008-1

SDG No.:

Client Sample ID: 4570 Lab Sample ID: 200-65008-12

Matrix: Air Lab File ID: 52552-005.d

Analysis Method: TO-15 Date Collected: 09/21/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 09/23/2022 12:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 183859 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.040	U	0.040	0.015
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.0078
74-83-9	Bromomethane	0.040	U	0.040	0.010
74-87-3	Chloromethane	0.10	U	0.10	0.024
75-00-3	Chloroethane	0.10	U	0.10	0.050
75-01-4	Vinyl chloride	0.040	U	0.040	0.0056
75-09-2	Methylene Chloride	0.10	U	0.10	0.034
75-15-0	Carbon disulfide	0.10	U	0.10	0.026
75-25-2	Bromoform	0.040	U	0.040	0.012
75-27-4	Bromodichloromethane	0.040	U	0.040	0.0080
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.0058
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.0058
75-65-0	tert-Butyl alcohol	1.0	U	1.0	0.24
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.010
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.022
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.040	U	0.040	0.011
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.011
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.017
78-93-3	Methyl ethyl ketone (MEK)	0.10	U	0.10	0.034
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.0068
79-01-6	Trichloroethene	0.040	U	0.040	0.0048
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.0086
80-62-6	Methyl methacrylate	0.10	U	0.10	0.032
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.0062
91-20-3	Naphthalene	0.10	U	0.10	0.034
95-47-6	Xylene, o-	0.040	U	0.040	0.019
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.0096
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.014
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.0094
591-78-6	2-Hexanone	0.10	U	0.10	0.040

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-005.d
Lims ID: 200-65008-A-12
Client ID: 4570
Sample Type: Client
Inject. Date: 23-Sep-2022 12:56:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0052552-005
Misc. Info.: 65008-12
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Sep-2022 16:42:33 Calib Date: 09-Jul-2022 01:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20220708-51593.b\51593-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1679

First Level Reviewer: bunmaa Date: 25-Sep-2022 16:42:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		4.067				ND	7
2 Dichlorodifluoromethane	85		4.163				ND	
3 Chlorodifluoromethane	51		4.206				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.511				ND	
5 Chloromethane	50		4.624				ND	7
6 Vinyl chloride	62		4.923				ND	
7 Butane	43		4.923				ND	7
8 Butadiene	54		5.035				ND	7
9 Bromomethane	94		5.742				ND	
10 Chloroethane	64		6.004				ND	7
13 Vinyl bromide	106		6.421				ND	
14 Trichlorofluoromethane	101		6.587				ND	
16 Ethanol	45		6.956				ND	7
20 1,1-Dichloroethene	96		7.635				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	
22 Acetone	43		7.721				ND	7
23 Isopropyl alcohol	45		8.015				ND	
24 Carbon disulfide	76	8.047	8.047	0.005	69	2838	0.0354	M
26 3-Chloro-1-propene	41		8.331				ND	7
27 Methylene Chloride	49	8.561	8.561	0.000	30	1891	0.0550	7M
28 2-Methyl-2-propanol	59		8.786				ND	
30 trans-1,2-Dichloroethene	61		9.058				ND	7
31 Methyl tert-butyl ether	73		9.074				ND	7
32 Hexane	57		9.561				ND	
33 1,1-Dichloroethane	63		9.813				ND	7
34 Vinyl acetate	43		9.829				ND	7
S 35 1,2-Dichloroethene, Total	61		10.200				ND	7
36 2-Butanone (MEK)	72		10.776				ND	7
37 cis-1,2-Dichloroethene	96		10.797				ND	7
38 Ethyl acetate	88		10.867				ND	
* 39 Chlorobromomethane	128	11.204	11.209	-0.005	75	235238	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.257				ND	7
	41 Chloroform	83		11.386				ND	
	42 1,1,1-Trichloroethane	97		11.685				ND	
	43 Cyclohexane	84		11.830				ND	
	44 Carbon tetrachloride	117		11.969				ND	
	45 Benzene	78		12.311				ND	7
	46 1,2-Dichloroethane	62		12.386				ND	
	47 Isooctane	57		12.536				ND	
	48 n-Heptane	43		12.846				ND	7
*	49 1,4-Difluorobenzene	114	13.049	13.049	0.000	95	1196286	10.0	
	51 Trichloroethene	95		13.477				ND	
	53 1,2-Dichloropropane	63		13.932				ND	
	54 Methyl methacrylate	69		14.028				ND	
	55 1,4-Dioxane	88		14.076				ND	7
	57 Dibromomethane	174	14.098	14.098	0.011	32	549	0.0101	7M
	58 Dichlorobromomethane	83		14.397				ND	
	59 cis-1,3-Dichloropropene	75		15.200				ND	7
	61 4-Methyl-2-pentanone (MIBK)	43		15.467				ND	7
	62 Toluene	92		15.842				ND	7
	66 trans-1,3-Dichloropropene	75		16.259				ND	7
	67 1,1,2-Trichloroethane	83		16.634				ND	
	68 Tetrachloroethene	166		16.832				ND	
	69 2-Hexanone	43		17.051				ND	7
	70 Chlorodibromomethane	129		17.367				ND	
	71 Ethylene Dibromide	107		17.602				ND	7
*	73 Chlorobenzene-d5	117	18.517	18.517	0.000	91	964591	10.0	
	74 Chlorobenzene	112		18.576				ND	7
	75 Ethylbenzene	91		18.773				ND	7
	76 m-Xylene & p-Xylene	106		19.036				ND	7
	78 o-Xylene	106		19.806				ND	
	79 Styrene	104		19.843				ND	7
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.196				ND	7
	82 Isopropylbenzene	105		20.534				ND	7
	83 1,1,2,2-Tetrachloroethane	83		21.063				ND	7
	85 N-Propylbenzene	91		21.272				ND	7
	86 2-Chlorotoluene	91		21.416				ND	7
	87 4-Ethyltoluene	105		21.475				ND	7
	88 1,3,5-Trimethylbenzene	105		21.571				ND	7
	91 tert-Butylbenzene	119		22.064				ND	7
	92 1,2,4-Trimethylbenzene	105		22.149				ND	MU
	93 sec-Butylbenzene	105		22.390				ND	7
	94 1,3-Dichlorobenzene	146	22.566	22.566	0.005	15	1395	0.0131	M
	95 4-Isopropyltoluene	119		22.609				ND	7
	96 1,4-Dichlorobenzene	146	22.716	22.716	0.010	31	1605	0.0159	M
	97 Benzyl chloride	91	22.877	22.877	0.022	13	1460	0.0116	M
	98 n-Butylbenzene	91		23.166				ND	7
	99 1,2-Dichlorobenzene	146	23.198	23.192	0.006	22	1606	0.0147	
	102 1,2,4-Trichlorobenzene	180		25.573				ND	7
	103 Hexachlorobutadiene	225		25.814				ND	7
	104 Naphthalene	128	26.033	26.033	0.000	1	2474	0.0157	M

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15WISs_00009	Amount Added: 20.00	Units: mL	Run Reagent

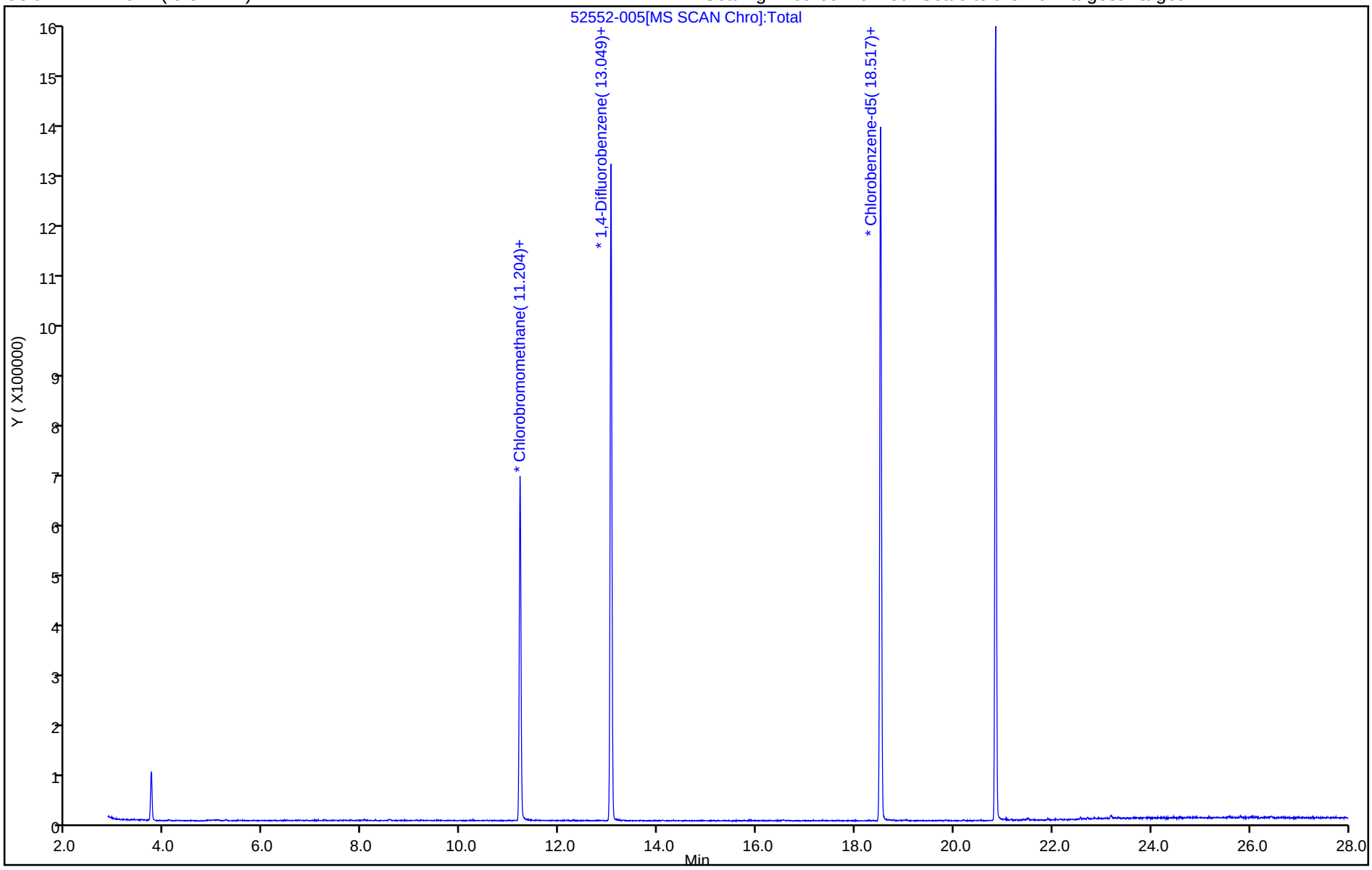
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Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHW.i\20220923-52552.b\52552-005.d

Injection Date:	23-Sep-2022 12:56:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12	Worklist Smp#:	5
Client ID:	4570				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	5
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

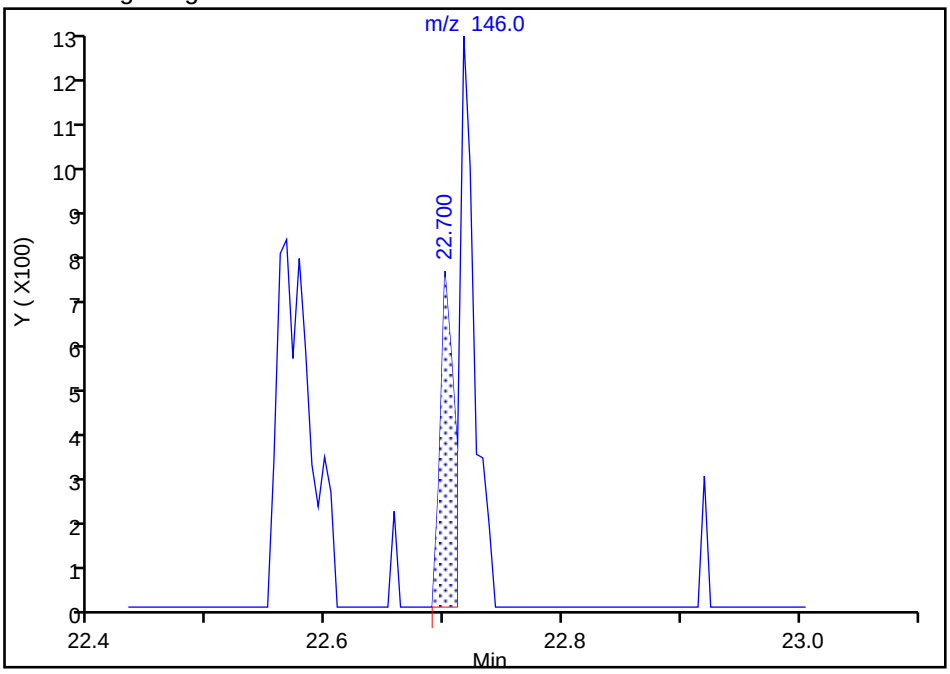
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Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

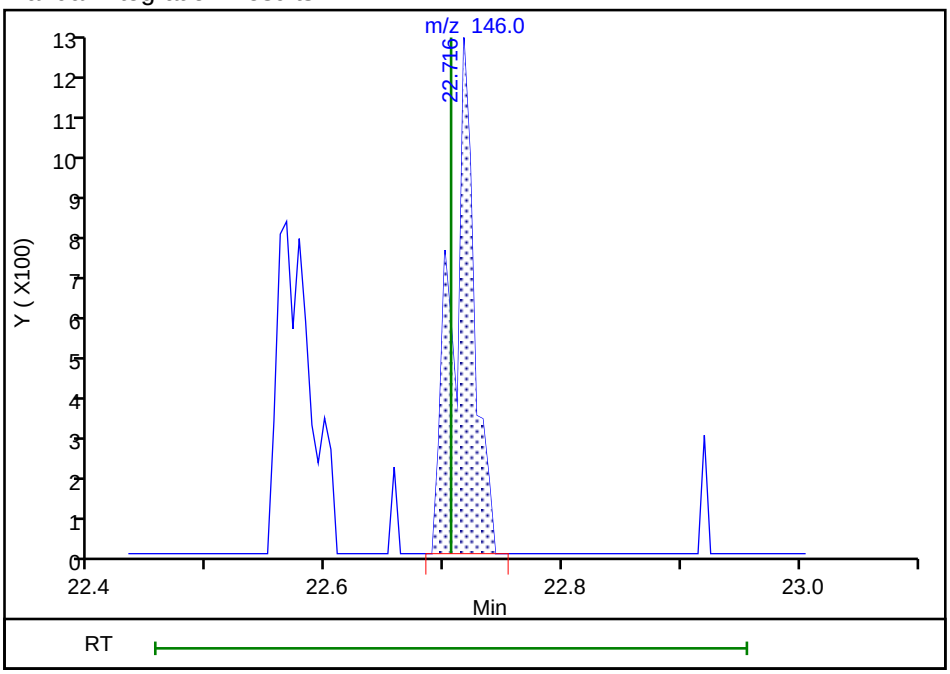
Processing Integration Results

RT: 22.70
Area: 615
Amount: 0.006108
Amount Units: ppb v/v



Manual Integration Results

RT: 22.72
Area: 1605
Amount: 0.015941
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:41:28
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

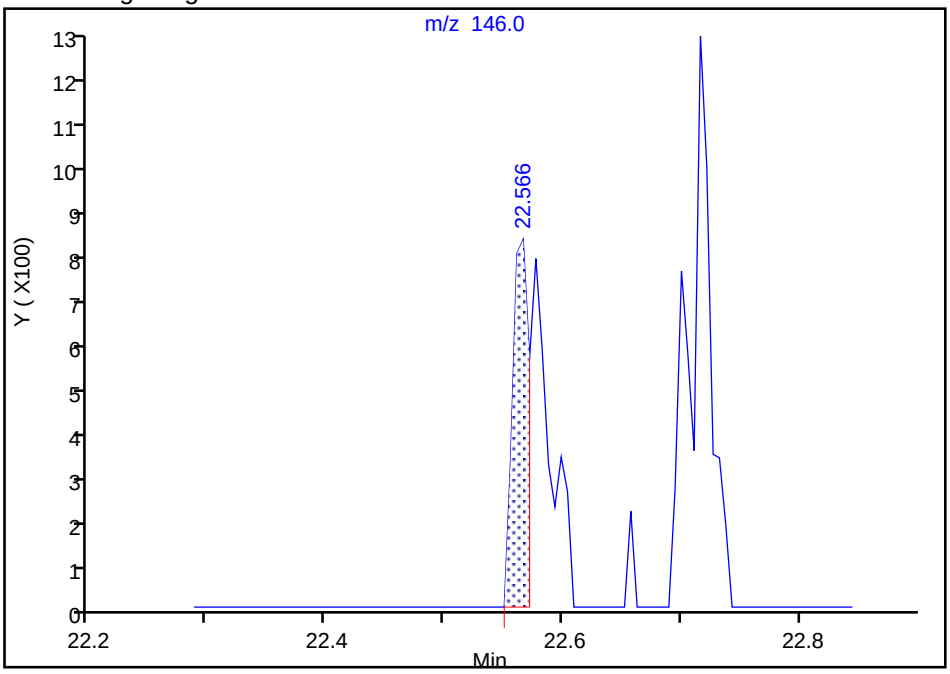
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Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

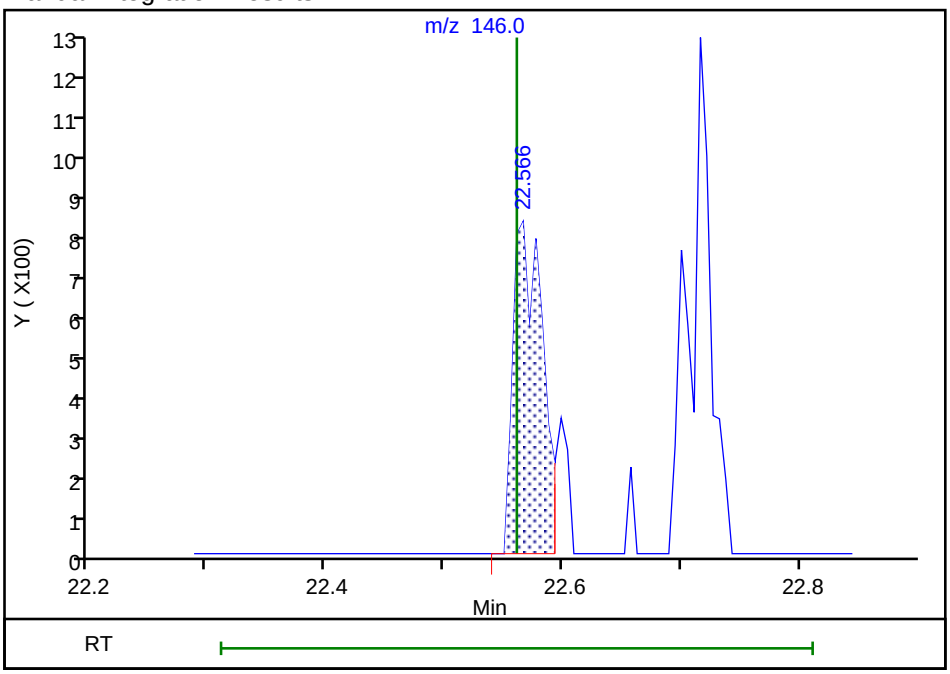
Processing Integration Results

RT: 22.57
Area: 793
Amount: 0.007446
Amount Units: ppb v/v



Manual Integration Results

RT: 22.57
Area: 1395
Amount: 0.013099
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:41:08

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

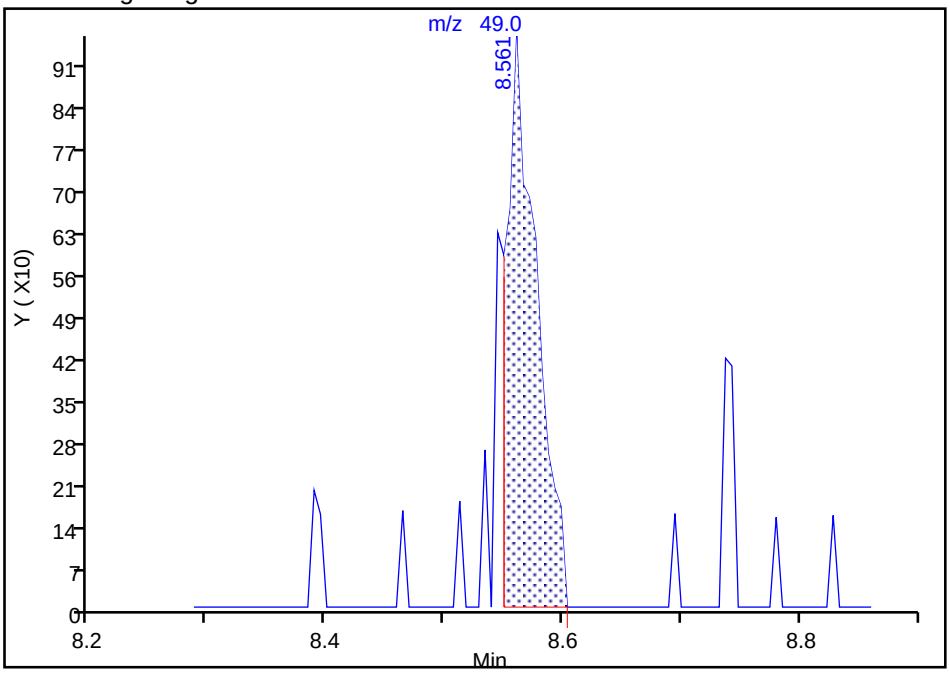
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Injection Date:	23-Sep-2022 12:56:30	Instrument ID:	CHW.i		
Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

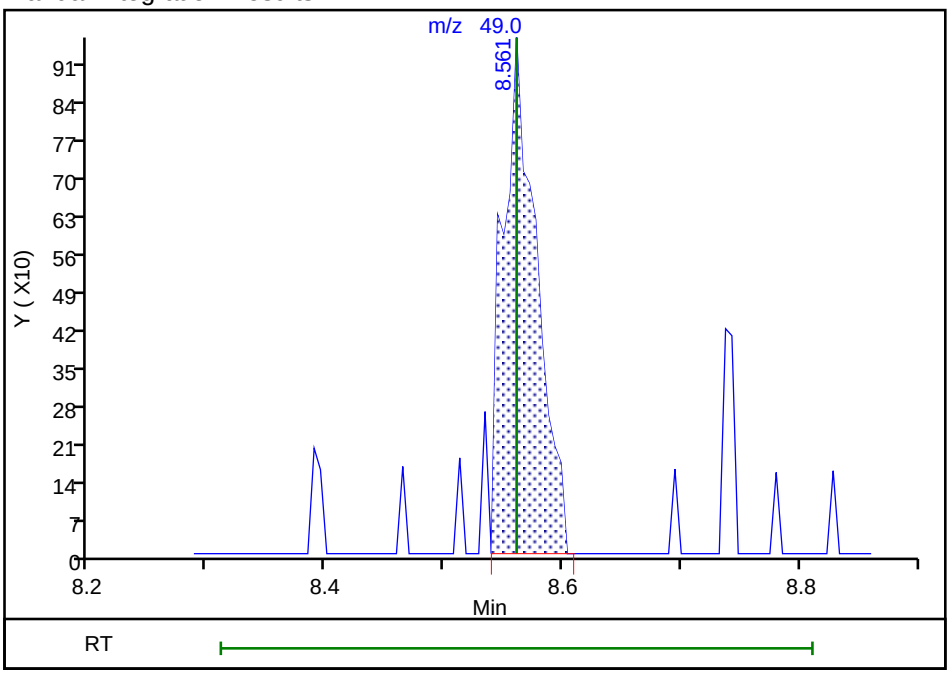
Processing Integration Results

RT: 8.56
Area: 1690
Amount: 0.049122
Amount Units: ppb v/v



Manual Integration Results

RT: 8.56
Area: 1891
Amount: 0.054964
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:38:41

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

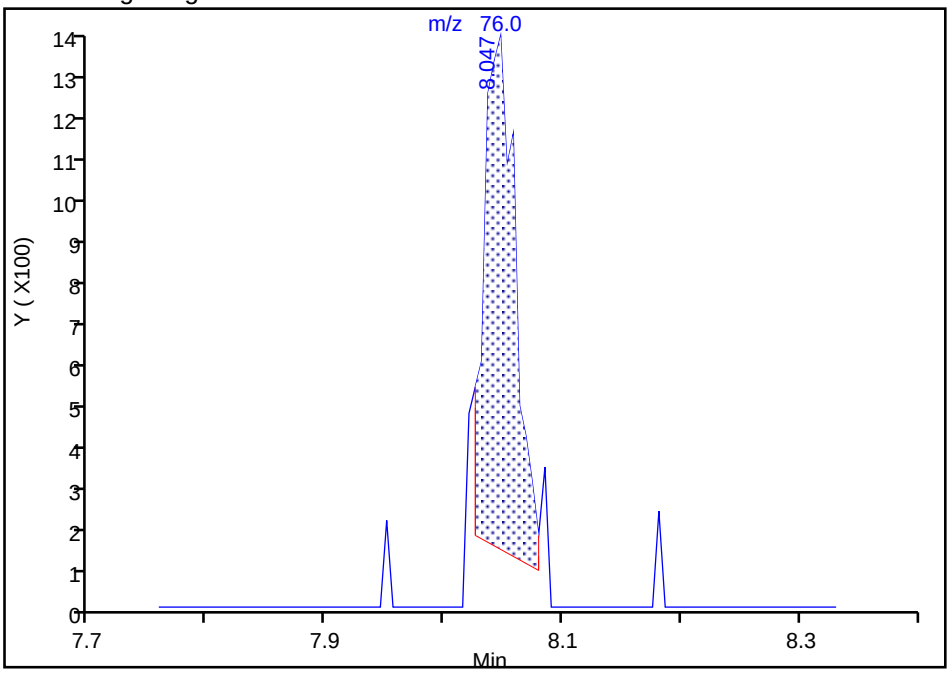
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Injection Date:	23-Sep-2022 12:56:30	Instrument ID:	CHW.i		
Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

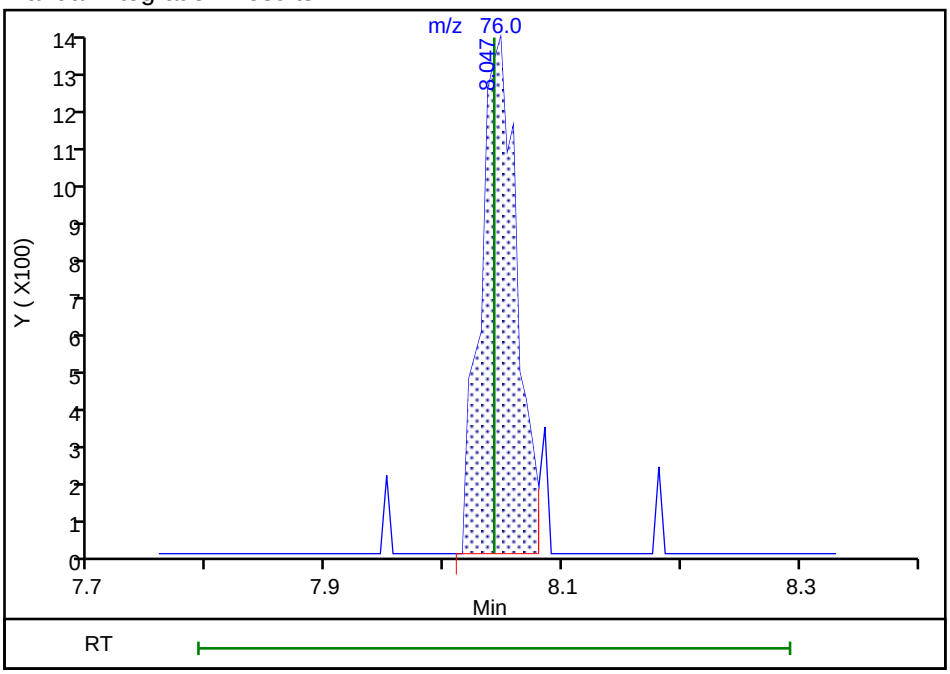
Processing Integration Results

RT: 8.05
Area: 2244
Amount: 0.027963
Amount Units: ppb v/v



Manual Integration Results

RT: 8.05
Area: 2838
Amount: 0.035365
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:38:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

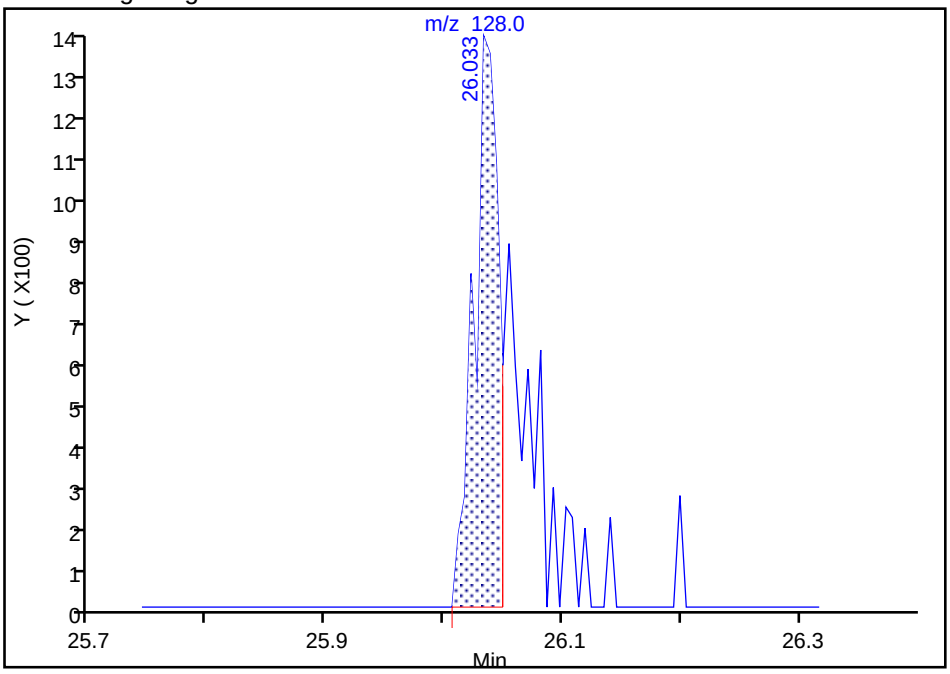
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Injection Date:	23-Sep-2022 12:56:30	Instrument ID:	CHW.i		
Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

104 Naphthalene, CAS: 91-20-3

Signal: 1

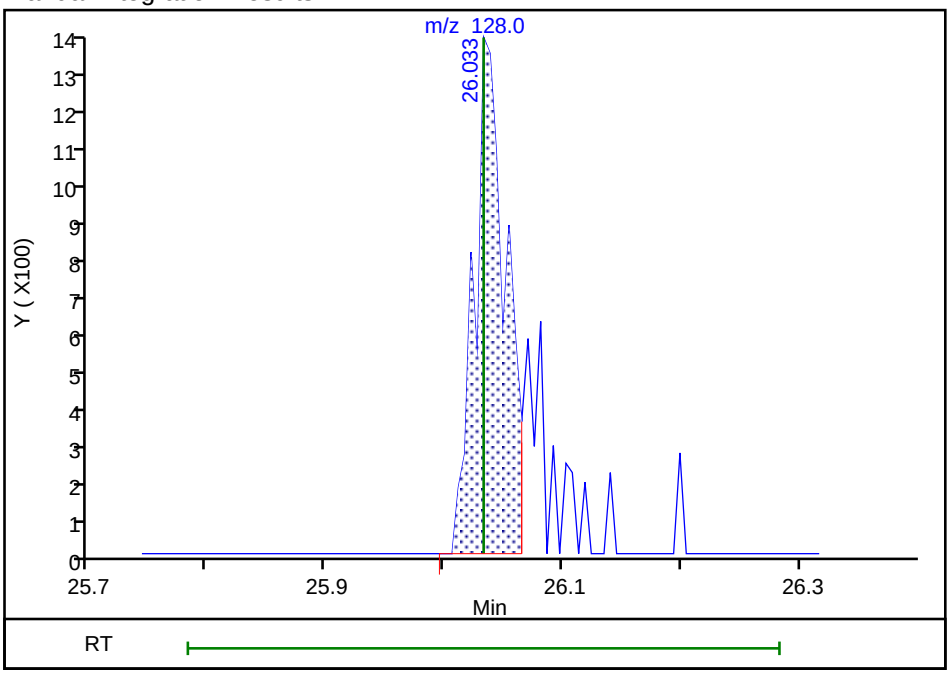
Processing Integration Results

RT: 26.03
Area: 1910
Amount: 0.012098
Amount Units: ppb v/v



Manual Integration Results

RT: 26.03
Area: 2474
Amount: 0.015671
Amount Units: ppb v/v



Reviewer: bunmaa, 25-Sep-2022 16:42:20

Audit Action: Manually Integrated Audit Reason: Assign Peak

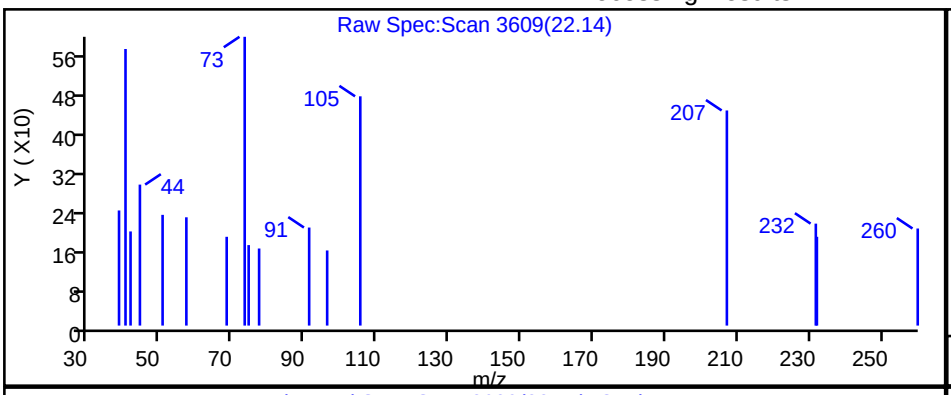
User Disabled Compound Report

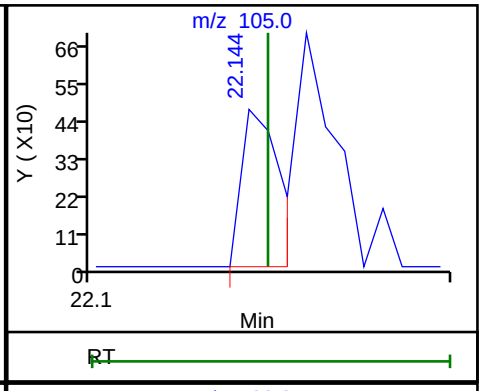
Eurofins Burlington

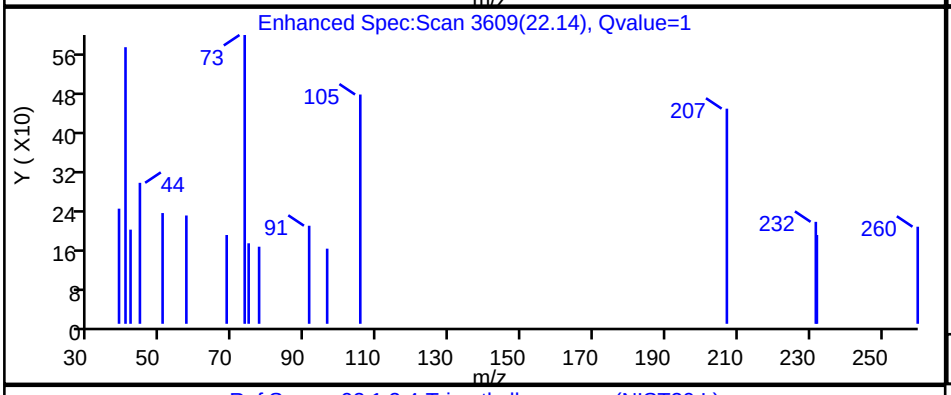
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Injection Date:	23-Sep-2022 12:56:30	Instrument ID:	CHW.i		
Lims ID:	200-65008-A-12	Lab Sample ID:	200-65008-12		
Client ID:	4570				
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

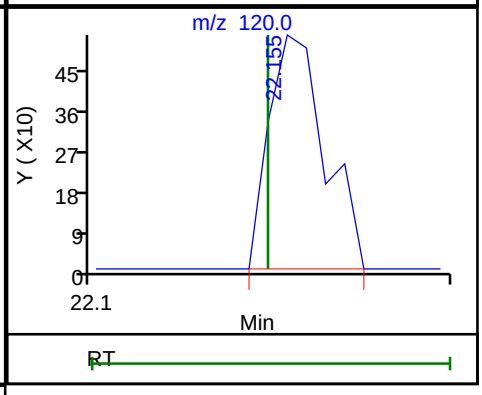
92 1,2,4-Trimethylbenzene, CAS: 95-63-6

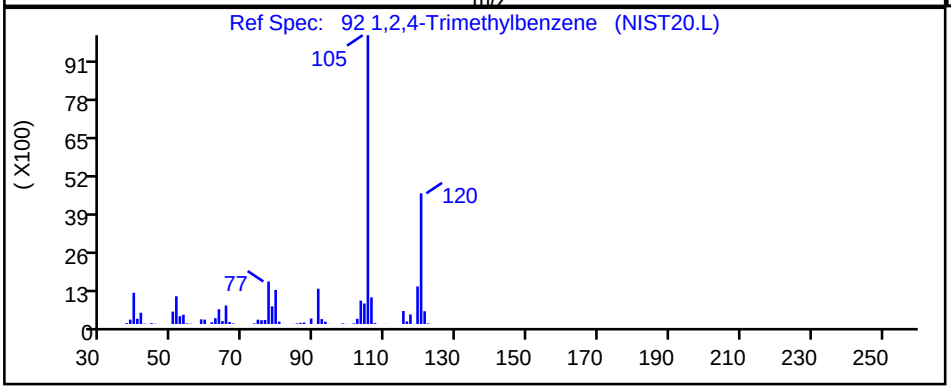
Processing Results











RT	Mass	Response	Amount
22.14	105.00	348	0.001847
22.15	120.00	569	

Reviewer: bunmaa, 25-Sep-2022 16:40:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-266752-1
Client Project/Site: Ikos Senior Living

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, New York 10016

Attn: Ms. Adrianna Bosco

Melissa Haas

Authorized for release by:
10/11/2022 12:49:19 PM

Melissa Haas, Senior Project Manager
(203)308-0880
Melissa.Haas@et.eurofinsus.com

LINKS

Review your project results through my EOL

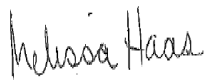
Have a Question? Ask The Expert

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Melissa Haas
Senior Project Manager
10/11/2022 12:49:19 PM

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Sample Summary 216
Chain of Custody 217
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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Indicates an estimated value.
U	Analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	MS or MSD is outside acceptance limits.
*	Duplicate RPD exceeds control limits
*	LCS or LCSD is outside acceptance limits.
E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
J	Indicates an estimated value.
U	Analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*	MS or MSD is outside acceptance limits.
J	Indicates an estimated value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U	Analyzed for but not detected.

Metals

Qualifier	Qualifier Description
*	Duplicate analysis not within control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Sample result is greater than the MDL but below the CRDL
N	Spiked sample recovery is not within control limits.
U	Indicates analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-266752-1

Laboratory: Eurofins Edison

Narrative

CASE NARRATIVE

Client: AKRF Inc

Project: Ikos Senior Living

Report Number: 460-266752-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/3/2022 7:00 PM, 10/4/2022 6:30 PM and 10/5/2022 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.3º C, 2.6º C, 2.6º C and 3.3º C.

Receipt Exceptions

The client requested that the soils and ground waters collected for this project be split into 2 separate COCs.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260D. The samples were prepared on 10/04/2022, 10/05/2022 and 10/06/2022 and analyzed on 10/05/2022, 10/06/2022, 10/07/2022 and 10/08/2022.

The continuing calibration verification (CCV) analyzed in batch 460-870087 was outside the method criteria for the following analyte: Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-870199 was outside the method criteria for the following analyte: Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Job ID: 460-266752-1 (Continued)

Laboratory: Eurofins Edison (Continued)

The continuing calibration verification (CCV) associated with batch 460-870378 recovered above the upper control limit for Methyl acetate. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870277 was outside the method criteria for the following analyte: Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-870277 recovered outside control limits for the following analytes: Carbon tetrachloride, sec-Butylbenzene and tert-Butylbenzene. These analytes were biased low in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-870501 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane and n-Butylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870379 was outside the method criteria for the following analytes: Carbon tetrachloride, Chlorobromomethane, Bromoform and Methyl tert-butyl ether. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) for analytical batch 460-870379 recovered outside control limits for the following analyte: Bromoform. This analyte was biased low in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870690 was outside the method criteria for the following analytes: 1,3,5-Trimethylbenzene, Isopropylbenzene, N-Propylbenzene, n-Butylbenzene, sec-Butylbenzene and Tetrachloroethene (biased high) and Dichlorodifluoromethane (biased low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-870776 was outside the method criteria for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane and 1,1-Dichloroethene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-870776 recovered outside control limits for the following analyte: Carbon disulfide. This analyte was biased low in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the Volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Methods 8270E. The samples were prepared on 10/04/2022, 10/05/2022 and 10/07/2022 and analyzed on 10/05/2022, 10/06/2022, 10/08/2022 and 10/09/2022.

The continuing calibration verification (CCV) analyzed in batch 460-870154 was outside the method criteria for the following analyte(s): Benzaldehyde and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Job ID: 460-266752-1 (Continued)

Laboratory: Eurofins Edison (Continued)

The continuing calibration verification (CCV) associated with batch 460-870313 recovered above the upper control limit for 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870313 was outside the method criteria for the following analyte(s): 2-Nitroaniline and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-870226 and analytical batch 460-870313 recovered outside control limits for the following analytes: Atrazine and Caprolactam. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870349 was outside the method criteria for the following analyte(s): < 2,4-Dinitrophenol, Atrazine and Benzaldehyde>. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-870755 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-870853 was outside the method criteria for the following analyte(s): 2-Nitrophenol, 4,6-Dinitro-2-methylphenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-01_0-2_20221005 (460-266877-1). Elevated reporting limits (RLs) are provided.

Several analytes failed the recovery criteria low for the MS of sample 460-266324-1 in batch 460-870755.

Several analytes failed the recovery criteria low for the MSD of sample 460-266324-1 in batch 460-870755.

Atrazine and Caprolactam failed the recovery criteria high for the MS of sample 460-266802-4 in batch 460-870313.

Atrazine and Caprolactam failed the recovery criteria high for the MSD of sample 460-266802-4 in batch 460-870313. Benzaldehyde exceeded the RPD limit.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 10/04/2022, 10/05/2022 and 10/07/2022 and analyzed on 10/05/2022, 10/06/2022 and 10/10/2022.

The continuing calibration verification (CCV) associated with batch 460-870169 recovered above the upper control limit for beta-BHC on

Job ID: 460-266752-1 (Continued)

Laboratory: Eurofins Edison (Continued)

the secondary column. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 460-870169/6).

The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane for the following sample: SB-02_0-2_20221003 (460-266752-1). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

The continuing calibration verification (CCV) associated with batch 460-870367 recovered above the upper control limit for beta-BHC on the secondary column. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 460-870367/3).

The %RPD between the primary and confirmation columns exceeded 40% for cis-Chlordane for the following sample: SB-05_0-2_20221004 (460-266826-1). The lower value has been reported and qualified in accordance with the laboratory's SOP.

4,4'-DDE, beta-BHC and Endrin aldehyde failed the recovery criteria low for the MSD of sample 460-266794-1 in batch 460-870367.

No other difficulties were encountered during the Pesticides analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 10/04/2022, 10/05/2022 and 10/07/2022 and analyzed on 10/05/2022, 10/06/2022 and 10/10/2022.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

METALS - TOTAL (ICP/MS)

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for Metals - Total (ICP/MS) in accordance with EPA SW-846 Method 6020B - Total. The samples were prepared on 10/05/2022, 10/06/2022 and 10/07/2022 and analyzed on 10/05/2022, 10/07/2022 and 10/10/2022.

Antimony and Manganese failed the recovery criteria low for the MS of sample 460-266735-8 in batch 460-870271. Aluminum and Potassium failed the recovery criteria high.

Antimony and Manganese failed the recovery criteria low for the MSD of sample 460-266735-8 in batch 460-870271. Aluminum, Iron and Magnesium failed the recovery criteria high.

Antimony failed the recovery criteria low for the MS of sample 460-266794-1 in batch 460-870468. Several analytes failed the recovery criteria high.

For the MSD of sample 460-266794-1 in batch 460-870468, Antimony and Vanadium failed the recovery criteria low. Several analytes failed the recovery criteria high. Also, Calcium, Lead, Nickel and Vanadium exceeded the RPD limit.

Antimony, Calcium and Magnesium failed the recovery criteria low for the MS of sample SB-05_29-31_20221004MS (460-266826-2) in batch 460-870666. Aluminum, Iron and Manganese failed the recovery criteria high.

Job ID: 460-266752-1 (Continued)

Laboratory: Eurofins Edison (Continued)

Several analytes failed the recovery criteria low for the MS of sample 460-266993-2 in batch 460-871052. Calcium, Iron, Lead and Vanadium failed the recovery criteria high.

For the MSD of sample 460-266993-2 in batch 460-871052, Potassium failed the recovery criteria low. Several analytes failed the recovery criteria high. Also, Arsenic, Copper, Iron and Manganese exceeded the RPD limit.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were prepared on 10/10/2022 and analyzed on 10/10/2022 and 10/11/2022.

No difficulties were encountered during the hexchrome Cr6 analysis.

All quality control parameters were within the acceptance limits.

MERCURY - TOTAL

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for Mercury - Total in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 10/05/2022, 10/06/2022 and 10/10/2022.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples SB-02_0-2_20221003 (460-266752-1), SB-05_0-2_20221004 (460-266826-1), SB-01_0-2_20221005 (460-266877-1), SB-02_31-33_20221003 (460-266752-2), SB-05_29-31_20221004 (460-266826-2), SB-01_31-33_20221005 (460-266877-2), SB-03_0-2_20221003 (460-266752-3), SB-06_0-2_20221004 (460-266826-3), SB-03_31-33_20221003 (460-266752-4), SB-06_29-31_20221004 (460-266826-4), SB-04_0-2_20221003 (460-266752-5), SB-04_32-34_20221003 (460-266752-6), SB-07_0-2_20221003 (460-266752-7) and SB-07_32-34_20221003 (460-266752-8) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 10/05/2022 and 10/10/2022.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-02_0-2_20221003 — Lab Sample ID: 460-266752-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0013		0.00020	0.000061	mg/Kg	1	☼	8260D	Total/NA
Benzo[a]anthracene	0.031	J	0.035	0.012	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.025	J	0.035	0.0094	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.033	J	0.035	0.0091	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.35	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.014	J	0.035	0.0069	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.025	J	0.35	0.0060	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.039	J	0.35	0.012	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.035	0.014	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.015	J	0.35	0.0062	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.039	J	0.35	0.0088	mg/Kg	1	☼	8270E	Total/NA
Chlordane (technical)	0.057	J	0.072	0.017	mg/Kg	1	☼	8081B	Total/NA
cis-Chlordane	0.0052	J p	0.0072	0.0011	mg/Kg	1	☼	8081B	Total/NA
Aroclor 1260	0.063	J	0.072	0.019	mg/Kg	1	☼	8082A	Total/NA
Polychlorinated biphenyls, Total	0.063	J	0.072	0.019	mg/Kg	1	☼	8082A	Total/NA
Aluminum	4180		20.5	5.6	mg/Kg	1	☼	6020B	Total/NA
Arsenic	1.5		1.0	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	36.3		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.24	J	0.41	0.058	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.14	J	1.0	0.12	mg/Kg	1	☼	6020B	Total/NA
Calcium	7730		102	18.1	mg/Kg	1	☼	6020B	Total/NA
Chromium	9.5		2.0	0.93	mg/Kg	1	☼	6020B	Total/NA
Cobalt	3.7		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	12.5		2.0	0.38	mg/Kg	1	☼	6020B	Total/NA
Iron	7870		61.4	20.7	mg/Kg	1	☼	6020B	Total/NA
Lead	13.0		0.61	0.20	mg/Kg	1	☼	6020B	Total/NA
Magnesium	4190		102	10.4	mg/Kg	1	☼	6020B	Total/NA
Manganese	207		4.1	0.41	mg/Kg	1	☼	6020B	Total/NA
Nickel	8.8		2.0	0.48	mg/Kg	1	☼	6020B	Total/NA
Potassium	744		102	16.6	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.16	J	1.3	0.13	mg/Kg	1	☼	6020B	Total/NA
Sodium	275		102	46.7	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.11	J	0.41	0.042	mg/Kg	1	☼	6020B	Total/NA
Vanadium	14.8		2.0	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	36.2		8.2	3.1	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.15		0.017	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-02_31-33_20221003 — Lab Sample ID: 460-266752-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0071		0.0012	0.0011	mg/Kg	1	☼	8260D	Total/NA
Aluminum	2810		18.9	5.2	mg/Kg	1	☼	6020B	Total/NA
Arsenic	0.61	J	0.94	0.097	mg/Kg	1	☼	6020B	Total/NA
Barium	23.4		1.9	0.14	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.23	J	0.38	0.054	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.11	J	0.94	0.11	mg/Kg	1	☼	6020B	Total/NA
Calcium	21600		94.4	16.7	mg/Kg	1	☼	6020B	Total/NA
Chromium	8.3		1.9	0.86	mg/Kg	1	☼	6020B	Total/NA
Cobalt	2.9		1.9	0.14	mg/Kg	1	☼	6020B	Total/NA
Copper	9.5		1.9	0.35	mg/Kg	1	☼	6020B	Total/NA
Iron	6500		56.6	19.1	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Edison

Client Sample ID: SB-02_31-33_20221003 (Continued) — Lab Sample ID: 460-266752-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.0		0.57	0.19	mg/Kg	1	☼	6020B	Total/NA
Magnesium	12100		94.4	9.6	mg/Kg	1	☼	6020B	Total/NA
Manganese	168		3.8	0.38	mg/Kg	1	☼	6020B	Total/NA
Nickel	6.7		1.9	0.44	mg/Kg	1	☼	6020B	Total/NA
Potassium	522		94.4	15.3	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.17	J	1.2	0.12	mg/Kg	1	☼	6020B	Total/NA
Sodium	201		94.4	43.1	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.069	J	0.38	0.039	mg/Kg	1	☼	6020B	Total/NA
Vanadium	9.8		1.9	0.19	mg/Kg	1	☼	6020B	Total/NA
Zinc	15.2		7.6	2.9	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.070		0.017	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-03_0-2_20221003 — Lab Sample ID: 460-266752-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.049		0.039	0.014	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.041		0.039	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.057		0.039	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.39	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.022	J	0.039	0.0076	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.046	J	0.39	0.0066	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.076	J	0.39	0.014	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.028	J	0.039	0.015	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.035	J	0.39	0.0068	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.075	J	0.39	0.0097	mg/Kg	1	☼	8270E	Total/NA
Aluminum	6790		22.2	6.1	mg/Kg	1	☼	6020B	Total/NA
Antimony	0.16	J	1.1	0.16	mg/Kg	1	☼	6020B	Total/NA
Arsenic	2.5		1.1	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	62.6		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.36	J	0.44	0.063	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.21	J	1.1	0.13	mg/Kg	1	☼	6020B	Total/NA
Calcium	32300		111	19.6	mg/Kg	1	☼	6020B	Total/NA
Chromium	16.4		2.2	1.0	mg/Kg	1	☼	6020B	Total/NA
Cobalt	5.0		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Copper	23.3		2.2	0.41	mg/Kg	1	☼	6020B	Total/NA
Iron	11300		66.6	22.4	mg/Kg	1	☼	6020B	Total/NA
Lead	81.7		0.67	0.22	mg/Kg	1	☼	6020B	Total/NA
Magnesium	5740		111	11.3	mg/Kg	1	☼	6020B	Total/NA
Manganese	216		4.4	0.45	mg/Kg	1	☼	6020B	Total/NA
Nickel	13.5		2.2	0.52	mg/Kg	1	☼	6020B	Total/NA
Potassium	1360		111	18.0	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.18	J	1.4	0.14	mg/Kg	1	☼	6020B	Total/NA
Sodium	309		111	50.7	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.093	J	0.44	0.045	mg/Kg	1	☼	6020B	Total/NA
Vanadium	20.8		2.2	0.23	mg/Kg	1	☼	6020B	Total/NA
Zinc	65.1		8.9	3.4	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.077		0.018	0.0086	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-03_31-33_20221003 — Lab Sample ID: 460-266752-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014		0.0012	0.0011	mg/Kg	1	☼	8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-03_31-33_20221003 (Continued) — Lab Sample ID: 460-266752-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	3030		20.0	5.5	mg/Kg	1	☼	6020B	Total/NA
Arsenic	0.86	J	1.0	0.10	mg/Kg	1	☼	6020B	Total/NA
Barium	19.1		2.0	0.14	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.16	J	0.40	0.057	mg/Kg	1	☼	6020B	Total/NA
Calcium	1560		99.8	17.7	mg/Kg	1	☼	6020B	Total/NA
Chromium	10.1		2.0	0.91	mg/Kg	1	☼	6020B	Total/NA
Cobalt	2.6		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	8.2		2.0	0.37	mg/Kg	1	☼	6020B	Total/NA
Iron	6720		59.9	20.2	mg/Kg	1	☼	6020B	Total/NA
Lead	2.7		0.60	0.20	mg/Kg	1	☼	6020B	Total/NA
Magnesium	1940		99.8	10.2	mg/Kg	1	☼	6020B	Total/NA
Manganese	177		4.0	0.40	mg/Kg	1	☼	6020B	Total/NA
Nickel	6.4		2.0	0.47	mg/Kg	1	☼	6020B	Total/NA
Potassium	510		99.8	16.2	mg/Kg	1	☼	6020B	Total/NA
Sodium	161		99.8	45.6	mg/Kg	1	☼	6020B	Total/NA
Vanadium	8.5		2.0	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	14.4		8.0	3.0	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.071		0.017	0.0081	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-04_0-2_20221003 — Lab Sample ID: 460-266752-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.025	J	0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]anthracene	0.092		0.037	0.013	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.080		0.037	0.0098	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.11		0.037	0.0095	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.042	J	0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.036	J	0.037	0.0072	mg/Kg	1	☼	8270E	Total/NA
Bis(2-ethylhexyl) phthalate	0.080	J	0.37	0.019	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.088	J	0.37	0.0062	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.17	J	0.37	0.013	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.048		0.037	0.014	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.10	J	0.37	0.0065	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.17	J	0.37	0.0092	mg/Kg	1	☼	8270E	Total/NA
Aluminum	9180		21.7	6.0	mg/Kg	1	☼	6020B	Total/NA
Antimony	0.49	J	1.1	0.16	mg/Kg	1	☼	6020B	Total/NA
Arsenic	4.0		1.1	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	78.8		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.63		0.43	0.062	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.43	J	1.1	0.12	mg/Kg	1	☼	6020B	Total/NA
Calcium	9950		109	19.2	mg/Kg	1	☼	6020B	Total/NA
Chromium	19.1		2.2	0.99	mg/Kg	1	☼	6020B	Total/NA
Cobalt	9.6		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Copper	34.8		2.2	0.40	mg/Kg	1	☼	6020B	Total/NA
Iron	20700		65.1	21.9	mg/Kg	1	☼	6020B	Total/NA
Lead	80.0		0.65	0.22	mg/Kg	1	☼	6020B	Total/NA
Magnesium	4900		109	11.1	mg/Kg	1	☼	6020B	Total/NA
Manganese	689		4.3	0.44	mg/Kg	1	☼	6020B	Total/NA
Nickel	20.7		2.2	0.51	mg/Kg	1	☼	6020B	Total/NA
Potassium	2720		109	17.6	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.35	J	1.4	0.14	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-04_0-2_20221003 (Continued) — Lab Sample ID: 460-266752-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	301		109	49.6	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.21	J	0.43	0.045	mg/Kg	1	☼	6020B	Total/NA
Vanadium	31.6		2.2	0.22	mg/Kg	1	☼	6020B	Total/NA
Zinc	107		8.7	3.3	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.59		0.017	0.0080	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-04_32-34_20221003 — Lab Sample ID: 460-266752-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4170		20.2	5.6	mg/Kg	1	☼	6020B	Total/NA
Arsenic	1.3		1.0	0.10	mg/Kg	1	☼	6020B	Total/NA
Barium	35.4		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.26	J	0.40	0.058	mg/Kg	1	☼	6020B	Total/NA
Calcium	1230		101	17.9	mg/Kg	1	☼	6020B	Total/NA
Chromium	19.3		2.0	0.92	mg/Kg	1	☼	6020B	Total/NA
Cobalt	4.6		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	18.3		2.0	0.37	mg/Kg	1	☼	6020B	Total/NA
Iron	10400		60.7	20.4	mg/Kg	1	☼	6020B	Total/NA
Lead	6.1		0.61	0.20	mg/Kg	1	☼	6020B	Total/NA
Magnesium	2050		101	10.3	mg/Kg	1	☼	6020B	Total/NA
Manganese	268		4.0	0.41	mg/Kg	1	☼	6020B	Total/NA
Nickel	10.2		2.0	0.48	mg/Kg	1	☼	6020B	Total/NA
Potassium	826		101	16.4	mg/Kg	1	☼	6020B	Total/NA
Sodium	199		101	46.2	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.070	J	0.40	0.041	mg/Kg	1	☼	6020B	Total/NA
Vanadium	15.3		2.0	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	27.3		8.1	3.1	mg/Kg	1	☼	6020B	Total/NA

Client Sample ID: SB-07_0-2_20221003 — Lab Sample ID: 460-266752-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.010		0.0013	0.0012	mg/Kg	1	☼	8260D	Total/NA
Tetrachloroethene	0.00024		0.00022	0.000066	mg/Kg	1	☼	8260D	Total/NA
Benzo[a]anthracene	0.061		0.037	0.013	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.056		0.037	0.0099	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.083		0.037	0.0097	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.029	J	0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.035	J	0.037	0.0073	mg/Kg	1	☼	8270E	Total/NA
Bis(2-ethylhexyl) phthalate	0.022	J	0.37	0.020	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.062	J	0.37	0.0063	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.094	J	0.37	0.013	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.034	J	0.037	0.015	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.039	J	0.37	0.0066	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.093	J	0.37	0.0093	mg/Kg	1	☼	8270E	Total/NA
Aluminum	5980		21.0	5.8	mg/Kg	1	☼	6020B	Total/NA
Antimony	0.20	J	1.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Arsenic	3.9		1.0	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	66.6		2.1	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.31	J	0.42	0.060	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.33	J	1.0	0.12	mg/Kg	1	☼	6020B	Total/NA
Calcium	27200		105	18.6	mg/Kg	1	☼	6020B	Total/NA
Chromium	15.1		2.1	0.95	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-07_0-2_20221003 (Continued) — Lab Sample ID: 460-266752-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	5.4		2.1	0.16	mg/Kg	1	☼	6020B	Total/NA
Copper	39.8		2.1	0.39	mg/Kg	1	☼	6020B	Total/NA
Iron	13300		62.9	21.2	mg/Kg	1	☼	6020B	Total/NA
Lead	131		0.63	0.21	mg/Kg	1	☼	6020B	Total/NA
Magnesium	11900		105	10.7	mg/Kg	1	☼	6020B	Total/NA
Manganese	274		4.2	0.42	mg/Kg	1	☼	6020B	Total/NA
Nickel	16.8		2.1	0.49	mg/Kg	1	☼	6020B	Total/NA
Potassium	1220		105	17.0	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.19	J	1.3	0.13	mg/Kg	1	☼	6020B	Total/NA
Silver	0.11	J	0.42	0.093	mg/Kg	1	☼	6020B	Total/NA
Sodium	402		105	47.9	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.11	J	0.42	0.043	mg/Kg	1	☼	6020B	Total/NA
Vanadium	32.6		2.1	0.22	mg/Kg	1	☼	6020B	Total/NA
Zinc	109		8.4	3.2	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.11		0.017	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-07_32-34_20221003 — Lab Sample ID: 460-266752-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.031		0.0012	0.0012	mg/Kg	1	☼	8260D	Total/NA
Tetrachloroethene	0.00024		0.00020	0.000061	mg/Kg	1	☼	8260D	Total/NA
Aluminum	3830		19.9	5.5	mg/Kg	1	☼	6020B	Total/NA
Arsenic	1.0		1.0	0.10	mg/Kg	1	☼	6020B	Total/NA
Barium	29.2		2.0	0.14	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.22	J	0.40	0.057	mg/Kg	1	☼	6020B	Total/NA
Calcium	6370		99.7	17.7	mg/Kg	1	☼	6020B	Total/NA
Chromium	10.2		2.0	0.91	mg/Kg	1	☼	6020B	Total/NA
Cobalt	3.6		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	15.4		2.0	0.37	mg/Kg	1	☼	6020B	Total/NA
Iron	8020		59.8	20.1	mg/Kg	1	☼	6020B	Total/NA
Lead	13.7		0.60	0.20	mg/Kg	1	☼	6020B	Total/NA
Magnesium	4700		99.7	10.2	mg/Kg	1	☼	6020B	Total/NA
Manganese	212		4.0	0.40	mg/Kg	1	☼	6020B	Total/NA
Nickel	8.1		2.0	0.47	mg/Kg	1	☼	6020B	Total/NA
Potassium	729		99.7	16.2	mg/Kg	1	☼	6020B	Total/NA
Sodium	170		99.7	45.6	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.062	J	0.40	0.041	mg/Kg	1	☼	6020B	Total/NA
Vanadium	13.4		2.0	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	21.4		8.0	3.0	mg/Kg	1	☼	6020B	Total/NA

Client Sample ID: SB-05_0-2_20221004 — Lab Sample ID: 460-266826-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0097		0.0011	0.00033	mg/Kg	1	☼	8260D	Total/NA
1,1'-Biphenyl	0.14	J	0.37	0.013	mg/Kg	1	☼	8270E	Total/NA
2-Methylnaphthalene	0.28	J	0.37	0.010	mg/Kg	1	☼	8270E	Total/NA
Acenaphthene	2.7		0.37	0.010	mg/Kg	1	☼	8270E	Total/NA
Acenaphthylene	0.67		0.37	0.010	mg/Kg	1	☼	8270E	Total/NA
Anthracene	6.5		0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	7.5		0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	7.6		0.037	0.0072	mg/Kg	1	☼	8270E	Total/NA
Carbazole	1.9		0.37	0.014	mg/Kg	1	☼	8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-05_0-2_20221004 (Continued)

Lab Sample ID: 460-266826-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	2.7		0.037	0.016	mg/Kg	1	☼	8270E	Total/NA
Dibenzofuran	1.2		0.37	0.012	mg/Kg	1	☼	8270E	Total/NA
Di-n-butyl phthalate	0.026	J	0.37	0.014	mg/Kg	1	☼	8270E	Total/NA
Fluorene	2.5		0.37	0.011	mg/Kg	1	☼	8270E	Total/NA
Naphthalene	0.47		0.37	0.0063	mg/Kg	1	☼	8270E	Total/NA
N-Nitrosodiphenylamine	0.056	J	0.37	0.030	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]anthracene - DL	25		0.37	0.13	mg/Kg	10	☼	8270E	Total/NA
Benzo[a]pyrene - DL	23		0.37	0.098	mg/Kg	10	☼	8270E	Total/NA
Benzo[b]fluoranthene - DL	29		0.37	0.095	mg/Kg	10	☼	8270E	Total/NA
Chrysene - DL	23		3.7	0.062	mg/Kg	10	☼	8270E	Total/NA
Fluoranthene - DL	48		3.7	0.13	mg/Kg	10	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene - DL	17		0.37	0.14	mg/Kg	10	☼	8270E	Total/NA
Phenanthrene - DL	27		3.7	0.064	mg/Kg	10	☼	8270E	Total/NA
Pyrene - DL	38		3.7	0.091	mg/Kg	10	☼	8270E	Total/NA
4,4'-DDT	0.0063	J	0.0074	0.0014	mg/Kg	1	☼	8081B	Total/NA
Chlordane (technical)	0.12		0.074	0.018	mg/Kg	1	☼	8081B	Total/NA
cis-Chlordane	0.013	p	0.0074	0.0012	mg/Kg	1	☼	8081B	Total/NA
Dieldrin	0.0027		0.0022	0.00097	mg/Kg	1	☼	8081B	Total/NA
Aluminum	6680		21.8	6.0	mg/Kg	1	☼	6020B	Total/NA
Antimony	0.30	J	1.1	0.16	mg/Kg	1	☼	6020B	Total/NA
Arsenic	6.9		1.1	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	119		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.40	J	0.44	0.062	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.66	J	1.1	0.12	mg/Kg	1	☼	6020B	Total/NA
Calcium	18600		109	19.3	mg/Kg	1	☼	6020B	Total/NA
Chromium	15.5		2.2	0.99	mg/Kg	1	☼	6020B	Total/NA
Cobalt	5.3		2.2	0.16	mg/Kg	1	☼	6020B	Total/NA
Copper	63.1		2.2	0.40	mg/Kg	1	☼	6020B	Total/NA
Iron	13600		65.3	22.0	mg/Kg	1	☼	6020B	Total/NA
Lead	283		0.65	0.22	mg/Kg	1	☼	6020B	Total/NA
Magnesium	5510		109	11.1	mg/Kg	1	☼	6020B	Total/NA
Manganese	265		4.4	0.44	mg/Kg	1	☼	6020B	Total/NA
Nickel	16.3		2.2	0.51	mg/Kg	1	☼	6020B	Total/NA
Potassium	1050		109	17.6	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.48	J	1.4	0.14	mg/Kg	1	☼	6020B	Total/NA
Silver	0.25	J	0.44	0.097	mg/Kg	1	☼	6020B	Total/NA
Sodium	444		109	49.7	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.13	J	0.44	0.045	mg/Kg	1	☼	6020B	Total/NA
Vanadium	28.1		2.2	0.22	mg/Kg	1	☼	6020B	Total/NA
Zinc	149		8.7	3.3	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.094		0.019	0.0089	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-05_29-31_20221004

Lab Sample ID: 460-266826-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.14		0.0096	0.0092	mg/Kg	1	☼	8260D	Total/NA
Tetrachloroethene	0.0014	J	0.0016	0.00049	mg/Kg	1	☼	8260D	Total/NA
Acenaphthene	0.030	J	0.34	0.0097	mg/Kg	1	☼	8270E	Total/NA
Acenaphthylene	0.037	J	0.34	0.0098	mg/Kg	1	☼	8270E	Total/NA
Anthracene	0.080	J	0.34	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]anthracene	0.27		0.034	0.012	mg/Kg	1	☼	8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-05_29-31_20221004 (Continued) — Lab Sample ID: 460-266826-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.29		0.034	0.0091	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.39		0.034	0.0088	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	1.3		0.34	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.14		0.034	0.0067	mg/Kg	1	☼	8270E	Total/NA
Carbazole	0.023	J	0.34	0.013	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.20	J	0.34	0.0058	mg/Kg	1	☼	8270E	Total/NA
Dibenz(a,h)anthracene	0.22		0.034	0.015	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.46		0.34	0.012	mg/Kg	1	☼	8270E	Total/NA
Fluorene	0.018	J	0.34	0.010	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	1.2		0.034	0.013	mg/Kg	1	☼	8270E	Total/NA
Naphthalene	0.0062	J	0.34	0.0059	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.18	J	0.34	0.0060	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.39		0.34	0.0085	mg/Kg	1	☼	8270E	Total/NA
Aluminum	3380		20.7	5.7	mg/Kg	1	☼	6020B	Total/NA
Arsenic	0.72	J	1.0	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	22.4		2.1	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.19	J	0.41	0.059	mg/Kg	1	☼	6020B	Total/NA
Calcium	18100		104	18.4	mg/Kg	1	☼	6020B	Total/NA
Chromium	9.7		2.1	0.94	mg/Kg	1	☼	6020B	Total/NA
Cobalt	3.0		2.1	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	8.9		2.1	0.38	mg/Kg	1	☼	6020B	Total/NA
Iron	6800		62.2	20.9	mg/Kg	1	☼	6020B	Total/NA
Lead	4.8		0.62	0.21	mg/Kg	1	☼	6020B	Total/NA
Magnesium	9550		104	10.6	mg/Kg	1	☼	6020B	Total/NA
Manganese	190		4.1	0.42	mg/Kg	1	☼	6020B	Total/NA
Nickel	6.7		2.1	0.49	mg/Kg	1	☼	6020B	Total/NA
Potassium	694		104	16.8	mg/Kg	1	☼	6020B	Total/NA
Sodium	175		104	47.4	mg/Kg	1	☼	6020B	Total/NA
Vanadium	12.5		2.1	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	16.4		8.3	3.2	mg/Kg	1	☼	6020B	Total/NA

Client Sample ID: SB-06_0-2_20221004 — Lab Sample ID: 460-266826-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.010	J	0.36	0.010	mg/Kg	1	☼	8270E	Total/NA
Anthracene	0.028	J	0.36	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.13		0.036	0.0096	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	0.17		0.036	0.0094	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.062	J	0.36	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	0.066		0.036	0.0071	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.11	J	0.36	0.0061	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.22	J	0.36	0.013	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.036	0.014	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.12	J	0.36	0.0064	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.21	J	0.36	0.0090	mg/Kg	1	☼	8270E	Total/NA
Aluminum	6750		20.8	5.7	mg/Kg	1	☼	6020B	Total/NA
Arsenic	3.4		1.0	0.11	mg/Kg	1	☼	6020B	Total/NA
Barium	37.3		2.1	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.41	J	0.42	0.059	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.16	J	1.0	0.12	mg/Kg	1	☼	6020B	Total/NA
Calcium	8910		104	18.4	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-06_0-2_20221004 (Continued) — Lab Sample ID: 460-266826-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	12.3		2.1	0.95	mg/Kg	1	☼	6020B	Total/NA
Cobalt	6.0		2.1	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	27.7		2.1	0.38	mg/Kg	1	☼	6020B	Total/NA
Iron	11500		62.5	21.0	mg/Kg	1	☼	6020B	Total/NA
Lead	30.4		0.62	0.21	mg/Kg	1	☼	6020B	Total/NA
Magnesium	3720		104	10.6	mg/Kg	1	☼	6020B	Total/NA
Manganese	335		4.2	0.42	mg/Kg	1	☼	6020B	Total/NA
Nickel	12.3		2.1	0.49	mg/Kg	1	☼	6020B	Total/NA
Potassium	763		104	16.9	mg/Kg	1	☼	6020B	Total/NA
Selenium	0.19	J	1.3	0.13	mg/Kg	1	☼	6020B	Total/NA
Sodium	281		104	47.6	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.079	J	0.42	0.043	mg/Kg	1	☼	6020B	Total/NA
Vanadium	17.2		2.1	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	42.5		8.3	3.2	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.075		0.017	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-06_29-31_20221004 — Lab Sample ID: 460-266826-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.00087	J	0.0012	0.00037	mg/Kg	1	☼	8260D	Total/NA
Anthracene	0.023	J	0.34	0.010	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	0.053		0.034	0.0091	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.34	0.010	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.049	J	0.34	0.0058	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.10	J	0.34	0.012	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	0.071		0.034	0.013	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.076	J	0.34	0.0060	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.10	J	0.34	0.0085	mg/Kg	1	☼	8270E	Total/NA
Aluminum	3730		20.1	5.5	mg/Kg	1	☼	6020B	Total/NA
Arsenic	0.79	J	1.0	0.10	mg/Kg	1	☼	6020B	Total/NA
Barium	23.0		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.19	J	0.40	0.057	mg/Kg	1	☼	6020B	Total/NA
Calcium	22200		101	17.8	mg/Kg	1	☼	6020B	Total/NA
Chromium	9.1		2.0	0.91	mg/Kg	1	☼	6020B	Total/NA
Cobalt	3.7		2.0	0.15	mg/Kg	1	☼	6020B	Total/NA
Copper	9.6		2.0	0.37	mg/Kg	1	☼	6020B	Total/NA
Iron	8350		60.4	20.3	mg/Kg	1	☼	6020B	Total/NA
Lead	2.2		0.60	0.20	mg/Kg	1	☼	6020B	Total/NA
Magnesium	14700		101	10.3	mg/Kg	1	☼	6020B	Total/NA
Manganese	176		4.0	0.41	mg/Kg	1	☼	6020B	Total/NA
Nickel	7.9		2.0	0.47	mg/Kg	1	☼	6020B	Total/NA
Potassium	918		101	16.3	mg/Kg	1	☼	6020B	Total/NA
Sodium	281		101	46.0	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.049	J	0.40	0.041	mg/Kg	1	☼	6020B	Total/NA
Vanadium	15.5		2.0	0.21	mg/Kg	1	☼	6020B	Total/NA
Zinc	22.7		8.1	3.1	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.034		0.016	0.0075	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-01_0-2_20221005 — Lab Sample ID: 460-266877-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.00055	J	0.0013	0.00033	mg/Kg	1	☼	8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-01_0-2_20221005 (Continued)

Lab Sample ID: 460-266877-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	0.081	J	0.36	0.013	mg/Kg	1	☼	8270E	Total/NA
2-Methylnaphthalene	0.28	J	0.36	0.010	mg/Kg	1	☼	8270E	Total/NA
Acenaphthene	0.84		0.36	0.010	mg/Kg	1	☼	8270E	Total/NA
Acenaphthylene	0.22	J	0.36	0.010	mg/Kg	1	☼	8270E	Total/NA
Anthracene	2.3		0.36	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]anthracene	6.5		0.036	0.013	mg/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	5.3		0.036	0.0096	mg/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	7.1		0.036	0.0093	mg/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	3.3		0.36	0.011	mg/Kg	1	☼	8270E	Total/NA
Benzo[k]fluoranthene	2.3		0.036	0.0071	mg/Kg	1	☼	8270E	Total/NA
Carbazole	0.86		0.36	0.014	mg/Kg	1	☼	8270E	Total/NA
Chrysene	6.0		0.36	0.0061	mg/Kg	1	☼	8270E	Total/NA
Dibenz(a,h)anthracene	0.95		0.036	0.016	mg/Kg	1	☼	8270E	Total/NA
Dibenzofuran	0.50		0.36	0.012	mg/Kg	1	☼	8270E	Total/NA
Fluorene	0.77		0.36	0.011	mg/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	4.2		0.036	0.014	mg/Kg	1	☼	8270E	Total/NA
Naphthalene	0.37		0.36	0.0062	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene - DL	18		1.8	0.063	mg/Kg	5	☼	8270E	Total/NA
Phenanthrene - DL	16		1.8	0.032	mg/Kg	5	☼	8270E	Total/NA
Pyrene - DL	17		1.8	0.045	mg/Kg	5	☼	8270E	Total/NA
4,4'-DDT	0.0033	J	0.0073	0.0013	mg/Kg	1	☼	8081B	Total/NA
Dieldrin	0.0020	J	0.0022	0.00095	mg/Kg	1	☼	8081B	Total/NA
Aluminum	5960		17.3	4.8	mg/Kg	1	☼	6020B	Total/NA
Antimony	0.25	J	0.87	0.13	mg/Kg	1	☼	6020B	Total/NA
Arsenic	2.2		0.87	0.089	mg/Kg	1	☼	6020B	Total/NA
Barium	35.1		1.7	0.13	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.32	J	0.35	0.049	mg/Kg	1	☼	6020B	Total/NA
Cadmium	0.098	J	0.87	0.098	mg/Kg	1	☼	6020B	Total/NA
Calcium	5840		86.6	15.3	mg/Kg	1	☼	6020B	Total/NA
Chromium	16.7		1.7	0.79	mg/Kg	1	☼	6020B	Total/NA
Cobalt	5.2		1.7	0.13	mg/Kg	1	☼	6020B	Total/NA
Copper	15.2		1.7	0.32	mg/Kg	1	☼	6020B	Total/NA
Iron	10500		51.9	17.5	mg/Kg	1	☼	6020B	Total/NA
Lead	19.1		0.52	0.17	mg/Kg	1	☼	6020B	Total/NA
Magnesium	2460		86.6	8.8	mg/Kg	1	☼	6020B	Total/NA
Manganese	338		3.5	0.35	mg/Kg	1	☼	6020B	Total/NA
Nickel	12.1		1.7	0.41	mg/Kg	1	☼	6020B	Total/NA
Potassium	714		86.6	14.0	mg/Kg	1	☼	6020B	Total/NA
Sodium	152		86.6	39.6	mg/Kg	1	☼	6020B	Total/NA
Thallium	0.058	J	0.35	0.035	mg/Kg	1	☼	6020B	Total/NA
Vanadium	21.8		1.7	0.18	mg/Kg	1	☼	6020B	Total/NA
Zinc	28.9		6.9	2.6	mg/Kg	1	☼	6020B	Total/NA
Mercury	0.018		0.017	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-01_31-33_20221005

Lab Sample ID: 460-266877-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.16		0.0079	0.0075	mg/Kg	1	☼	8260D	Total/NA
Tetrachloroethene	0.0020		0.0013	0.00040	mg/Kg	1	☼	8260D	Total/NA
Aluminum	2340		16.1	4.4	mg/Kg	1	☼	6020B	Total/NA
Arsenic	0.62	J	0.81	0.083	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-01_31-33_20221005 (Continued)

Lab Sample ID: 460-266877-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	20.7		1.6	0.12	mg/Kg	1	☼	6020B	Total/NA
Beryllium	0.12	J	0.32	0.046	mg/Kg	1	☼	6020B	Total/NA
Calcium	7590		80.7	14.3	mg/Kg	1	☼	6020B	Total/NA
Chromium	8.0		1.6	0.73	mg/Kg	1	☼	6020B	Total/NA
Cobalt	2.9		1.6	0.12	mg/Kg	1	☼	6020B	Total/NA
Copper	6.8		1.6	0.30	mg/Kg	1	☼	6020B	Total/NA
Iron	5240		48.4	16.3	mg/Kg	1	☼	6020B	Total/NA
Lead	2.8		0.48	0.16	mg/Kg	1	☼	6020B	Total/NA
Magnesium	4370		80.7	8.2	mg/Kg	1	☼	6020B	Total/NA
Manganese	183		3.2	0.33	mg/Kg	1	☼	6020B	Total/NA
Nickel	5.7		1.6	0.38	mg/Kg	1	☼	6020B	Total/NA
Potassium	383		80.7	13.1	mg/Kg	1	☼	6020B	Total/NA
Sodium	117		80.7	36.9	mg/Kg	1	☼	6020B	Total/NA
Vanadium	7.4		1.6	0.17	mg/Kg	1	☼	6020B	Total/NA
Zinc	10.2		6.5	2.5	mg/Kg	1	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-02_0-2_20221003
Date Collected: 10/03/22 09:10
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-1
Matrix: Solid
Percent Solids: 93.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00020	U	0.00020	0.000047	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,1,2,2-Tetrachloroethane	0.00020	U	0.00020	0.000043	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00020	U	0.00020	0.000061	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,1,2-Trichloroethane	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,1-Dichloroethane	0.00020	U	0.00020	0.000041	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,1-Dichloroethene	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2,3-Trichlorobenzene	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2,4-Trichlorobenzene	0.00020	U	0.00020	0.000072	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2,4-Trimethylbenzene	0.00020	U	0.00020	0.000049	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2-Dibromo-3-Chloropropane	0.00020	U	0.00020	0.000092	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2-Dichlorobenzene	0.00020	U	0.00020	0.000073	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2-Dichloroethane	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,2-Dichloropropane	0.00020	U	0.00020	0.000085	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,3,5-Trimethylbenzene	0.00020	U	0.00020	0.000063	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,3-Dichlorobenzene	0.00020	U	0.00020	0.000073	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
1,4-Dichlorobenzene	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
2-Butanone (MEK)	0.0010	U	0.0010	0.000074	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
2-Hexanone	0.0010	U	0.0010	0.00034	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
4-Methyl-2-pentanone (MIBK)	0.0010	U	0.0010	0.00031	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Acetone	0.0012	U	0.0012	0.0011	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Benzene	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Bromoform	0.00020	U	0.00020	0.000085	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Bromomethane	0.00040	U	0.00040	0.00020	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Carbon disulfide	0.00020	U	0.00020	0.000053	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Carbon tetrachloride	0.00020	U	0.00020	0.000078	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chlorobenzene	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chlorobromomethane	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chlorodibromomethane	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chloroethane	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chloroform	0.00020	U	0.00020	0.00020	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Chloromethane	0.00020	U	0.00020	0.000087	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
cis-1,2-Dichloroethene	0.00020	U	0.00020	0.000072	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
cis-1,3-Dichloropropene	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Cyclohexane	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Dichlorobromomethane	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Dichlorodifluoromethane	0.00020	U	0.00020	0.000068	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Ethylbenzene	0.00020	U	0.00020	0.000040	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Ethylene Dibromide	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Isopropylbenzene	0.00020	U	0.00020	0.000057	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Methyl acetate	0.0010	U	0.0010	0.00086	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Methyl tert-butyl ether	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Methylcyclohexane	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Methylene Chloride	0.00040	U	0.00040	0.00023	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
m-Xylene & p-Xylene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
n-Butylbenzene	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
N-Propylbenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
o-Xylene	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
sec-Butylbenzene	0.00020	U	0.00020	0.000058	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Styrene	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1

Client Sample ID: SB-02_0-2_20221003
Date Collected: 10/03/22 09:10
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-1
Matrix: Solid
Percent Solids: 93.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Tetrachloroethene	**0.0013**		0.00020	0.000061	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Toluene	0.00020	U	0.00020	0.000047	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
trans-1,2-Dichloroethene	0.00020	U	0.00020	0.000049	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
trans-1,3-Dichloropropene	0.00020	U	0.00020	0.000053	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Trichloroethene	0.00020	U	0.00020	0.000065	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Trichlorofluoromethane	0.00020	U	0.00020	0.000082	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Vinyl chloride	0.00020	U	0.00020	0.00011	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1
Xylenes, Total	0.00040	U	0.00040	0.000035	mg/Kg	☼	10/04/22 13:27	10/05/22 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 145*	*10/04/22 13:27*	*10/05/22 17:15*	*1*
4-Bromofluorobenzene	*104*		*75 - 139*	*10/04/22 13:27*	*10/05/22 17:15*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 139*	*10/04/22 13:27*	*10/05/22 17:15*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*	*10/04/22 13:27*	*10/05/22 17:15*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
1,2,4,5-Tetrachlorobenzene	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
1,4-Dioxane	0.035	U	0.035	0.031	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,2'-oxybis[1-chloropropane]	0.35	U	0.35	0.0064	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,3,4,6-Tetrachlorophenol	0.35	U	0.35	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4,5-Trichlorophenol	0.35	U	0.35	0.036	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.045	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4-Dichlorophenol	0.14	U	0.14	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4-Dimethylphenol	0.35	U	0.35	0.042	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4-Dinitrophenol	0.28	U	0.28	0.17	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,4-Dinitrotoluene	0.072	U	0.072	0.038	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2,6-Dinitrotoluene	0.072	U	0.072	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Chloronaphthalene	0.35	U	0.35	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Chlorophenol	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Methylnaphthalene	0.35	U	0.35	0.0099	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Methylphenol	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Nitroaniline	0.35	U	0.35	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
2-Nitrophenol	0.35	U	0.35	0.035	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
3 & 4 Methylphenol	0.35	U	0.35	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.053	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
3-Nitroaniline	0.35	U	0.35	0.084	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4,6-Dinitro-2-methylphenol	0.28	U	0.28	0.14	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Bromophenyl phenyl ether	0.35	U	0.35	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Chloro-3-methylphenol	0.35	U	0.35	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Chloroaniline	0.35	U	0.35	0.063	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Chlorophenyl phenyl ether	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Methylphenol	0.35	U	0.35	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Nitroaniline	0.35	U	0.35	0.041	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
4-Nitrophenol	0.72	U	0.72	0.058	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Acenaphthene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Acenaphthylene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Acetophenone	0.35	U	0.35	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1

Client Sample ID: SB-02_0-2_20221003
Date Collected: 10/03/22 09:10
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-1
Matrix: Solid
Percent Solids: 93.1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Atrazine	0.14	U	0.14	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzaldehyde	0.35	U	0.35	0.058	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzo[a]anthracene	**0.031**	**J**	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzo[a]pyrene	**0.025**	**J**	0.035	0.0094	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzo[b]fluoranthene	**0.033**	**J**	0.035	0.0091	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Benzo[k]fluoranthene	**0.014**	**J**	0.035	0.0069	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Bis(2-chloroethoxy)methane	0.35	U	0.35	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Bis(2-chloroethyl)ether	0.035	U	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Bis(2-ethylhexyl) phthalate	0.35	U	0.35	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Butyl benzyl phthalate	0.35	U	0.35	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Caprolactam	0.35	U	0.35	0.055	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Carbazole	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Chrysene	**0.025**	**J**	0.35	0.0060	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Dibenz(a,h)anthracene	0.035	U	0.035	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Dibenzofuran	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Diethyl phthalate	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Dimethyl phthalate	0.35	U	0.35	0.080	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Di-n-butyl phthalate	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Di-n-octyl phthalate	0.35	U	0.35	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Fluoranthene	**0.039**	**J**	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Fluorene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Hexachlorobenzene	0.035	U	0.035	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Hexachlorobutadiene	0.072	U	0.072	0.0075	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Hexachlorocyclopentadiene	0.35	U	0.35	0.031	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Hexachloroethane	0.035	U	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Indeno[1,2,3-cd]pyrene	**0.018**	**J**	0.035	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Isophorone	0.14	U	0.14	0.10	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Naphthalene	0.35	U	0.35	0.0061	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Nitrobenzene	0.035	U	0.035	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
N-Nitrosodi-n-propylamine	0.035	U	0.035	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
N-Nitrosodiphenylamine	0.35	U	0.35	0.029	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Pentachlorophenol	0.28	U	0.28	0.072	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Phenanthrene	**0.015**	**J**	0.35	0.0062	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Phenol	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1
Pyrene	**0.039**	**J**	0.35	0.0088	mg/Kg	☼	10/04/22 18:31	10/05/22 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 123*	*10/04/22 18:31*	*10/05/22 06:08*	*1*
2-Fluorobiphenyl	*84*		*22 - 122*	*10/04/22 18:31*	*10/05/22 06:08*	*1*
2-Fluorophenol (Surr)	*72*		*18 - 123*	*10/04/22 18:31*	*10/05/22 06:08*	*1*
Nitrobenzene-d5 (Surr)	*74*		*16 - 125*	*10/04/22 18:31*	*10/05/22 06:08*	*1*
Phenol-d5 (Surr)	*70*		*23 - 120*	*10/04/22 18:31*	*10/05/22 06:08*	*1*
Terphenyl-d14 (Surr)	*87*		*25 - 126*	*10/04/22 18:31*	*10/05/22 06:08*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0072	U	0.0072	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
4,4'-DDE	0.0072	U	0.0072	0.00084	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1

Client Sample ID: SB-02_0-2_20221003

Date Collected: 10/03/22 09:10
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-1

Matrix: Solid
Percent Solids: 93.1

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0072	U	0.0072	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Aldrin	0.0072	U	0.0072	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
alpha-BHC	0.0021	U	0.0021	0.00073	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
beta-BHC	0.0021	U	0.0021	0.00080	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Chlordane (technical)	**0.057**	**J**	0.072	0.017	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
cis-Chlordane	**0.0052**	**J p**	0.0072	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
delta-BHC	0.0021	U	0.0021	0.00044	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Dieldrin	0.0021	U	0.0021	0.00093	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endosulfan I	0.0072	U	0.0072	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endosulfan II	0.0072	U	0.0072	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endosulfan sulfate	0.0072	U	0.0072	0.00090	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endrin	0.0072	U	0.0072	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endrin aldehyde	0.0072	U	0.0072	0.0017	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Endrin ketone	0.0072	U	0.0072	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00066	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Heptachlor	0.0072	U	0.0072	0.00084	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Heptachlor epoxide	0.0072	U	0.0072	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Methoxychlor	0.0072	U	0.0072	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1
Toxaphene	0.072	U	0.072	0.026	mg/Kg	☼	10/04/22 16:51	10/05/22 07:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:18*	*1*
DCB Decachlorobiphenyl	*69*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:18*	*1*
Tetrachloro-m-xylene	*93*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:18*	*1*
Tetrachloro-m-xylene	*88*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:18*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1221	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1232	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1242	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1248	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1254	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1260	**0.063**	**J**	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor-1262	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Aroclor 1268	0.072	U	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1
Polychlorinated biphenyls, Total	**0.063**	**J**	0.072	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 10:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*10 - 150*	*10/04/22 16:32*	*10/05/22 10:55*	*1*
DCB Decachlorobiphenyl	*93*		*10 - 150*	*10/04/22 16:32*	*10/05/22 10:55*	*1*
Tetrachloro-m-xylene	*91*		*42 - 150*	*10/04/22 16:32*	*10/05/22 10:55*	*1*
Tetrachloro-m-xylene	*86*		*42 - 150*	*10/04/22 16:32*	*10/05/22 10:55*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4180**		20.5	5.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Arsenic	**1.5**		1.0	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1

Client Sample ID: SB-02_0-2_20221003

Lab Sample ID: 460-266752-1
Date Collected: 10/03/22 09:10
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 93.1

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	36.3		2.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Beryllium	0.24	J	0.41	0.058	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Cadmium	0.14	J	1.0	0.12	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Calcium	7730		102	18.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Chromium	9.5		2.0	0.93	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Cobalt	3.7		2.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Copper	12.5		2.0	0.38	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Iron	7870		61.4	20.7	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Lead	13.0		0.61	0.20	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Magnesium	4190		102	10.4	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Manganese	207		4.1	0.41	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Nickel	8.8		2.0	0.48	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Potassium	744		102	16.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Selenium	0.16	J	1.3	0.13	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Silver	0.41	U	0.41	0.091	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Sodium	275		102	46.7	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Thallium	0.11	J	0.41	0.042	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Vanadium	14.8		2.0	0.21	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1
Zinc	36.2		8.2	3.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:13	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.017	0.0082	mg/Kg	☼	10/05/22 00:06	10/05/22 04:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.91	mg/Kg	☼	10/10/22 08:32	10/10/22 13:40	1
Percent Moisture (EPA Moisture)	6.9		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	93.1		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-02_31-33_20221003

Lab Sample ID: 460-266752-2
Date Collected: 10/03/22 09:15
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00019	U	0.00019	0.000045	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,1,2,2-Tetrachloroethane	0.00019	U	0.00019	0.000041	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00019	U	0.00019	0.000058	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,1,2-Trichloroethane	0.00019	U	0.00019	0.000034	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,1-Dichloroethane	0.00019	U	0.00019	0.000040	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,1-Dichloroethene	0.00019	U	0.00019	0.000044	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2,3-Trichlorobenzene	0.00019	U	0.00019	0.000035	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2,4-Trichlorobenzene	0.00019	U	0.00019	0.000069	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2,4-Trimethylbenzene	0.00019	U	0.00019	0.000048	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2-Dibromo-3-Chloropropane	0.00019	U	0.00019	0.000089	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2-Dichlorobenzene	0.00019	U	0.00019	0.000070	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2-Dichloroethane	0.00019	U	0.00019	0.000057	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,2-Dichloropropane	0.00019	U	0.00019	0.000082	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,3,5-Trimethylbenzene	0.00019	U	0.00019	0.000061	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1

Client Sample ID: SB-02_31-33_20221003
Date Collected: 10/03/22 09:15
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-2
Matrix: Solid
Percent Solids: 97.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.00019	U	0.00019	0.000071	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
1,4-Dichlorobenzene	0.00019	U	0.00019	0.000044	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
2-Butanone (MEK)	0.00097	U	0.00097	0.000071	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
2-Hexanone	0.00097	U	0.00097	0.00033	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
4-Methyl-2-pentanone (MIBK)	0.00097	U	0.00097	0.00030	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Acetone	**0.0071**		0.0012	0.0011	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Benzene	0.00019	U	0.00019	0.000050	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Bromoform	0.00019	U	0.00019	0.000082	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Bromomethane	0.00039	U	0.00039	0.00019	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Carbon disulfide	0.00019	U	0.00019	0.000051	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Carbon tetrachloride	0.00019	U	0.00019	0.000075	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chlorobenzene	0.00019	U	0.00019	0.000034	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chlorobromomethane	0.00019	U	0.00019	0.000054	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chlorodibromomethane	0.00019	U	0.00019	0.000038	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chloroethane	0.00019	U	0.00019	0.00010	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chloroform	0.00019	U	0.00019	0.00019	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Chloromethane	0.00019	U	0.00019	0.000084	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
cis-1,2-Dichloroethene	0.00019	U	0.00019	0.000069	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
cis-1,3-Dichloropropene	0.00019	U	0.00019	0.000053	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Cyclohexane	0.00019	U	0.00019	0.000043	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Dichlorobromomethane	0.00019	U	0.00019	0.000050	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Dichlorodifluoromethane	0.00019	U	0.00019	0.000065	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Ethylbenzene	0.00019	U	0.00019	0.000039	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Ethylene Dibromide	0.00019	U	0.00019	0.000035	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Isopropylbenzene	0.00019	U	0.00019	0.000055	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Methyl acetate	0.00097	U	0.00097	0.00083	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Methyl tert-butyl ether	0.00019	U	0.00019	0.000099	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Methylcyclohexane	0.00019	U	0.00019	0.000097	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Methylene Chloride	0.00039	U	0.00039	0.00022	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
m-Xylene & p-Xylene	0.00019	U	0.00019	0.000034	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
n-Butylbenzene	0.00019	U	0.00019	0.000057	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
N-Propylbenzene	0.00019	U	0.00019	0.000034	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
o-Xylene	0.00019	U	0.00019	0.000038	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
sec-Butylbenzene	0.00019	U	0.00019	0.000056	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Styrene	0.00019	U	0.00019	0.000054	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
tert-Butylbenzene	0.00019	U	0.00019	0.000053	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Tetrachloroethene	0.00019	U	0.00019	0.000059	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Toluene	0.00019	U	0.00019	0.000045	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
trans-1,2-Dichloroethene	0.00019	U	0.00019	0.000048	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
trans-1,3-Dichloropropene	0.00019	U	0.00019	0.000051	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Trichloroethene	0.00019	U	0.00019	0.000062	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Trichlorofluoromethane	0.00019	U	0.00019	0.000079	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Vinyl chloride	0.00019	U	0.00019	0.00011	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1
Xylenes, Total	0.00039	U	0.00039	0.000034	mg/Kg	☼	10/04/22 13:28	10/05/22 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 145*	*10/04/22 13:28*	*10/05/22 17:39*	*1*
4-Bromofluorobenzene	*101*		*75 - 139*	*10/04/22 13:28*	*10/05/22 17:39*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 139*	*10/04/22 13:28*	*10/05/22 17:39*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*	*10/04/22 13:28*	*10/05/22 17:39*	*1*

Client Sample ID: SB-02_31-33_20221003

Date Collected: 10/03/22 09:15
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-2

Matrix: Solid
Percent Solids: 97.2

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0061	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.043	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4-Dimethylphenol	0.34	U	0.34	0.040	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4-Dinitrophenol	0.27	U	0.27	0.17	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,4-Dinitrotoluene	0.069	U	0.069	0.036	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2,6-Dinitrotoluene	0.069	U	0.069	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Methylnaphthalene	0.34	U	0.34	0.0095	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.051	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
3-Nitroaniline	0.34	U	0.34	0.080	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Chloroaniline	0.34	U	0.34	0.060	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
4-Nitrophenol	0.69	U	0.69	0.055	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Acenaphthene	0.34	U	0.34	0.0096	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Acenaphthylene	0.34	U	0.34	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Anthracene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Atrazine	0.14	U	0.14	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzaldehyde	0.34	U	0.34	0.056	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzo[a]anthracene	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzo[a]pyrene	0.034	U	0.034	0.0090	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzo[b]fluoranthene	0.034	U	0.034	0.0088	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzo[g,h,i]perylene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Benzo[k]fluoranthene	0.034	U	0.034	0.0066	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Caprolactam	0.34	U	0.34	0.053	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Carbazole	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Chrysene	0.34	U	0.34	0.0057	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Dibenz(a,h)anthracene	0.034	U	0.034	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1

Client Sample ID: SB-02_31-33_20221003
Date Collected: 10/03/22 09:15
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-2
Matrix: Solid
Percent Solids: 97.2

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Dimethyl phthalate	0.34	U	0.34	0.077	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Fluoranthene	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Fluorene	0.34	U	0.34	0.0099	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Hexachlorobutadiene	0.069	U	0.069	0.0072	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Indeno[1,2,3-cd]pyrene	0.034	U	0.034	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Isophorone	0.14	U	0.14	0.098	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Naphthalene	0.34	U	0.34	0.0059	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Pentachlorophenol	0.27	U	0.27	0.069	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Phenanthrene	0.34	U	0.34	0.0059	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Phenol	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1
Pyrene	0.34	U	0.34	0.0084	mg/Kg	☼	10/04/22 18:31	10/05/22 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*10 - 123*	*10/04/22 18:31*	*10/05/22 06:31*	*1*
2-Fluorobiphenyl	*82*		*22 - 122*	*10/04/22 18:31*	*10/05/22 06:31*	*1*
2-Fluorophenol (Surr)	*71*		*18 - 123*	*10/04/22 18:31*	*10/05/22 06:31*	*1*
Nitrobenzene-d5 (Surr)	*70*		*16 - 125*	*10/04/22 18:31*	*10/05/22 06:31*	*1*
Phenol-d5 (Surr)	*68*		*23 - 120*	*10/04/22 18:31*	*10/05/22 06:31*	*1*
Terphenyl-d14 (Surr)	*88*		*25 - 126*	*10/04/22 18:31*	*10/05/22 06:31*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
4,4'-DDE	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
alpha-BHC	0.0020	U	0.0020	0.00070	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
beta-BHC	0.0020	U	0.0020	0.00077	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
delta-BHC	0.0020	U	0.0020	0.00042	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Dieldrin	0.0020	U	0.0020	0.00089	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endosulfan I	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endosulfan sulfate	0.0069	U	0.0069	0.00086	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endrin	0.0069	U	0.0069	0.00098	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00064	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Heptachlor	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1

Client Sample ID: SB-02_31-33_20221003
Date Collected: 10/03/22 09:15
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-2
Matrix: Solid
Percent Solids: 97.2

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/04/22 16:51	10/05/22 07:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:30*	*1*
DCB Decachlorobiphenyl	*75*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:30*	*1*
Tetrachloro-m-xylene	*97*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:30*	*1*
Tetrachloro-m-xylene	*91*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:30*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:12*	*1*
DCB Decachlorobiphenyl	*98*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:12*	*1*
Tetrachloro-m-xylene	*100*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:12*	*1*
Tetrachloro-m-xylene	*93*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:12*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2810**		18.9	5.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Antimony	0.94	U	0.94	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Arsenic	**0.61**	**J**	0.94	0.097	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Barium	**23.4**		1.9	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Beryllium	**0.23**	**J**	0.38	0.054	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Cadmium	**0.11**	**J**	0.94	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Calcium	**21600**		94.4	16.7	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Chromium	**8.3**		1.9	0.86	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Cobalt	**2.9**		1.9	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Copper	**9.5**		1.9	0.35	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Iron	**6500**		56.6	19.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Lead	**4.0**		0.57	0.19	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Magnesium	**12100**		94.4	9.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Manganese	**168**		3.8	0.38	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Nickel	**6.7**		1.9	0.44	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Potassium	**522**		94.4	15.3	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Selenium	**0.17**	**J**	1.2	0.12	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Silver	0.38	U	0.38	0.084	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Sodium	**201**		94.4	43.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Thallium	**0.069**	**J**	0.38	0.039	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1

Client Sample ID: SB-02_31-33_20221003

Lab Sample ID: 460-266752-2
Date Collected: 10/03/22 09:15
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.2

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	9.8		1.9	0.19	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1
Zinc	15.2		7.6	2.9	mg/Kg	☼	10/05/22 09:10	10/05/22 19:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.017	0.0082	mg/Kg	☼	10/05/22 00:06	10/05/22 04:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.88	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	2.8		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	97.2		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-03_0-2_20221003

Lab Sample ID: 460-266752-3
Date Collected: 10/03/22 15:00
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 85.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00023	U	0.00023	0.000053	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,1,2,2-Tetrachloroethane	0.00023	U	0.00023	0.000048	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00023	U	0.00023	0.000068	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,1,2-Trichloroethane	0.00023	U	0.00023	0.000040	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,1-Dichloroethane	0.00023	U	0.00023	0.000046	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,1-Dichloroethene	0.00023	U	0.00023	0.000051	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2,3-Trichlorobenzene	0.00023	U	0.00023	0.000041	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2,4-Trichlorobenzene	0.00023	U	0.00023	0.000081	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2,4-Trimethylbenzene	0.00023	U	0.00023	0.000055	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2-Dibromo-3-Chloropropane	0.00023	U	0.00023	0.00010	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2-Dichlorobenzene	0.00023	U	0.00023	0.000081	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2-Dichloroethane	0.00023	U	0.00023	0.000067	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,2-Dichloropropane	0.00023	U	0.00023	0.000095	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,3,5-Trimethylbenzene	0.00023	U	0.00023	0.000071	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,3-Dichlorobenzene	0.00023	U	0.00023	0.000082	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
1,4-Dichlorobenzene	0.00023	U	0.00023	0.000051	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
2-Butanone (MEK)	0.0011	U	0.0011	0.000083	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
2-Hexanone	0.0011	U	0.0011	0.00039	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
4-Methyl-2-pentanone (MIBK)	0.0011	U	0.0011	0.00035	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Acetone	0.0014	U	0.0014	0.0013	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Benzene	0.00023	U	0.00023	0.000058	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Bromoform	0.00023	U	0.00023	0.000096	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Bromomethane	0.00045	U	0.00045	0.00023	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Carbon disulfide	0.00023	U	0.00023	0.000060	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Carbon tetrachloride	0.00023	U	0.00023	0.000087	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chlorobenzene	0.00023	U	0.00023	0.000040	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chlorobromomethane	0.00023	U	0.00023	0.000063	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chlorodibromomethane	0.00023	U	0.00023	0.000044	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chloroethane	0.00023	U	0.00023	0.00012	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chloroform	0.00023	U	0.00023	0.00022	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Chloromethane	0.00023	U	0.00023	0.000098	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1

Client Sample ID: SB-03_0-2_20221003
Date Collected: 10/03/22 15:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-3
Matrix: Solid
Percent Solids: 85.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.00023	U	0.00023	0.000081	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
cis-1,3-Dichloropropene	0.00023	U	0.00023	0.000062	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Cyclohexane	0.00023	U	0.00023	0.000050	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Dichlorobromomethane	0.00023	U	0.00023	0.000058	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Dichlorodifluoromethane	0.00023	U	0.00023	0.000076	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Ethylbenzene	0.00023	U	0.00023	0.000045	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Ethylene Dibromide	0.00023	U	0.00023	0.000041	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Isopropylbenzene	0.00023	U	0.00023	0.000064	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Methyl acetate	0.0011	U	0.0011	0.00097	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Methyl tert-butyl ether	0.00023	U	0.00023	0.00012	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Methylcyclohexane	0.00023	U	0.00023	0.00011	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Methylene Chloride	0.00045	U	0.00045	0.00026	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
m-Xylene & p-Xylene	0.00023	U	0.00023	0.000039	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
n-Butylbenzene	0.00023	U	0.00023	0.000066	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
N-Propylbenzene	0.00023	U	0.00023	0.000039	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
o-Xylene	0.00023	U	0.00023	0.000044	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
sec-Butylbenzene	0.00023	U	0.00023	0.000065	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Styrene	0.00023	U	0.00023	0.000063	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
tert-Butylbenzene	0.00023	U	0.00023	0.000062	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Tetrachloroethene	0.00023	U	0.00023	0.000069	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Toluene	0.00023	U	0.00023	0.000053	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
trans-1,2-Dichloroethene	0.00023	U	0.00023	0.000055	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
trans-1,3-Dichloropropene	0.00023	U	0.00023	0.000060	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Trichloroethene	0.00023	U	0.00023	0.000072	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Trichlorofluoromethane	0.00023	U	0.00023	0.000091	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Vinyl chloride	0.00023	U	0.00023	0.00012	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1
Xylenes, Total	0.00045	U	0.00045	0.000039	mg/Kg	☼	10/04/22 13:28	10/05/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 145*	*10/04/22 13:28*	*10/05/22 18:05*	*1*
4-Bromofluorobenzene	*104*		*75 - 139*	*10/04/22 13:28*	*10/05/22 18:05*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 139*	*10/04/22 13:28*	*10/05/22 18:05*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*	*10/04/22 13:28*	*10/05/22 18:05*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.39	U	0.39	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
1,2,4,5-Tetrachlorobenzene	0.39	U	0.39	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
1,4-Dioxane	0.039	U	0.039	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,2'-oxybis[1-chloropropane]	0.39	U	0.39	0.0070	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,3,4,6-Tetrachlorophenol	0.39	U	0.39	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4,5-Trichlorophenol	0.39	U	0.39	0.040	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4,6-Trichlorophenol	0.16	U	0.16	0.050	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4-Dichlorophenol	0.16	U	0.16	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4-Dimethylphenol	0.39	U	0.39	0.046	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4-Dinitrophenol	0.31	U	0.31	0.19	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,4-Dinitrotoluene	0.079	U	0.079	0.042	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2,6-Dinitrotoluene	0.079	U	0.079	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2-Chloronaphthalene	0.39	U	0.39	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2-Chlorophenol	0.39	U	0.39	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1

Client Sample ID: SB-03_0-2_20221003
Date Collected: 10/03/22 15:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-3
Matrix: Solid
Percent Solids: 85.0

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.39	U	0.39	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2-Methylphenol	0.39	U	0.39	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2-Nitroaniline	0.39	U	0.39	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
2-Nitrophenol	0.39	U	0.39	0.039	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
3 & 4 Methylphenol	0.39	U	0.39	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
3,3'-Dichlorobenzidine	0.16	U	0.16	0.059	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
3-Nitroaniline	0.39	U	0.39	0.092	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4,6-Dinitro-2-methylphenol	0.31	U	0.31	0.16	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Bromophenyl phenyl ether	0.39	U	0.39	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Chloro-3-methylphenol	0.39	U	0.39	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Chloroaniline	0.39	U	0.39	0.069	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Chlorophenyl phenyl ether	0.39	U	0.39	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Methylphenol	0.39	U	0.39	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Nitroaniline	0.39	U	0.39	0.045	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
4-Nitrophenol	0.79	U	0.79	0.063	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Acenaphthene	0.39	U	0.39	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Acenaphthylene	0.39	U	0.39	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Acetophenone	0.39	U	0.39	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Anthracene	0.39	U	0.39	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Atrazine	0.16	U	0.16	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzaldehyde	0.39	U	0.39	0.064	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzo[a]anthracene	**0.049**		0.039	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzo[a]pyrene	**0.041**		0.039	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzo[b]fluoranthene	**0.057**		0.039	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzo[g,h,i]perylene	**0.024**	**J**	0.39	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Benzo[k]fluoranthene	**0.022**	**J**	0.039	0.0076	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Bis(2-chloroethoxy)methane	0.39	U	0.39	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Bis(2-chloroethyl)ether	0.039	U	0.039	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Bis(2-ethylhexyl) phthalate	0.39	U	0.39	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Butyl benzyl phthalate	0.39	U	0.39	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Caprolactam	0.39	U	0.39	0.060	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Carbazole	0.39	U	0.39	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Chrysene	**0.046**	**J**	0.39	0.0066	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Dibenz(a,h)anthracene	0.039	U	0.039	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Dibenzofuran	0.39	U	0.39	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Diethyl phthalate	0.39	U	0.39	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Dimethyl phthalate	0.39	U	0.39	0.088	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Di-n-butyl phthalate	0.39	U	0.39	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Di-n-octyl phthalate	0.39	U	0.39	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Fluoranthene	**0.076**	**J**	0.39	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Fluorene	0.39	U	0.39	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Hexachlorobenzene	0.039	U	0.039	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Hexachlorobutadiene	0.079	U	0.079	0.0083	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Hexachlorocyclopentadiene	0.39	U	0.39	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Hexachloroethane	0.039	U	0.039	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Indeno[1,2,3-cd]pyrene	**0.028**	**J**	0.039	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Isophorone	0.16	U	0.16	0.11	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Naphthalene	0.39	U	0.39	0.0067	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Nitrobenzene	0.039	U	0.039	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1

Client Sample ID: SB-03_0-2_20221003

Date Collected: 10/03/22 15:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-3

Matrix: Solid
Percent Solids: 85.0

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.039	U	0.039	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
N-Nitrosodiphenylamine	0.39	U	0.39	0.032	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Pentachlorophenol	0.31	U	0.31	0.080	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Phenanthrene	**0.035**	**J**	0.39	0.0068	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Phenol	0.39	U	0.39	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1
Pyrene	**0.075**	**J**	0.39	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 06:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	67		10 - 123	10/04/22 18:31	10/05/22 06:54	1
2-Fluorobiphenyl	83		22 - 122	10/04/22 18:31	10/05/22 06:54	1
2-Fluorophenol (Surr)	72		18 - 123	10/04/22 18:31	10/05/22 06:54	1
Nitrobenzene-d5 (Surr)	73		16 - 125	10/04/22 18:31	10/05/22 06:54	1
Phenol-d5 (Surr)	69		23 - 120	10/04/22 18:31	10/05/22 06:54	1
Terphenyl-d14 (Surr)	85		25 - 126	10/04/22 18:31	10/05/22 06:54	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0079	U	0.0079	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
4,4'-DDE	0.0079	U	0.0079	0.00093	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
4,4'-DDT	0.0079	U	0.0079	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Aldrin	0.0079	U	0.0079	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
alpha-BHC	0.0023	U	0.0023	0.00080	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
beta-BHC	0.0023	U	0.0023	0.00088	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Chlordane (technical)	0.079	U	0.079	0.019	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
cis-Chlordane	0.0079	U	0.0079	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
delta-BHC	0.0023	U	0.0023	0.00048	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Dieldrin	0.0023	U	0.0023	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endosulfan I	0.0079	U	0.0079	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endosulfan II	0.0079	U	0.0079	0.0020	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endosulfan sulfate	0.0079	U	0.0079	0.00099	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endrin	0.0079	U	0.0079	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endrin aldehyde	0.0079	U	0.0079	0.0019	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Endrin ketone	0.0079	U	0.0079	0.0015	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
gamma-BHC (Lindane)	0.0023	U	0.0023	0.00073	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Heptachlor	0.0079	U	0.0079	0.00093	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Heptachlor epoxide	0.0079	U	0.0079	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Methoxychlor	0.0079	U	0.0079	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1
Toxaphene	0.079	U	0.079	0.028	mg/Kg	☼	10/04/22 16:51	10/05/22 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	79		43 - 150	10/04/22 16:51	10/05/22 07:43	1
DCB Decachlorobiphenyl	69		43 - 150	10/04/22 16:51	10/05/22 07:43	1
Tetrachloro-m-xylene	89		26 - 137	10/04/22 16:51	10/05/22 07:43	1
Tetrachloro-m-xylene	84		26 - 137	10/04/22 16:51	10/05/22 07:43	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1221	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1232	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1

Client Sample ID: SB-03_0-2_20221003
Date Collected: 10/03/22 15:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-3
Matrix: Solid
Percent Solids: 85.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1248	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1254	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1260	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor-1262	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Aroclor 1268	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1
Polychlorinated biphenyls, Total	0.079	U	0.079	0.021	mg/Kg	☼	10/04/22 16:32	10/05/22 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:29*	*1*
DCB Decachlorobiphenyl	*94*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:29*	*1*
Tetrachloro-m-xylene	*91*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:29*	*1*
Tetrachloro-m-xylene	*86*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:29*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6790**		22.2	6.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Antimony	**0.16**	**J**	1.1	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Arsenic	**2.5**		1.1	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Barium	**62.6**		2.2	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Beryllium	**0.36**	**J**	0.44	0.063	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Cadmium	**0.21**	**J**	1.1	0.13	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Calcium	**32300**		111	19.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Chromium	**16.4**		2.2	1.0	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Cobalt	**5.0**		2.2	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Copper	**23.3**		2.2	0.41	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Iron	**11300**		66.6	22.4	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Lead	**81.7**		0.67	0.22	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Magnesium	**5740**		111	11.3	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Manganese	**216**		4.4	0.45	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Nickel	**13.5**		2.2	0.52	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Potassium	**1360**		111	18.0	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Selenium	**0.18**	**J**	1.4	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Silver	0.44	U	0.44	0.099	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Sodium	**309**		111	50.7	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Thallium	**0.093**	**J**	0.44	0.045	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Vanadium	**20.8**		2.2	0.23	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1
Zinc	**65.1**		8.9	3.4	mg/Kg	☼	10/05/22 09:10	10/05/22 19:18	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.077**		0.018	0.0086	mg/Kg	☼	10/05/22 00:06	10/05/22 04:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.3	U	2.3	0.98	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	**14.9**		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	**85.1**		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-03_31-33_20221003
Date Collected: 10/03/22 15:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-4
Matrix: Solid
Percent Solids: 94.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00020	U	0.00020	0.000046	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,1,2,2-Tetrachloroethane	0.00020	U	0.00020	0.000042	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,1,2-Trichloroethane	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,1-Dichloroethane	0.00020	U	0.00020	0.000041	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,1-Dichloroethene	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2,3-Trichlorobenzene	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2,4-Trichlorobenzene	0.00020	U	0.00020	0.000071	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2,4-Trimethylbenzene	0.00020	U	0.00020	0.000049	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2-Dibromo-3-Chloropropane	0.00020	U	0.00020	0.000091	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2-Dichlorobenzene	0.00020	U	0.00020	0.000071	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2-Dichloroethane	0.00020	U	0.00020	0.000058	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,2-Dichloropropane	0.00020	U	0.00020	0.000083	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,3,5-Trimethylbenzene	0.00020	U	0.00020	0.000062	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,3-Dichlorobenzene	0.00020	U	0.00020	0.000072	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
1,4-Dichlorobenzene	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
2-Butanone (MEK)	0.00099	U	0.00099	0.000073	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
2-Hexanone	0.00099	U	0.00099	0.00034	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
4-Methyl-2-pentanone (MIBK)	0.00099	U	0.00099	0.00031	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Acetone	0.014		0.0012	0.0011	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Benzene	0.00020	U	0.00020	0.000051	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Bromoform	0.00020	U	0.00020	0.000084	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Bromomethane	0.00039	U	0.00039	0.00020	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Carbon disulfide	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Carbon tetrachloride	0.00020	U *	0.00020	0.000076	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chlorobenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chlorobromomethane	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chlorodibromomethane	0.00020	U	0.00020	0.000038	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chloroethane	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chloroform	0.00020	U	0.00020	0.00019	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Chloromethane	0.00020	U	0.00020	0.000086	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
cis-1,2-Dichloroethene	0.00020	U	0.00020	0.000071	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
cis-1,3-Dichloropropene	0.00020	U	0.00020	0.000054	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Cyclohexane	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Dichlorobromomethane	0.00020	U	0.00020	0.000051	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Dichlorodifluoromethane	0.00020	U	0.00020	0.000067	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Ethylbenzene	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Ethylene Dibromide	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Isopropylbenzene	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Methyl acetate	0.00099	U	0.00099	0.00085	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Methyl tert-butyl ether	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Methylcyclohexane	0.00020	U	0.00020	0.000098	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Methylene Chloride	0.00039	U	0.00039	0.00023	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
m-Xylene & p-Xylene	0.00020	U	0.00020	0.000034	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
n-Butylbenzene	0.00020	U	0.00020	0.000058	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
N-Propylbenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
o-Xylene	0.00020	U	0.00020	0.000038	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
sec-Butylbenzene	0.00020	U *	0.00020	0.000057	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Styrene	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1

Client Sample ID: SB-03_31-33_20221003
Date Collected: 10/03/22 15:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-4
Matrix: Solid
Percent Solids: 94.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	0.00020	U *	0.00020	0.000054	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Tetrachloroethene	0.00020	U	0.00020	0.000060	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Toluene	0.00020	U	0.00020	0.000046	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
trans-1,2-Dichloroethene	0.00020	U	0.00020	0.000049	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
trans-1,3-Dichloropropene	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Trichloroethene	0.00020	U	0.00020	0.000063	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Trichlorofluoromethane	0.00020	U	0.00020	0.000080	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Vinyl chloride	0.00020	U	0.00020	0.00011	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1
Xylenes, Total	0.00039	U	0.00039	0.000034	mg/Kg	☼	10/04/22 13:29	10/06/22 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 145*	*10/04/22 13:29*	*10/06/22 01:11*	*1*
4-Bromofluorobenzene	*93*		*75 - 139*	*10/04/22 13:29*	*10/06/22 01:11*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 139*	*10/04/22 13:29*	*10/06/22 01:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*	*10/04/22 13:29*	*10/06/22 01:11*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
1,2,4,5-Tetrachlorobenzene	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
1,4-Dioxane	0.035	U	0.035	0.031	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,2'-oxybis[1-chloropropane]	0.35	U	0.35	0.0063	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,3,4,6-Tetrachlorophenol	0.35	U	0.35	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4,5-Trichlorophenol	0.35	U	0.35	0.036	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.045	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4-Dimethylphenol	0.35	U	0.35	0.042	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4-Dinitrophenol	0.28	U	0.28	0.17	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,4-Dinitrotoluene	0.071	U	0.071	0.038	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2,6-Dinitrotoluene	0.071	U	0.071	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Chloronaphthalene	0.35	U	0.35	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Chlorophenol	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Methylnaphthalene	0.35	U	0.35	0.0098	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Methylphenol	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Nitroaniline	0.35	U	0.35	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
2-Nitrophenol	0.35	U	0.35	0.035	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
3 & 4 Methylphenol	0.35	U	0.35	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.053	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
3-Nitroaniline	0.35	U	0.35	0.083	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4,6-Dinitro-2-methylphenol	0.28	U	0.28	0.14	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Bromophenyl phenyl ether	0.35	U	0.35	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Chloro-3-methylphenol	0.35	U	0.35	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Chloroaniline	0.35	U	0.35	0.062	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Chlorophenyl phenyl ether	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Methylphenol	0.35	U	0.35	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Nitroaniline	0.35	U	0.35	0.040	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
4-Nitrophenol	0.71	U	0.71	0.057	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Acenaphthene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Acenaphthylene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Acetophenone	0.35	U	0.35	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1

Client Sample ID: SB-03_31-33_20221003
Date Collected: 10/03/22 15:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-4
Matrix: Solid
Percent Solids: 94.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Atrazine	0.14	U	0.14	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzaldehyde	0.35	U	0.35	0.058	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzo[a]anthracene	0.035	U	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzo[a]pyrene	0.035	U	0.035	0.0093	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzo[b]fluoranthene	0.035	U	0.035	0.0090	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzo[g,h,i]perylene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Benzo[k]fluoranthene	0.035	U	0.035	0.0069	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Bis(2-chloroethoxy)methane	0.35	U	0.35	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Bis(2-chloroethyl)ether	0.035	U	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Bis(2-ethylhexyl) phthalate	0.35	U	0.35	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Butyl benzyl phthalate	0.35	U	0.35	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Caprolactam	0.35	U	0.35	0.054	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Carbazole	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Chrysene	0.35	U	0.35	0.0059	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Dibenz(a,h)anthracene	0.035	U	0.035	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Dibenzofuran	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Diethyl phthalate	0.35	U	0.35	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Dimethyl phthalate	0.35	U	0.35	0.079	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Di-n-butyl phthalate	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Di-n-octyl phthalate	0.35	U	0.35	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Fluoranthene	0.35	U	0.35	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Fluorene	0.35	U	0.35	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Hexachlorobenzene	0.035	U	0.035	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Hexachlorobutadiene	0.071	U	0.071	0.0074	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Hexachlorocyclopentadiene	0.35	U	0.35	0.031	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Hexachloroethane	0.035	U	0.035	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Indeno[1,2,3-cd]pyrene	0.035	U	0.035	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Isophorone	0.14	U	0.14	0.10	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Naphthalene	0.35	U	0.35	0.0060	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Nitrobenzene	0.035	U	0.035	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
N-Nitrosodi-n-propylamine	0.035	U	0.035	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
N-Nitrosodiphenylamine	0.35	U	0.35	0.029	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Pentachlorophenol	0.28	U	0.28	0.072	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Phenanthrene	0.35	U	0.35	0.0061	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Phenol	0.35	U	0.35	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1
Pyrene	0.35	U	0.35	0.0087	mg/Kg	☼	10/04/22 18:31	10/05/22 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*58*		*10 - 123*	*10/04/22 18:31*	*10/05/22 05:22*	*1*
2-Fluorobiphenyl	*80*		*22 - 122*	*10/04/22 18:31*	*10/05/22 05:22*	*1*
2-Fluorophenol (Surr)	*72*		*18 - 123*	*10/04/22 18:31*	*10/05/22 05:22*	*1*
Nitrobenzene-d5 (Surr)	*70*		*16 - 125*	*10/04/22 18:31*	*10/05/22 05:22*	*1*
Phenol-d5 (Surr)	*69*		*23 - 120*	*10/04/22 18:31*	*10/05/22 05:22*	*1*
Terphenyl-d14 (Surr)	*82*		*25 - 126*	*10/04/22 18:31*	*10/05/22 05:22*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0071	U	0.0071	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
4,4'-DDE	0.0071	U	0.0071	0.00083	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1

Client Sample ID: SB-03_31-33_20221003

Date Collected: 10/03/22 15:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-4

Matrix: Solid
Percent Solids: 94.5

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0071	U	0.0071	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Aldrin	0.0071	U	0.0071	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
alpha-BHC	0.0021	U	0.0021	0.00072	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
beta-BHC	0.0021	U	0.0021	0.00079	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Chlordane (technical)	0.071	U	0.071	0.017	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
cis-Chlordane	0.0071	U	0.0071	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
delta-BHC	0.0021	U	0.0021	0.00043	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Dieldrin	0.0021	U	0.0021	0.00092	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endosulfan I	0.0071	U	0.0071	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endosulfan II	0.0071	U	0.0071	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endosulfan sulfate	0.0071	U	0.0071	0.00089	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endrin	0.0071	U	0.0071	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endrin aldehyde	0.0071	U	0.0071	0.0017	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Endrin ketone	0.0071	U	0.0071	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00065	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Heptachlor	0.0071	U	0.0071	0.00083	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Heptachlor epoxide	0.0071	U	0.0071	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Methoxychlor	0.0071	U	0.0071	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1
Toxaphene	0.071	U	0.071	0.026	mg/Kg	☼	10/04/22 16:51	10/05/22 07:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:55*	*1*
DCB Decachlorobiphenyl	*74*		*43 - 150*	*10/04/22 16:51*	*10/05/22 07:55*	*1*
Tetrachloro-m-xylene	*91*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:55*	*1*
Tetrachloro-m-xylene	*85*		*26 - 137*	*10/04/22 16:51*	*10/05/22 07:55*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1221	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1232	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1242	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1248	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1254	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1260	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor-1262	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Aroclor 1268	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1
Polychlorinated biphenyls, Total	0.071	U	0.071	0.019	mg/Kg	☼	10/04/22 16:32	10/05/22 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:45*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 150*	*10/04/22 16:32*	*10/05/22 11:45*	*1*
Tetrachloro-m-xylene	*86*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:45*	*1*
Tetrachloro-m-xylene	*85*		*42 - 150*	*10/04/22 16:32*	*10/05/22 11:45*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3030**		20.0	5.5	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Arsenic	**0.86**	**J**	1.0	0.10	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1

Client Sample ID: SB-03_31-33_20221003

Lab Sample ID: 460-266752-4

Date Collected: 10/03/22 15:05
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 94.5

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	19.1		2.0	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Beryllium	0.16	J	0.40	0.057	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Cadmium	1.0	U	1.0	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Calcium	1560		99.8	17.7	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Chromium	10.1		2.0	0.91	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Cobalt	2.6		2.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Copper	8.2		2.0	0.37	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Iron	6720		59.9	20.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Lead	2.7		0.60	0.20	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Magnesium	1940		99.8	10.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Manganese	177		4.0	0.40	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Nickel	6.4		2.0	0.47	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Potassium	510		99.8	16.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Selenium	1.2	U	1.2	0.13	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Silver	0.40	U	0.40	0.089	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Sodium	161		99.8	45.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Thallium	0.40	U	0.40	0.041	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Vanadium	8.5		2.0	0.21	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1
Zinc	14.4		8.0	3.0	mg/Kg	☼	10/05/22 09:10	10/05/22 19:21	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.071		0.017	0.0081	mg/Kg	☼	10/05/22 00:06	10/05/22 04:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.2	U	2.2	0.92	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	5.5		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	94.5		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-04_0-2_20221003

Lab Sample ID: 460-266752-5

Date Collected: 10/03/22 13:00
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 89.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00021	U	0.00021	0.000050	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,1,2,2-Tetrachloroethane	0.00021	U	0.00021	0.000046	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00021	U	0.00021	0.000064	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,1,2-Trichloroethane	0.00021	U	0.00021	0.000038	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,1-Dichloroethane	0.00021	U	0.00021	0.000044	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,1-Dichloroethene	0.00021	U	0.00021	0.000048	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2,3-Trichlorobenzene	0.00021	U	0.00021	0.000039	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2,4-Trichlorobenzene	0.00021	U	0.00021	0.000077	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2,4-Trimethylbenzene	0.00021	U	0.00021	0.000053	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2-Dibromo-3-Chloropropane	0.00021	U	0.00021	0.000098	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2-Dichlorobenzene	0.00021	U	0.00021	0.000077	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2-Dichloroethane	0.00021	U	0.00021	0.000063	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,2-Dichloropropane	0.00021	U	0.00021	0.000090	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,3,5-Trimethylbenzene	0.00021	U	0.00021	0.000067	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1

Client Sample ID: SB-04_0-2_20221003
Date Collected: 10/03/22 13:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.00021	U	0.00021	0.000078	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
1,4-Dichlorobenzene	0.00021	U	0.00021	0.000048	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
2-Butanone (MEK)	0.0011	U	0.0011	0.000079	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
2-Hexanone	0.0011	U	0.0011	0.00037	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
4-Methyl-2-pentanone (MIBK)	0.0011	U	0.0011	0.00033	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Acetone	0.0013	U	0.0013	0.0012	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Benzene	0.00021	U	0.00021	0.000055	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Bromoform	0.00021	U	0.00021	0.000091	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Bromomethane	0.00043	U	0.00043	0.00021	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Carbon disulfide	0.00021	U	0.00021	0.000057	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Carbon tetrachloride	0.00021	U *	0.00021	0.000083	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chlorobenzene	0.00021	U	0.00021	0.000038	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chlorobromomethane	0.00021	U	0.00021	0.000060	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chlorodibromomethane	0.00021	U	0.00021	0.000041	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chloroethane	0.00021	U	0.00021	0.00011	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chloroform	0.00021	U	0.00021	0.00021	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Chloromethane	0.00021	U	0.00021	0.000093	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
cis-1,2-Dichloroethene	0.00021	U	0.00021	0.000077	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
cis-1,3-Dichloropropene	0.00021	U	0.00021	0.000058	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Cyclohexane	0.00021	U	0.00021	0.000047	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Dichlorobromomethane	0.00021	U	0.00021	0.000055	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Dichlorodifluoromethane	0.00021	U	0.00021	0.000072	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Ethylbenzene	0.00021	U	0.00021	0.000043	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Ethylene Dibromide	0.00021	U	0.00021	0.000038	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Isopropylbenzene	0.00021	U	0.00021	0.000061	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Methyl acetate	0.0011	U	0.0011	0.00092	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Methyl tert-butyl ether	0.00021	U	0.00021	0.00011	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Methylcyclohexane	0.00021	U	0.00021	0.00011	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Methylene Chloride	0.00043	U	0.00043	0.00024	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
m-Xylene & p-Xylene	0.00021	U	0.00021	0.000037	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
n-Butylbenzene	0.00021	U	0.00021	0.000063	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
N-Propylbenzene	0.00021	U	0.00021	0.000037	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
o-Xylene	0.00021	U	0.00021	0.000041	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
sec-Butylbenzene	0.00021	U *	0.00021	0.000062	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Styrene	0.00021	U	0.00021	0.000059	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
tert-Butylbenzene	0.00021	U *	0.00021	0.000059	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Tetrachloroethene	0.00021	U	0.00021	0.000065	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Toluene	0.00021	U	0.00021	0.000050	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
trans-1,2-Dichloroethene	0.00021	U	0.00021	0.000053	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
trans-1,3-Dichloropropene	0.00021	U	0.00021	0.000057	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Trichloroethene	0.00021	U	0.00021	0.000069	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Trichlorofluoromethane	0.00021	U	0.00021	0.000087	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Vinyl chloride	0.00021	U	0.00021	0.00012	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1
Xylenes, Total	0.00043	U	0.00043	0.000037	mg/Kg	☼	10/04/22 13:29	10/06/22 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 145*	*10/04/22 13:29*	*10/06/22 01:35*	*1*
4-Bromofluorobenzene	*111*		*75 - 139*	*10/04/22 13:29*	*10/06/22 01:35*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 139*	*10/04/22 13:29*	*10/06/22 01:35*	*1*
Toluene-d8 (Surr)	*118*		*80 - 120*	*10/04/22 13:29*	*10/06/22 01:35*	*1*

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-04_0-2_20221003
Date Collected: 10/03/22 13:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
1,2,4,5-Tetrachlorobenzene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
1,4-Dioxane	0.037	U	0.037	0.032	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,2'-oxybis[1-chloropropane]	0.37	U	0.37	0.0067	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,3,4,6-Tetrachlorophenol	0.37	U	0.37	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4,5-Trichlorophenol	0.37	U	0.37	0.038	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4,6-Trichlorophenol	0.15	U	0.15	0.047	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4-Dichlorophenol	0.15	U	0.15	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4-Dimethylphenol	0.37	U	0.37	0.044	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4-Dinitrophenol	0.30	U	0.30	0.18	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,4-Dinitrotoluene	0.075	U	0.075	0.040	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2,6-Dinitrotoluene	0.075	U	0.075	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Chloronaphthalene	0.37	U	0.37	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Chlorophenol	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Methylnaphthalene	0.37	U	0.37	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Methylphenol	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Nitroaniline	0.37	U	0.37	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
2-Nitrophenol	0.37	U	0.37	0.037	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
3 & 4 Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
3,3'-Dichlorobenzidine	0.15	U	0.15	0.056	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
3-Nitroaniline	0.37	U	0.37	0.087	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4,6-Dinitro-2-methylphenol	0.30	U	0.30	0.15	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Bromophenyl phenyl ether	0.37	U	0.37	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Chloro-3-methylphenol	0.37	U	0.37	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Chloroaniline	0.37	U	0.37	0.065	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Chlorophenyl phenyl ether	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Nitroaniline	0.37	U	0.37	0.042	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
4-Nitrophenol	0.75	U	0.75	0.060	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Acenaphthene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Acenaphthylene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Acetophenone	0.37	U	0.37	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Anthracene	**0.025**	**J**	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Atrazine	0.15	U	0.15	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzaldehyde	0.37	U	0.37	0.061	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzo[a]anthracene	**0.092**		0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzo[a]pyrene	**0.080**		0.037	0.0098	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzo[b]fluoranthene	**0.11**		0.037	0.0095	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzo[g,h,i]perylene	**0.042**	**J**	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Benzo[k]fluoranthene	**0.036**	**J**	0.037	0.0072	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Bis(2-chloroethoxy)methane	0.37	U	0.37	0.029	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Bis(2-chloroethyl)ether	0.037	U	0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Bis(2-ethylhexyl) phthalate	**0.080**	**J**	0.37	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Butyl benzyl phthalate	0.37	U	0.37	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Caprolactam	0.37	U	0.37	0.057	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Carbazole	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Chrysene	**0.088**	**J**	0.37	0.0062	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Dibenz(a,h)anthracene	0.037	U	0.037	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Dibenzofuran	0.37	U	0.37	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1

Client Sample ID: SB-04_0-2_20221003

Date Collected: 10/03/22 13:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-5

Matrix: Solid
Percent Solids: 89.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.37	U	0.37	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Dimethyl phthalate	0.37	U	0.37	0.084	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Di-n-butyl phthalate	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Di-n-octyl phthalate	0.37	U	0.37	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Fluoranthene	**0.17**	**J**	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Fluorene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Hexachlorobenzene	0.037	U	0.037	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Hexachlorobutadiene	0.075	U	0.075	0.0078	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Hexachlorocyclopentadiene	0.37	U	0.37	0.032	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Hexachloroethane	0.037	U	0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Indeno[1,2,3-cd]pyrene	**0.048**		0.037	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Isophorone	0.15	U	0.15	0.11	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Naphthalene	0.37	U	0.37	0.0064	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Nitrobenzene	0.037	U	0.037	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
N-Nitrosodi-n-propylamine	0.037	U	0.037	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
N-Nitrosodiphenylamine	0.37	U	0.37	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Pentachlorophenol	0.30	U	0.30	0.076	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Phenanthrene	**0.10**	**J**	0.37	0.0065	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Phenol	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1
Pyrene	**0.17**	**J**	0.37	0.0092	mg/Kg	☼	10/04/22 18:31	10/05/22 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*10 - 123*	*10/04/22 18:31*	*10/05/22 07:17*	*1*
2-Fluorobiphenyl	*81*		*22 - 122*	*10/04/22 18:31*	*10/05/22 07:17*	*1*
2-Fluorophenol (Surr)	*72*		*18 - 123*	*10/04/22 18:31*	*10/05/22 07:17*	*1*
Nitrobenzene-d5 (Surr)	*71*		*16 - 125*	*10/04/22 18:31*	*10/05/22 07:17*	*1*
Phenol-d5 (Surr)	*69*		*23 - 120*	*10/04/22 18:31*	*10/05/22 07:17*	*1*
Terphenyl-d14 (Surr)	*84*		*25 - 126*	*10/04/22 18:31*	*10/05/22 07:17*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0075	U	0.0075	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
4,4'-DDE	0.0075	U	0.0075	0.00088	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
4,4'-DDT	0.0075	U	0.0075	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Aldrin	0.0075	U	0.0075	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
alpha-BHC	0.0022	U	0.0022	0.00076	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
beta-BHC	0.0022	U	0.0022	0.00084	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Chlordane (technical)	0.075	U	0.075	0.018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
cis-Chlordane	0.0075	U	0.0075	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
delta-BHC	0.0022	U	0.0022	0.00046	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Dieldrin	0.0022	U	0.0022	0.00097	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endosulfan I	0.0075	U	0.0075	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endosulfan II	0.0075	U	0.0075	0.0019	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endosulfan sulfate	0.0075	U	0.0075	0.00094	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endrin	0.0075	U	0.0075	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endrin aldehyde	0.0075	U	0.0075	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Endrin ketone	0.0075	U	0.0075	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
gamma-BHC (Lindane)	0.0022	U	0.0022	0.00069	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Heptachlor	0.0075	U	0.0075	0.00088	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Heptachlor epoxide	0.0075	U	0.0075	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1

Client Sample ID: SB-04_0-2_20221003
Date Collected: 10/03/22 13:00
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	0.0075	U	0.0075	0.0017	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1
Toxaphene	0.075	U	0.075	0.027	mg/Kg	☼	10/04/22 16:51	10/05/22 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:07*	*1*
DCB Decachlorobiphenyl	*64*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:07*	*1*
Tetrachloro-m-xylene	*83*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:07*	*1*
Tetrachloro-m-xylene	*74*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:07*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1221	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1232	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1242	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1248	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1254	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1260	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor-1262	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Aroclor 1268	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1
Polychlorinated biphenyls, Total	0.075	U	0.075	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:02*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:02*	*1*
Tetrachloro-m-xylene	*86*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:02*	*1*
Tetrachloro-m-xylene	*82*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:02*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9180**		21.7	6.0	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Antimony	**0.49**	**J**	1.1	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Arsenic	**4.0**		1.1	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Barium	**78.8**		2.2	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Beryllium	**0.63**		0.43	0.062	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Cadmium	**0.43**	**J**	1.1	0.12	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Calcium	**9950**		109	19.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Chromium	**19.1**		2.2	0.99	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Cobalt	**9.6**		2.2	0.16	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Copper	**34.8**		2.2	0.40	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Iron	**20700**		65.1	21.9	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Lead	**80.0**		0.65	0.22	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Magnesium	**4900**		109	11.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Manganese	**689**		4.3	0.44	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Nickel	**20.7**		2.2	0.51	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Potassium	**2720**		109	17.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Selenium	**0.35**	**J**	1.4	0.14	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Silver	0.43	U	0.43	0.097	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Sodium	**301**		109	49.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Thallium	**0.21**	**J**	0.43	0.045	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1

Client Sample ID: SB-04_0-2_20221003

Lab Sample ID: 460-266752-5
Date Collected: 10/03/22 13:00
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 89.4

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	31.6		2.2	0.22	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1
Zinc	107		8.7	3.3	mg/Kg	☼	10/05/22 09:10	10/05/22 19:23	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.59		0.017	0.0080	mg/Kg	☼	10/05/22 00:06	10/05/22 04:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.2	U	2.2	0.94	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	10.6		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	89.4		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-04_32-34_20221003

Lab Sample ID: 460-266752-6
Date Collected: 10/03/22 13:05
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,1,2,2-Tetrachloroethane	0.00020	U	0.00020	0.000042	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,1,2-Trichloroethane	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,1-Dichloroethane	0.00020	U	0.00020	0.000040	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,1-Dichloroethene	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2,3-Trichlorobenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2,4-Trichlorobenzene	0.00020	U	0.00020	0.000070	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2,4-Trimethylbenzene	0.00020	U	0.00020	0.000048	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2-Dibromo-3-Chloropropane	0.00020	U	0.00020	0.000090	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2-Dichlorobenzene	0.00020	U	0.00020	0.000070	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2-Dichloroethane	0.00020	U	0.00020	0.000058	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,2-Dichloropropane	0.00020	U	0.00020	0.000083	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,3,5-Trimethylbenzene	0.00020	U	0.00020	0.000061	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,3-Dichlorobenzene	0.00020	U	0.00020	0.000071	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
1,4-Dichlorobenzene	0.00020	U	0.00020	0.000044	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
2-Butanone (MEK)	0.00098	U	0.00098	0.000072	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
2-Hexanone	0.00098	U	0.00098	0.00033	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
4-Methyl-2-pentanone (MIBK)	0.00098	U	0.00098	0.00030	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Acetone	0.0012	U	0.0012	0.0011	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Benzene	0.00020	U	0.00020	0.000050	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Bromoform	0.00020	U	0.00020	0.000083	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Bromomethane	0.00039	U	0.00039	0.00020	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Carbon disulfide	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Carbon tetrachloride	0.00020	U *	0.00020	0.000075	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chlorobenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chlorobromomethane	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chlorodibromomethane	0.00020	U	0.00020	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chloroethane	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chloroform	0.00020	U	0.00020	0.00019	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Chloromethane	0.00020	U	0.00020	0.000085	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1

Client Sample ID: SB-04_32-34_20221003
Date Collected: 10/03/22 13:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-6
Matrix: Solid
Percent Solids: 97.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.00020	U	0.00020	0.000070	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
cis-1,3-Dichloropropene	0.00020	U	0.00020	0.000053	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Cyclohexane	0.00020	U	0.00020	0.000043	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Dichlorobromomethane	0.00020	U	0.00020	0.000050	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Dichlorodifluoromethane	0.00020	U	0.00020	0.000066	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Ethylbenzene	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Ethylene Dibromide	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Isopropylbenzene	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Methyl acetate	0.00098	U	0.00098	0.00084	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Methyl tert-butyl ether	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Methylcyclohexane	0.00020	U	0.00020	0.000097	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Methylene Chloride	0.00039	U	0.00039	0.00022	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
m-Xylene & p-Xylene	0.00020	U	0.00020	0.000034	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
n-Butylbenzene	0.00020	U	0.00020	0.000057	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
N-Propylbenzene	0.00020	U	0.00020	0.000034	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
o-Xylene	0.00020	U	0.00020	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
sec-Butylbenzene	0.00020	U *	0.00020	0.000056	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Styrene	0.00020	U	0.00020	0.000054	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
tert-Butylbenzene	0.00020	U *	0.00020	0.000054	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Tetrachloroethene	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Toluene	0.00020	U	0.00020	0.000046	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
trans-1,2-Dichloroethene	0.00020	U	0.00020	0.000048	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
trans-1,3-Dichloropropene	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Trichloroethene	0.00020	U	0.00020	0.000063	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Trichlorofluoromethane	0.00020	U	0.00020	0.000079	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Vinyl chloride	0.00020	U	0.00020	0.00011	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1
Xylenes, Total	0.00039	U	0.00039	0.000034	mg/Kg	☼	10/04/22 13:30	10/06/22 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 145*	*10/04/22 13:30*	*10/06/22 01:59*	*1*
4-Bromofluorobenzene	*102*		*75 - 139*	*10/04/22 13:30*	*10/06/22 01:59*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 139*	*10/04/22 13:30*	*10/06/22 01:59*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*	*10/04/22 13:30*	*10/06/22 01:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0062	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.035	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.044	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4-Dimethylphenol	0.34	U	0.34	0.041	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4-Dinitrophenol	0.27	U	0.27	0.17	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,4-Dinitrotoluene	0.069	U	0.069	0.037	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2,6-Dinitrotoluene	0.069	U	0.069	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1

Client Sample ID: SB-04_32-34_20221003
Date Collected: 10/03/22 13:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-6
Matrix: Solid
Percent Solids: 97.0

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.34	U	0.34	0.0095	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.051	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
3-Nitroaniline	0.34	U	0.34	0.081	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Chloroaniline	0.34	U	0.34	0.060	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
4-Nitrophenol	0.69	U	0.69	0.055	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Acenaphthene	0.34	U	0.34	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Acenaphthylene	0.34	U	0.34	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Anthracene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Atrazine	0.14	U	0.14	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzaldehyde	0.34	U	0.34	0.056	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzo[a]anthracene	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzo[a]pyrene	0.034	U	0.034	0.0091	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzo[b]fluoranthene	0.034	U	0.034	0.0088	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzo[g,h,i]perylene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Benzo[k]fluoranthene	0.034	U	0.034	0.0067	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Caprolactam	0.34	U	0.34	0.053	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Carbazole	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Chrysene	0.34	U	0.34	0.0058	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Dibenz(a,h)anthracene	0.034	U	0.034	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Dimethyl phthalate	0.34	U	0.34	0.077	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Fluoranthene	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Fluorene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Hexachlorobutadiene	0.069	U	0.069	0.0072	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Indeno[1,2,3-cd]pyrene	0.034	U	0.034	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Isophorone	0.14	U	0.14	0.098	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Naphthalene	0.34	U	0.34	0.0059	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1

Client Sample ID: SB-04_32-34_20221003

Date Collected: 10/03/22 13:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-6

Matrix: Solid
Percent Solids: 97.0

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Pentachlorophenol	0.27	U	0.27	0.070	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Phenanthrene	0.34	U	0.34	0.0060	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Phenol	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1
Pyrene	0.34	U	0.34	0.0085	mg/Kg	☼	10/04/22 18:31	10/05/22 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	67		10 - 123	10/04/22 18:31	10/05/22 07:40	1
2-Fluorobiphenyl	81		22 - 122	10/04/22 18:31	10/05/22 07:40	1
2-Fluorophenol (Surr)	72		18 - 123	10/04/22 18:31	10/05/22 07:40	1
Nitrobenzene-d5 (Surr)	70		16 - 125	10/04/22 18:31	10/05/22 07:40	1
Phenol-d5 (Surr)	68		23 - 120	10/04/22 18:31	10/05/22 07:40	1
Terphenyl-d14 (Surr)	85		25 - 126	10/04/22 18:31	10/05/22 07:40	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
4,4'-DDE	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
alpha-BHC	0.0021	U	0.0021	0.00070	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
beta-BHC	0.0021	U	0.0021	0.00077	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
delta-BHC	0.0021	U	0.0021	0.00042	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Dieldrin	0.0021	U	0.0021	0.00090	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endosulfan I	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endosulfan sulfate	0.0069	U	0.0069	0.00086	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endrin	0.0069	U	0.0069	0.00099	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00064	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Heptachlor	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/04/22 16:51	10/05/22 08:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	82		43 - 150	10/04/22 16:51	10/05/22 08:19	1
DCB Decachlorobiphenyl	78		43 - 150	10/04/22 16:51	10/05/22 08:19	1
Tetrachloro-m-xylene	95		26 - 137	10/04/22 16:51	10/05/22 08:19	1
Tetrachloro-m-xylene	91		26 - 137	10/04/22 16:51	10/05/22 08:19	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1

Client Sample ID: SB-04_32-34_20221003

Date Collected: 10/03/22 13:05
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-6

Matrix: Solid
Percent Solids: 97.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:19*	*1*
DCB Decachlorobiphenyl	*88*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:19*	*1*
Tetrachloro-m-xylene	*84*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:19*	*1*
Tetrachloro-m-xylene	*81*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:19*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4170**		20.2	5.6	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Arsenic	**1.3**		1.0	0.10	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Barium	**35.4**		2.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Beryllium	**0.26**	**J**	0.40	0.058	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Cadmium	1.0	U	1.0	0.11	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Calcium	**1230**		101	17.9	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Chromium	**19.3**		2.0	0.92	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Cobalt	**4.6**		2.0	0.15	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Copper	**18.3**		2.0	0.37	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Iron	**10400**		60.7	20.4	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Lead	**6.1**		0.61	0.20	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Magnesium	**2050**		101	10.3	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Manganese	**268**		4.0	0.41	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Nickel	**10.2**		2.0	0.48	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Potassium	**826**		101	16.4	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Selenium	1.3	U	1.3	0.13	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Silver	0.40	U	0.40	0.090	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Sodium	**199**		101	46.2	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Thallium	**0.070**	**J**	0.40	0.041	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Vanadium	**15.3**		2.0	0.21	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1
Zinc	**27.3**		8.1	3.1	mg/Kg	☼	10/05/22 09:10	10/05/22 19:25	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	U	0.018	0.0083	mg/Kg	☼	10/05/22 00:06	10/05/22 04:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.90	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	**3.0**		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	**97.0**		1.0	1.0	%			10/05/22 09:25	1

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-07_0-2_20221003
Date Collected: 10/03/22 10:40
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-7
Matrix: Solid
Percent Solids: 88.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00022	U	0.00022	0.000050	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,1,2,2-Tetrachloroethane	0.00022	U	0.00022	0.000046	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00022	U	0.00022	0.000065	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,1,2-Trichloroethane	0.00022	U	0.00022	0.000039	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,1-Dichloroethane	0.00022	U	0.00022	0.000045	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,1-Dichloroethene	0.00022	U	0.00022	0.000049	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2,3-Trichlorobenzene	0.00022	U	0.00022	0.000039	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2,4-Trichlorobenzene	0.00022	U	0.00022	0.000078	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2,4-Trimethylbenzene	0.00022	U	0.00022	0.000053	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2-Dibromo-3-Chloropropane	0.00022	U	0.00022	0.00010	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2-Dichlorobenzene	0.00022	U	0.00022	0.000078	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2-Dichloroethane	0.00022	U	0.00022	0.000064	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,2-Dichloropropane	0.00022	U	0.00022	0.000092	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,3,5-Trimethylbenzene	0.00022	U	0.00022	0.000068	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,3-Dichlorobenzene	0.00022	U	0.00022	0.000079	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
1,4-Dichlorobenzene	0.00022	U	0.00022	0.000049	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
2-Butanone (MEK)	0.0011	U	0.0011	0.000080	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
2-Hexanone	0.0011	U	0.0011	0.00037	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
4-Methyl-2-pentanone (MIBK)	0.0011	U	0.0011	0.00034	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Acetone	**0.010**		0.0013	0.0012	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Benzene	0.00022	U	0.00022	0.000056	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Bromoform	0.00022	U	0.00022	0.000092	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Bromomethane	0.00043	U	0.00043	0.00022	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Carbon disulfide	0.00022	U	0.00022	0.000058	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Carbon tetrachloride	0.00022	U *	0.00022	0.000084	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chlorobenzene	0.00022	U	0.00022	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chlorobromomethane	0.00022	U	0.00022	0.000061	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chlorodibromomethane	0.00022	U	0.00022	0.000042	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chloroethane	0.00022	U	0.00022	0.00011	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chloroform	0.00022	U	0.00022	0.00021	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Chloromethane	0.00022	U	0.00022	0.000094	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
cis-1,2-Dichloroethene	0.00022	U	0.00022	0.000078	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
cis-1,3-Dichloropropene	0.00022	U	0.00022	0.000059	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Cyclohexane	0.00022	U	0.00022	0.000048	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Dichlorobromomethane	0.00022	U	0.00022	0.000056	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Dichlorodifluoromethane	0.00022	U	0.00022	0.000073	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Ethylbenzene	0.00022	U	0.00022	0.000043	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Ethylene Dibromide	0.00022	U	0.00022	0.000039	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Isopropylbenzene	0.00022	U	0.00022	0.000062	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Methyl acetate	0.0011	U	0.0011	0.00093	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Methyl tert-butyl ether	0.00022	U	0.00022	0.00011	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Methylcyclohexane	0.00022	U	0.00022	0.00011	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Methylene Chloride	0.00043	U	0.00043	0.00025	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
m-Xylene & p-Xylene	0.00022	U	0.00022	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
n-Butylbenzene	0.00022	U	0.00022	0.000064	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
N-Propylbenzene	0.00022	U	0.00022	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
o-Xylene	0.00022	U	0.00022	0.000042	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
sec-Butylbenzene	0.00022	U *	0.00022	0.000062	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Styrene	0.00022	U	0.00022	0.000060	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1

Client Sample ID: SB-07_0-2_20221003
Date Collected: 10/03/22 10:40
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-7
Matrix: Solid
Percent Solids: 88.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	0.00022	U *	0.00022	0.000060	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Tetrachloroethene	**0.00024**		0.00022	0.000066	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Toluene	0.00022	U	0.00022	0.000051	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
trans-1,2-Dichloroethene	0.00022	U	0.00022	0.000053	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
trans-1,3-Dichloropropene	0.00022	U	0.00022	0.000058	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Trichloroethene	0.00022	U	0.00022	0.000070	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Trichlorofluoromethane	0.00022	U	0.00022	0.000088	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Vinyl chloride	0.00022	U	0.00022	0.00012	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1
Xylenes, Total	0.00043	U	0.00043	0.000038	mg/Kg	☼	10/04/22 13:30	10/06/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 145*	*10/04/22 13:30*	*10/06/22 02:24*	*1*
4-Bromofluorobenzene	*112*		*75 - 139*	*10/04/22 13:30*	*10/06/22 02:24*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 139*	*10/04/22 13:30*	*10/06/22 02:24*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*	*10/04/22 13:30*	*10/06/22 02:24*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
1,2,4,5-Tetrachlorobenzene	0.37	U	0.37	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
1,4-Dioxane	0.037	U	0.037	0.033	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,2'-oxybis[1-chloropropane]	0.37	U	0.37	0.0068	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,3,4,6-Tetrachlorophenol	0.37	U	0.37	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4,5-Trichlorophenol	0.37	U	0.37	0.038	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4,6-Trichlorophenol	0.15	U	0.15	0.048	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4-Dichlorophenol	0.15	U	0.15	0.024	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4-Dimethylphenol	0.37	U	0.37	0.045	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4-Dinitrophenol	0.30	U	0.30	0.18	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,4-Dinitrotoluene	0.076	U	0.076	0.040	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2,6-Dinitrotoluene	0.076	U	0.076	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Chloronaphthalene	0.37	U	0.37	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Chlorophenol	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Methylnaphthalene	0.37	U	0.37	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Methylphenol	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Nitroaniline	0.37	U	0.37	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
2-Nitrophenol	0.37	U	0.37	0.037	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
3 & 4 Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
3,3'-Dichlorobenzidine	0.15	U	0.15	0.056	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
3-Nitroaniline	0.37	U	0.37	0.089	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4,6-Dinitro-2-methylphenol	0.30	U	0.30	0.15	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Bromophenyl phenyl ether	0.37	U	0.37	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Chloro-3-methylphenol	0.37	U	0.37	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Chloroaniline	0.37	U	0.37	0.066	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Chlorophenyl phenyl ether	0.37	U	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Nitroaniline	0.37	U	0.37	0.043	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
4-Nitrophenol	0.76	U	0.76	0.061	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Acenaphthene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Acenaphthylene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Acetophenone	0.37	U	0.37	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1

Client Sample ID: SB-07_0-2_20221003
Date Collected: 10/03/22 10:40
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-7
Matrix: Solid
Percent Solids: 88.3

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Atrazine	0.15	U	0.15	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzaldehyde	0.37	U	0.37	0.062	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzo[a]anthracene	**0.061**		0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzo[a]pyrene	**0.056**		0.037	0.0099	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzo[b]fluoranthene	**0.083**		0.037	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzo[g,h,i]perylene	**0.029**	**J**	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Benzo[k]fluoranthene	**0.035**	**J**	0.037	0.0073	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Bis(2-chloroethoxy)methane	0.37	U	0.37	0.029	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Bis(2-chloroethyl)ether	0.037	U	0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Bis(2-ethylhexyl) phthalate	**0.022**	**J**	0.37	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Butyl benzyl phthalate	0.37	U	0.37	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Caprolactam	0.37	U	0.37	0.058	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Carbazole	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Chrysene	**0.062**	**J**	0.37	0.0063	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Dibenz(a,h)anthracene	0.037	U	0.037	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Dibenzofuran	0.37	U	0.37	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Diethyl phthalate	0.37	U	0.37	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Dimethyl phthalate	0.37	U	0.37	0.085	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Di-n-butyl phthalate	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Di-n-octyl phthalate	0.37	U	0.37	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Fluoranthene	**0.094**	**J**	0.37	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Fluorene	0.37	U	0.37	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Hexachlorobenzene	0.037	U	0.037	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Hexachlorobutadiene	0.076	U	0.076	0.0079	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Hexachlorocyclopentadiene	0.37	U	0.37	0.033	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Hexachloroethane	0.037	U	0.037	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Indeno[1,2,3-cd]pyrene	**0.034**	**J**	0.037	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Isophorone	0.15	U	0.15	0.11	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Naphthalene	0.37	U	0.37	0.0064	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Nitrobenzene	0.037	U	0.037	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
N-Nitrosodi-n-propylamine	0.037	U	0.037	0.027	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
N-Nitrosodiphenylamine	0.37	U	0.37	0.031	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Pentachlorophenol	0.30	U	0.30	0.076	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Phenanthrene	**0.039**	**J**	0.37	0.0066	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Phenol	0.37	U	0.37	0.014	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1
Pyrene	**0.093**	**J**	0.37	0.0093	mg/Kg	☼	10/04/22 18:31	10/05/22 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*68*		*10 - 123*	*10/04/22 18:31*	*10/05/22 08:03*	*1*
2-Fluorobiphenyl	*81*		*22 - 122*	*10/04/22 18:31*	*10/05/22 08:03*	*1*
2-Fluorophenol (Surr)	*69*		*18 - 123*	*10/04/22 18:31*	*10/05/22 08:03*	*1*
Nitrobenzene-d5 (Surr)	*71*		*16 - 125*	*10/04/22 18:31*	*10/05/22 08:03*	*1*
Phenol-d5 (Surr)	*67*		*23 - 120*	*10/04/22 18:31*	*10/05/22 08:03*	*1*
Terphenyl-d14 (Surr)	*81*		*25 - 126*	*10/04/22 18:31*	*10/05/22 08:03*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0076	U	0.0076	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
4,4'-DDE	0.0076	U	0.0076	0.00089	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1

Client Sample ID: SB-07_0-2_20221003

Date Collected: 10/03/22 10:40
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-7

Matrix: Solid
Percent Solids: 88.3

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0076	U	0.0076	0.0014	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Aldrin	0.0076	U	0.0076	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
alpha-BHC	0.0023	U	0.0023	0.00077	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
beta-BHC	0.0023	U	0.0023	0.00085	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Chlordane (technical)	0.076	U	0.076	0.018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
cis-Chlordane	0.0076	U	0.0076	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
delta-BHC	0.0023	U	0.0023	0.00046	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Dieldrin	0.0023	U	0.0023	0.00098	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endosulfan I	0.0076	U	0.0076	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endosulfan II	0.0076	U	0.0076	0.0019	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endosulfan sulfate	0.0076	U	0.0076	0.00095	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endrin	0.0076	U	0.0076	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endrin aldehyde	0.0076	U	0.0076	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Endrin ketone	0.0076	U	0.0076	0.0015	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
gamma-BHC (Lindane)	0.0023	U	0.0023	0.00070	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Heptachlor	0.0076	U	0.0076	0.00089	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Heptachlor epoxide	0.0076	U	0.0076	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Methoxychlor	0.0076	U	0.0076	0.0017	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1
Toxaphene	0.076	U	0.076	0.027	mg/Kg	☼	10/04/22 16:51	10/05/22 08:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:32*	*1*
DCB Decachlorobiphenyl	*65*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:32*	*1*
Tetrachloro-m-xylene	*89*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:32*	*1*
Tetrachloro-m-xylene	*81*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:32*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1221	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1232	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1242	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1248	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1254	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1260	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor-1262	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Aroclor 1268	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1
Polychlorinated biphenyls, Total	0.076	U	0.076	0.020	mg/Kg	☼	10/04/22 16:32	10/05/22 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:36*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:36*	*1*
Tetrachloro-m-xylene	*85*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:36*	*1*
Tetrachloro-m-xylene	*81*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:36*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5980**		21.0	5.8	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Antimony	**0.20**	**J**	1.0	0.15	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Arsenic	**3.9**		1.0	0.11	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1

Client Sample ID: SB-07_0-2_20221003

Lab Sample ID: 460-266752-7
Date Collected: 10/03/22 10:40
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 88.3

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	66.6		2.1	0.15	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Beryllium	0.31	J	0.42	0.060	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Cadmium	0.33	J	1.0	0.12	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Calcium	27200		105	18.6	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Chromium	15.1		2.1	0.95	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Cobalt	5.4		2.1	0.16	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Copper	39.8		2.1	0.39	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Iron	13300		62.9	21.2	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Lead	131		0.63	0.21	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Magnesium	11900		105	10.7	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Manganese	274		4.2	0.42	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Nickel	16.8		2.1	0.49	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Potassium	1220		105	17.0	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Selenium	0.19	J	1.3	0.13	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Silver	0.11	J	0.42	0.093	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Sodium	402		105	47.9	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Thallium	0.11	J	0.42	0.043	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Vanadium	32.6		2.1	0.22	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1
Zinc	109		8.4	3.2	mg/Kg	☼	10/05/22 09:17	10/07/22 01:21	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.017	0.0082	mg/Kg	☼	10/05/22 00:21	10/05/22 05:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.3	U	2.3	0.98	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	11.7		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	88.3		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-07_32-34_20221003

Lab Sample ID: 460-266752-8
Date Collected: 10/03/22 10:45
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00020	U	0.00020	0.000047	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,1,2,2-Tetrachloroethane	0.00020	U	0.00020	0.000043	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00020	U	0.00020	0.000061	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,1,2-Trichloroethane	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,1-Dichloroethane	0.00020	U	0.00020	0.000042	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,1-Dichloroethene	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2,3-Trichlorobenzene	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2,4-Trichlorobenzene	0.00020	U	0.00020	0.000072	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2,4-Trimethylbenzene	0.00020	U	0.00020	0.000050	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2-Dibromo-3-Chloropropane	0.00020	U	0.00020	0.000093	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2-Dichlorobenzene	0.00020	U	0.00020	0.000073	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2-Dichloroethane	0.00020	U	0.00020	0.000060	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,2-Dichloropropane	0.00020	U	0.00020	0.000085	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,3,5-Trimethylbenzene	0.00020	U	0.00020	0.000063	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1

Client Sample ID: SB-07_32-34_20221003
Date Collected: 10/03/22 10:45
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-8
Matrix: Solid
Percent Solids: 97.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.00020	U	0.00020	0.000074	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
1,4-Dichlorobenzene	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
2-Butanone (MEK)	0.0010	U	0.0010	0.000074	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
2-Hexanone	0.0010	U	0.0010	0.00034	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
4-Methyl-2-pentanone (MIBK)	0.0010	U	0.0010	0.00031	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Acetone	**0.031**		0.0012	0.0012	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Benzene	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Bromoform	0.00020	U *	0.00020	0.000086	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Bromomethane	0.00040	U	0.00040	0.00020	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Carbon disulfide	0.00020	U	0.00020	0.000054	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Carbon tetrachloride	0.00020	U	0.00020	0.000078	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chlorobenzene	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chlorobromomethane	0.00020	U	0.00020	0.000057	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chlorodibromomethane	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chloroethane	0.00020	U	0.00020	0.00011	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chloroform	0.00020	U	0.00020	0.00020	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Chloromethane	0.00020	U	0.00020	0.000088	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
cis-1,2-Dichloroethene	0.00020	U	0.00020	0.000072	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
cis-1,3-Dichloropropene	0.00020	U	0.00020	0.000055	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Cyclohexane	0.00020	U	0.00020	0.000045	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Dichlorobromomethane	0.00020	U	0.00020	0.000052	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Dichlorodifluoromethane	0.00020	U	0.00020	0.000068	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Ethylbenzene	0.00020	U	0.00020	0.000040	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Ethylene Dibromide	0.00020	U	0.00020	0.000036	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Isopropylbenzene	0.00020	U	0.00020	0.000057	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Methyl acetate	0.0010	U	0.0010	0.00087	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Methyl tert-butyl ether	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Methylcyclohexane	0.00020	U	0.00020	0.00010	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Methylene Chloride	0.00040	U	0.00040	0.00023	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
m-Xylene & p-Xylene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
n-Butylbenzene	0.00020	U	0.00020	0.000059	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
N-Propylbenzene	0.00020	U	0.00020	0.000035	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
o-Xylene	0.00020	U	0.00020	0.000039	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
sec-Butylbenzene	0.00020	U	0.00020	0.000058	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Styrene	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
tert-Butylbenzene	0.00020	U	0.00020	0.000056	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Tetrachloroethene	**0.00024**		0.00020	0.000061	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Toluene	0.00020	U	0.00020	0.000047	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
trans-1,2-Dichloroethene	0.00020	U	0.00020	0.000050	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
trans-1,3-Dichloropropene	0.00020	U	0.00020	0.000054	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Trichloroethene	0.00020	U	0.00020	0.000065	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Trichlorofluoromethane	0.00020	U	0.00020	0.000082	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Vinyl chloride	0.00020	U	0.00020	0.00011	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1
Xylenes, Total	0.00040	U	0.00040	0.000035	mg/Kg	☼	10/04/22 13:31	10/06/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 145*	*10/04/22 13:31*	*10/06/22 16:35*	*1*
4-Bromofluorobenzene	*112*		*75 - 139*	*10/04/22 13:31*	*10/06/22 16:35*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 139*	*10/04/22 13:31*	*10/06/22 16:35*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*	*10/04/22 13:31*	*10/06/22 16:35*	*1*

Client Sample ID: SB-07_32-34_20221003
Date Collected: 10/03/22 10:45
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-8
Matrix: Solid
Percent Solids: 97.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0061	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.035	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.044	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4-Dimethylphenol	0.34	U	0.34	0.041	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4-Dinitrophenol	0.27	U	0.27	0.17	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,4-Dinitrotoluene	0.069	U	0.069	0.037	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2,6-Dinitrotoluene	0.069	U	0.069	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Methylnaphthalene	0.34	U	0.34	0.0095	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.051	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
3-Nitroaniline	0.34	U	0.34	0.081	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Chloroaniline	0.34	U	0.34	0.060	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
4-Nitrophenol	0.69	U	0.69	0.055	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Acenaphthene	0.34	U	0.34	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Acenaphthylene	0.34	U	0.34	0.0097	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Anthracene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Atrazine	0.14	U	0.14	0.020	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzaldehyde	0.34	U	0.34	0.056	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzo[a]anthracene	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzo[a]pyrene	0.034	U	0.034	0.0090	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzo[b]fluoranthene	0.034	U	0.034	0.0088	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzo[g,h,i]perylene	0.34	U	0.34	0.010	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Benzo[k]fluoranthene	0.034	U	0.034	0.0067	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.026	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Caprolactam	0.34	U	0.34	0.053	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Carbazole	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Chrysene	0.34	U	0.34	0.0057	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Dibenz(a,h)anthracene	0.034	U	0.034	0.015	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1

Client Sample ID: SB-07_32-34_20221003
Date Collected: 10/03/22 10:45
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-8
Matrix: Solid
Percent Solids: 97.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Dimethyl phthalate	0.34	U	0.34	0.077	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Fluoranthene	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Fluorene	0.34	U	0.34	0.0099	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Hexachlorobutadiene	0.069	U	0.069	0.0072	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Indeno[1,2,3-cd]pyrene	0.034	U	0.034	0.013	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Isophorone	0.14	U	0.14	0.098	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Naphthalene	0.34	U	0.34	0.0059	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Pentachlorophenol	0.27	U	0.27	0.070	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Phenanthrene	0.34	U	0.34	0.0060	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Phenol	0.34	U	0.34	0.012	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1
Pyrene	0.34	U	0.34	0.0084	mg/Kg	☼	10/04/22 18:31	10/05/22 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 123*	*10/04/22 18:31*	*10/05/22 05:45*	*1*
2-Fluorobiphenyl	*80*		*22 - 122*	*10/04/22 18:31*	*10/05/22 05:45*	*1*
2-Fluorophenol (Surr)	*68*		*18 - 123*	*10/04/22 18:31*	*10/05/22 05:45*	*1*
Nitrobenzene-d5 (Surr)	*69*		*16 - 125*	*10/04/22 18:31*	*10/05/22 05:45*	*1*
Phenol-d5 (Surr)	*66*		*23 - 120*	*10/04/22 18:31*	*10/05/22 05:45*	*1*
Terphenyl-d14 (Surr)	*84*		*25 - 126*	*10/04/22 18:31*	*10/05/22 05:45*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
4,4'-DDE	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
alpha-BHC	0.0021	U	0.0021	0.00070	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
beta-BHC	0.0021	U	0.0021	0.00077	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
delta-BHC	0.0021	U	0.0021	0.00042	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Dieldrin	0.0021	U	0.0021	0.00089	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endosulfan I	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endosulfan sulfate	0.0069	U	0.0069	0.00086	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endrin	0.0069	U	0.0069	0.00099	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00064	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Heptachlor	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1

Client Sample ID: SB-07_32-34_20221003
Date Collected: 10/03/22 10:45
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-8
Matrix: Solid
Percent Solids: 97.4

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/04/22 16:51	10/05/22 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:44*	*1*
DCB Decachlorobiphenyl	*63*		*43 - 150*	*10/04/22 16:51*	*10/05/22 08:44*	*1*
Tetrachloro-m-xylene	*80*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:44*	*1*
Tetrachloro-m-xylene	*74*		*26 - 137*	*10/04/22 16:51*	*10/05/22 08:44*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/04/22 16:32	10/05/22 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:52*	*1*
DCB Decachlorobiphenyl	*83*		*10 - 150*	*10/04/22 16:32*	*10/05/22 12:52*	*1*
Tetrachloro-m-xylene	*82*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:52*	*1*
Tetrachloro-m-xylene	*78*		*42 - 150*	*10/04/22 16:32*	*10/05/22 12:52*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3830**		19.9	5.5	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Arsenic	**1.0**		1.0	0.10	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Barium	**29.2**		2.0	0.14	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Beryllium	**0.22**	**J**	0.40	0.057	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Cadmium	1.0	U	1.0	0.11	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Calcium	**6370**		99.7	17.7	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Chromium	**10.2**		2.0	0.91	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Cobalt	**3.6**		2.0	0.15	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Copper	**15.4**		2.0	0.37	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Iron	**8020**		59.8	20.1	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Lead	**13.7**		0.60	0.20	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Magnesium	**4700**		99.7	10.2	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Manganese	**212**		4.0	0.40	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Nickel	**8.1**		2.0	0.47	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Potassium	**729**		99.7	16.2	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Selenium	1.2	U	1.2	0.13	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Silver	0.40	U	0.40	0.089	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Sodium	**170**		99.7	45.6	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Thallium	**0.062**	**J**	0.40	0.041	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1

Client Sample ID: SB-07_32-34_20221003

Lab Sample ID: 460-266752-8
Date Collected: 10/03/22 10:45
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.4

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	13.4		2.0	0.21	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1
Zinc	21.4		8.0	3.0	mg/Kg	☼	10/05/22 09:17	10/07/22 01:29	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	U	0.016	0.0076	mg/Kg	☼	10/05/22 00:21	10/05/22 05:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.89	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	2.6		1.0	1.0	%			10/05/22 09:25	1
Percent Solids (EPA Moisture)	97.4		1.0	1.0	%			10/05/22 09:25	1

Client Sample ID: SB-05_0-2_20221004

Lab Sample ID: 460-266826-1
Date Collected: 10/04/22 10:30
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 90.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011	U	0.0011	0.00025	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00032	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,1,2-Trichloroethane	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,1-Dichloroethane	0.0011	U	0.0011	0.00022	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,1-Dichloroethene	0.0011	U	0.0011	0.00024	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00039	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2,4-Trimethylbenzene	0.0011	U	0.0011	0.00026	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00049	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2-Dichlorobenzene	0.0011	U	0.0011	0.00039	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2-Dichloroethane	0.0011	U	0.0011	0.00032	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,2-Dichloropropane	0.0011	U	0.0011	0.00045	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,3,5-Trimethylbenzene	0.0011	U	0.0011	0.00034	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,3-Dichlorobenzene	0.0011	U	0.0011	0.00039	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
1,4-Dichlorobenzene	0.0011	U	0.0011	0.00024	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
2-Butanone (MEK)	0.0054	U	0.0054	0.00040	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
2-Hexanone	0.0054	U	0.0054	0.0018	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
4-Methyl-2-pentanone (MIBK)	0.0054	U	0.0054	0.0017	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Acetone	0.0065	U	0.0065	0.0062	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Benzene	0.0011	U	0.0011	0.00028	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Bromoform	0.0011	U	0.0011	0.00046	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Bromomethane	0.0022	U	0.0022	0.0011	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Carbon disulfide	0.0011	U	0.0011	0.00029	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Carbon tetrachloride	0.0011	U	0.0011	0.00042	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chlorobromomethane	0.0011	U	0.0011	0.00030	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chlorodibromomethane	0.0011	U	0.0011	0.00021	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chloroethane	0.0011	U	0.0011	0.00056	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chloroform	0.0011	U	0.0011	0.0010	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Chloromethane	0.0011	U	0.0011	0.00047	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1

Client Sample ID: SB-05_0-2_20221004
Date Collected: 10/04/22 10:30
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-1
Matrix: Solid
Percent Solids: 90.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00039	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00029	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Cyclohexane	0.0011	U	0.0011	0.00024	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Dichlorobromomethane	0.0011	U	0.0011	0.00028	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Dichlorodifluoromethane	0.0011	U	0.0011	0.00036	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Ethylbenzene	0.0011	U	0.0011	0.00021	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Ethylene Dibromide	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Isopropylbenzene	0.0011	U	0.0011	0.00031	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Methyl acetate	0.0054	U	0.0054	0.0046	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Methyl tert-butyl ether	0.0011	U	0.0011	0.00055	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Methylcyclohexane	0.0011	U	0.0011	0.00054	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Methylene Chloride	0.0022	U	0.0022	0.0012	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
m-Xylene & p-Xylene	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
n-Butylbenzene	0.0011	U	0.0011	0.00032	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
N-Propylbenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
o-Xylene	0.0011	U	0.0011	0.00021	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
sec-Butylbenzene	0.0011	U	0.0011	0.00031	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Styrene	0.0011	U	0.0011	0.00030	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
tert-Butylbenzene	0.0011	U	0.0011	0.00030	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Tetrachloroethene	**0.0097**		0.0011	0.00033	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Toluene	0.0011	U	0.0011	0.00025	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00026	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00029	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Trichloroethene	0.0011	U	0.0011	0.00035	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Trichlorofluoromethane	0.0011	U	0.0011	0.00044	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Vinyl chloride	0.0011	U	0.0011	0.00059	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1
Xylenes, Total	0.0022	U	0.0022	0.00019	mg/Kg	☼	10/05/22 20:07	10/07/22 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*72 - 145*	*10/05/22 20:07*	*10/07/22 01:54*	*1*
4-Bromofluorobenzene	*116*		*75 - 139*	*10/05/22 20:07*	*10/07/22 01:54*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 139*	*10/05/22 20:07*	*10/07/22 01:54*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*	*10/05/22 20:07*	*10/07/22 01:54*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**0.14**	**J**	0.37	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
1,2,4,5-Tetrachlorobenzene	0.37	U	0.37	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
1,4-Dioxane	0.037	U	0.037	0.032	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,2'-oxybis[1-chloropropane]	0.37	U	0.37	0.0066	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,3,4,6-Tetrachlorophenol	0.37	U	0.37	0.025	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4,5-Trichlorophenol	0.37	U	0.37	0.037	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4,6-Trichlorophenol	0.15	U	0.15	0.047	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4-Dichlorophenol	0.15	U	0.15	0.024	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4-Dimethylphenol	0.37	U	0.37	0.044	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4-Dinitrophenol	0.29	U	0.29	0.18	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,4-Dinitrotoluene	0.074	U	0.074	0.039	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2,6-Dinitrotoluene	0.074	U	0.074	0.026	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2-Chloronaphthalene	0.37	U	0.37	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2-Chlorophenol	0.37	U	0.37	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1

Client Sample ID: SB-05_0-2_20221004

Date Collected: 10/04/22 10:30
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-1

Matrix: Solid
Percent Solids: 90.1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.28	J	0.37	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2-Methylphenol	0.37	U	0.37	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2-Nitroaniline	0.37	U	0.37	0.028	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
2-Nitrophenol	0.37	U	0.37	0.037	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
3 & 4 Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
3,3'-Dichlorobenzidine	0.15	U	0.15	0.055	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
3-Nitroaniline	0.37	U	0.37	0.087	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4,6-Dinitro-2-methylphenol	0.29	U	0.29	0.15	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Bromophenyl phenyl ether	0.37	U	0.37	0.015	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Chloro-3-methylphenol	0.37	U	0.37	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Chloroaniline	0.37	U	0.37	0.065	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Chlorophenyl phenyl ether	0.37	U	0.37	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Methylphenol	0.37	U	0.37	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Nitroaniline	0.37	U	0.37	0.042	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
4-Nitrophenol	0.74	U	0.74	0.060	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Acenaphthene	2.7		0.37	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Acenaphthylene	0.67		0.37	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Acetophenone	0.37	U	0.37	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Anthracene	6.5		0.37	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Atrazine	0.15	U *	0.15	0.022	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Benzaldehyde	0.37	U	0.37	0.061	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Benzo[g,h,i]perylene	7.5		0.37	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Benzo[k]fluoranthene	7.6		0.037	0.0072	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Bis(2-chloroethoxy)methane	0.37	U	0.37	0.029	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Bis(2-chloroethyl)ether	0.037	U	0.037	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Bis(2-ethylhexyl) phthalate	0.37	U	0.37	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Butyl benzyl phthalate	0.37	U	0.37	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Caprolactam	0.37	U *	0.37	0.057	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Carbazole	1.9		0.37	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Dibenz(a,h)anthracene	2.7		0.037	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Dibenzofuran	1.2		0.37	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Diethyl phthalate	0.37	U	0.37	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Dimethyl phthalate	0.37	U	0.37	0.083	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Di-n-butyl phthalate	0.026	J	0.37	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Di-n-octyl phthalate	0.37	U	0.37	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Fluorene	2.5		0.37	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Hexachlorobenzene	0.037	U	0.037	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Hexachlorobutadiene	0.074	U	0.074	0.0078	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Hexachlorocyclopentadiene	0.37	U	0.37	0.032	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Hexachloroethane	0.037	U	0.037	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Isophorone	0.15	U	0.15	0.11	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Naphthalene	0.47		0.37	0.0063	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Nitrobenzene	0.037	U	0.037	0.020	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
N-Nitrosodi-n-propylamine	0.037	U	0.037	0.027	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
N-Nitrosodiphenylamine	0.056	J	0.37	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Pentachlorophenol	0.29	U	0.29	0.075	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1
Phenol	0.37	U	0.37	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 123*	*10/05/22 10:12*	*10/06/22 04:21*	*1*

Client Sample ID: SB-05_0-2_20221004

Date Collected: 10/04/22 10:30
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-1

Matrix: Solid
Percent Solids: 90.1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*22 - 122*	*10/05/22 10:12*	*10/06/22 04:21*	*1*
2-Fluorophenol (Surr)	*69*		*18 - 123*	*10/05/22 10:12*	*10/06/22 04:21*	*1*
Nitrobenzene-d5 (Surr)	*71*		*16 - 125*	*10/05/22 10:12*	*10/06/22 04:21*	*1*
Phenol-d5 (Surr)	*68*		*23 - 120*	*10/05/22 10:12*	*10/06/22 04:21*	*1*
Terphenyl-d14 (Surr)	*86*		*25 - 126*	*10/05/22 10:12*	*10/06/22 04:21*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**25**		0.37	0.13	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Benzo[a]pyrene	**23**		0.37	0.098	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Benzo[b]fluoranthene	**29**		0.37	0.095	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Chrysene	**23**		3.7	0.062	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Fluoranthene	**48**		3.7	0.13	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Indeno[1,2,3-cd]pyrene	**17**		0.37	0.14	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Phenanthrene	**27**		3.7	0.064	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10
Pyrene	**38**		3.7	0.091	mg/Kg	☼	10/05/22 10:12	10/06/22 08:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*112*		*10 - 123*	*10/05/22 10:12*	*10/06/22 08:50*	*10*
2-Fluorobiphenyl	*94*		*22 - 122*	*10/05/22 10:12*	*10/06/22 08:50*	*10*
2-Fluorophenol (Surr)	*84*		*18 - 123*	*10/05/22 10:12*	*10/06/22 08:50*	*10*
Nitrobenzene-d5 (Surr)	*85*		*16 - 125*	*10/05/22 10:12*	*10/06/22 08:50*	*10*
Phenol-d5 (Surr)	*86*		*23 - 120*	*10/05/22 10:12*	*10/06/22 08:50*	*10*
Terphenyl-d14 (Surr)	*101*		*25 - 126*	*10/05/22 10:12*	*10/06/22 08:50*	*10*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0074	U	0.0074	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
4,4'-DDE	0.0074	U	0.0074	0.00088	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
4,4'-DDT	**0.0063**	**J**	0.0074	0.0014	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Aldrin	0.0074	U	0.0074	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
alpha-BHC	0.0022	U	0.0022	0.00075	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
beta-BHC	0.0022	U	0.0022	0.00083	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Chlordane (technical)	**0.12**		0.074	0.018	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
cis-Chlordane	**0.013**	**p**	0.0074	0.0012	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
delta-BHC	0.0022	U	0.0022	0.00045	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Dieldrin	**0.0027**		0.0022	0.00097	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endosulfan I	0.0074	U	0.0074	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endosulfan II	0.0074	U	0.0074	0.0019	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endosulfan sulfate	0.0074	U	0.0074	0.00093	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endrin	0.0074	U	0.0074	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endrin aldehyde	0.0074	U	0.0074	0.0018	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Endrin ketone	0.0074	U	0.0074	0.0014	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
gamma-BHC (Lindane)	0.0022	U	0.0022	0.00069	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Heptachlor	0.0074	U	0.0074	0.00088	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Heptachlor epoxide	0.0074	U	0.0074	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Methoxychlor	0.0074	U	0.0074	0.0017	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1
Toxaphene	0.074	U	0.074	0.027	mg/Kg	☼	10/05/22 12:37	10/06/22 07:09	1

Client Sample ID: SB-05_0-2_20221004

Date Collected: 10/04/22 10:30
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-1

Matrix: Solid
Percent Solids: 90.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	57		43 - 150	10/05/22 12:37	10/06/22 07:09	1
DCB Decachlorobiphenyl	60		43 - 150	10/05/22 12:37	10/06/22 07:09	1
Tetrachloro-m-xylene	68		26 - 137	10/05/22 12:37	10/06/22 07:09	1
Tetrachloro-m-xylene	59		26 - 137	10/05/22 12:37	10/06/22 07:09	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1221	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1232	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1242	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1248	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1254	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1260	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor-1262	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Aroclor 1268	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1
Polychlorinated biphenyls, Total	0.074	U	0.074	0.020	mg/Kg	☼	10/05/22 12:32	10/06/22 11:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	107		10 - 150	10/05/22 12:32	10/06/22 11:18	1
DCB Decachlorobiphenyl	103		10 - 150	10/05/22 12:32	10/06/22 11:18	1
Tetrachloro-m-xylene	84		42 - 150	10/05/22 12:32	10/06/22 11:18	1
Tetrachloro-m-xylene	94		42 - 150	10/05/22 12:32	10/06/22 11:18	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6680		21.8	6.0	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Antimony	0.30	J	1.1	0.16	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Arsenic	6.9		1.1	0.11	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Barium	119		2.2	0.16	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Beryllium	0.40	J	0.44	0.062	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Cadmium	0.66	J	1.1	0.12	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Calcium	18600		109	19.3	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Chromium	15.5		2.2	0.99	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Cobalt	5.3		2.2	0.16	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Copper	63.1		2.2	0.40	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Iron	13600		65.3	22.0	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Lead	283		0.65	0.22	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Magnesium	5510		109	11.1	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Manganese	265		4.4	0.44	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Nickel	16.3		2.2	0.51	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Potassium	1050		109	17.6	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Selenium	0.48	J	1.4	0.14	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Silver	0.25	J	0.44	0.097	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Sodium	444		109	49.7	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Thallium	0.13	J	0.44	0.045	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Vanadium	28.1		2.2	0.22	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1
Zinc	149		8.7	3.3	mg/Kg	☼	10/06/22 08:43	10/07/22 21:47	1

Client Sample ID: SB-05_0-2_20221004

Lab Sample ID: 460-266826-1
Date Collected: 10/04/22 10:30
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 90.1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.094**		0.019	0.0089	mg/Kg	☼	10/06/22 00:22	10/06/22 04:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.2	U	2.2	0.95	mg/Kg	☼	10/10/22 08:32	10/10/22 14:40	1
Percent Moisture (EPA Moisture)	**9.9**		1.0	1.0	%			10/05/22 21:11	1
Percent Solids (EPA Moisture)	**90.1**		1.0	1.0	%			10/05/22 21:11	1

Client Sample ID: SB-05_29-31_20221004

Lab Sample ID: 460-266826-2
Date Collected: 10/04/22 10:35
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0016	U	0.0016	0.00037	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,1,2,2-Tetrachloroethane	0.0016	U	0.0016	0.00034	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0016	U	0.0016	0.00048	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,1,2-Trichloroethane	0.0016	U	0.0016	0.00029	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,1-Dichloroethane	0.0016	U	0.0016	0.00033	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,1-Dichloroethene	0.0016	U	0.0016	0.00036	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2,3-Trichlorobenzene	0.0016	U	0.0016	0.00029	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2,4-Trichlorobenzene	0.0016	U	0.0016	0.00057	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2,4-Trimethylbenzene	0.0016	U	0.0016	0.00039	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2-Dibromo-3-Chloropropane	0.0016	U	0.0016	0.00074	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2-Dichlorobenzene	0.0016	U	0.0016	0.00058	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2-Dichloroethane	0.0016	U	0.0016	0.00048	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,2-Dichloropropane	0.0016	U	0.0016	0.00068	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,3,5-Trimethylbenzene	0.0016	U	0.0016	0.00050	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,3-Dichlorobenzene	0.0016	U	0.0016	0.00059	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
1,4-Dichlorobenzene	0.0016	U	0.0016	0.00036	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
2-Butanone (MEK)	0.0080	U	0.0080	0.00059	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
2-Hexanone	0.0080	U	0.0080	0.0027	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
4-Methyl-2-pentanone (MIBK)	0.0080	U	0.0080	0.0025	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Acetone	**0.14**		0.0096	0.0092	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Benzene	0.0016	U	0.0016	0.00041	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Bromoform	0.0016	U	0.0016	0.00068	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Bromomethane	0.0032	U	0.0032	0.0016	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Carbon disulfide	0.0016	U	0.0016	0.00043	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Carbon tetrachloride	0.0016	U	0.0016	0.00062	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chlorobenzene	0.0016	U	0.0016	0.00028	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chlorobromomethane	0.0016	U	0.0016	0.00045	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chlorodibromomethane	0.0016	U	0.0016	0.00031	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chloroethane	0.0016	U	0.0016	0.00084	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chloroform	0.0016	U	0.0016	0.0016	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Chloromethane	0.0016	U	0.0016	0.00070	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
cis-1,2-Dichloroethene	0.0016	U	0.0016	0.00057	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
cis-1,3-Dichloropropene	0.0016	U	0.0016	0.00044	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Cyclohexane	0.0016	U	0.0016	0.00035	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Dichlorobromomethane	0.0016	U	0.0016	0.00041	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Dichlorodifluoromethane	0.0016	U	0.0016	0.00054	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1

Client Sample ID: SB-05_29-31_20221004
Date Collected: 10/04/22 10:35
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-2
Matrix: Solid
Percent Solids: 96.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.0016	U	0.0016	0.00032	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Ethylene Dibromide	0.0016	U	0.0016	0.00029	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Isopropylbenzene	0.0016	U	0.0016	0.00046	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Methyl acetate	0.0080	U	0.0080	0.0069	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Methyl tert-butyl ether	0.0016	U	0.0016	0.00082	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Methylcyclohexane	0.0016	U	0.0016	0.00080	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Methylene Chloride	0.0032	U	0.0032	0.0018	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
m-Xylene & p-Xylene	0.0016	U	0.0016	0.00028	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
n-Butylbenzene	0.0016	U	0.0016	0.00047	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
N-Propylbenzene	0.0016	U	0.0016	0.00028	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
o-Xylene	0.0016	U	0.0016	0.00031	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
sec-Butylbenzene	0.0016	U	0.0016	0.00046	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Styrene	0.0016	U	0.0016	0.00045	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
tert-Butylbenzene	0.0016	U	0.0016	0.00044	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Tetrachloroethene	**0.0014**	**J**	0.0016	0.00049	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Toluene	0.0016	U	0.0016	0.00038	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
trans-1,2-Dichloroethene	0.0016	U	0.0016	0.00039	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
trans-1,3-Dichloropropene	0.0016	U	0.0016	0.00043	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Trichloroethene	0.0016	U	0.0016	0.00052	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Trichlorofluoromethane	0.0016	U	0.0016	0.00065	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Vinyl chloride	0.0016	U	0.0016	0.00088	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1
Xylenes, Total	0.0032	U	0.0032	0.00028	mg/Kg	☼	10/05/22 20:09	10/07/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 145*	*10/05/22 20:09*	*10/07/22 02:19*	*1*
4-Bromofluorobenzene	*109*		*75 - 139*	*10/05/22 20:09*	*10/07/22 02:19*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 139*	*10/05/22 20:09*	*10/07/22 02:19*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*	*10/05/22 20:09*	*10/07/22 02:19*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0062	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.035	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.044	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4-Dimethylphenol	0.34	U	0.34	0.041	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4-Dinitrophenol	0.27	U	0.27	0.17	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,4-Dinitrotoluene	0.069	U	0.069	0.037	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2,6-Dinitrotoluene	0.069	U	0.069	0.025	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Methylnaphthalene	0.34	U	0.34	0.0096	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1

Client Sample ID: SB-05_29-31_20221004
Date Collected: 10/04/22 10:35
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-2
Matrix: Solid
Percent Solids: 96.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	0.14	U	0.14	0.052	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
3-Nitroaniline	0.34	U	0.34	0.081	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Chloroaniline	0.34	U	0.34	0.061	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
4-Nitrophenol	0.69	U	0.69	0.056	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Acenaphthene	**0.030**	**J**	0.34	0.0097	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Acenaphthylene	**0.037**	**J**	0.34	0.0098	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Anthracene	**0.080**	**J**	0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Atrazine	0.14	U *	0.14	0.020	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzaldehyde	0.34	U	0.34	0.057	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzo[a]anthracene	**0.27**		0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzo[a]pyrene	**0.29**		0.034	0.0091	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzo[b]fluoranthene	**0.39**		0.034	0.0088	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzo[g,h,i]perylene	**1.3**		0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Benzo[k]fluoranthene	**0.14**		0.034	0.0067	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.027	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Caprolactam	0.34	U *	0.34	0.053	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Carbazole	**0.023**	**J**	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Chrysene	**0.20**	**J**	0.34	0.0058	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Dibenz(a,h)anthracene	**0.22**		0.034	0.015	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Dimethyl phthalate	0.34	U	0.34	0.078	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Fluoranthene	**0.46**		0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Fluorene	**0.018**	**J**	0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Hexachlorobutadiene	0.069	U	0.069	0.0073	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Indeno[1,2,3-cd]pyrene	**1.2**		0.034	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Isophorone	0.14	U	0.14	0.099	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Naphthalene	**0.0062**	**J**	0.34	0.0059	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Pentachlorophenol	0.27	U	0.27	0.070	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Phenanthrene	**0.18**	**J**	0.34	0.0060	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1
Phenol	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1

Client Sample ID: SB-05_29-31_20221004

Date Collected: 10/04/22 10:35
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-2

Matrix: Solid
Percent Solids: 96.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.39		0.34	0.0085	mg/Kg	☼	10/05/22 10:12	10/06/22 04:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*10 - 123*	*10/05/22 10:12*	*10/06/22 04:38*	*1*
2-Fluorobiphenyl	*85*		*22 - 122*	*10/05/22 10:12*	*10/06/22 04:38*	*1*
2-Fluorophenol (Surr)	*70*		*18 - 123*	*10/05/22 10:12*	*10/06/22 04:38*	*1*
Nitrobenzene-d5 (Surr)	*74*		*16 - 125*	*10/05/22 10:12*	*10/06/22 04:38*	*1*
Phenol-d5 (Surr)	*69*		*23 - 120*	*10/05/22 10:12*	*10/06/22 04:38*	*1*
Terphenyl-d14 (Surr)	*91*		*25 - 126*	*10/05/22 10:12*	*10/06/22 04:38*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
4,4'-DDE	0.0069	U	0.0069	0.00082	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
alpha-BHC	0.0021	U	0.0021	0.00070	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
beta-BHC	0.0021	U	0.0021	0.00078	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
delta-BHC	0.0021	U	0.0021	0.00042	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Dieldrin	0.0021	U	0.0021	0.00090	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endosulfan I	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endosulfan sulfate	0.0069	U	0.0069	0.00087	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endrin	0.0069	U	0.0069	0.00099	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00064	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Heptachlor	0.0069	U	0.0069	0.00082	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/05/22 12:37	10/06/22 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:21*	*1*
DCB Decachlorobiphenyl	*60*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:21*	*1*
Tetrachloro-m-xylene	*80*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:21*	*1*
Tetrachloro-m-xylene	*71*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:21*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1

Client Sample ID: SB-05_29-31_20221004

Lab Sample ID: 460-266826-2
Date Collected: 10/04/22 10:35
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*10 - 150*	*10/05/22 12:32*	*10/06/22 11:38*	*1*
DCB Decachlorobiphenyl	*101*		*10 - 150*	*10/05/22 12:32*	*10/06/22 11:38*	*1*
Tetrachloro-m-xylene	*109*		*42 - 150*	*10/05/22 12:32*	*10/06/22 11:38*	*1*
Tetrachloro-m-xylene	*102*		*42 - 150*	*10/05/22 12:32*	*10/06/22 11:38*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3380**		20.7	5.7	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Arsenic	**0.72**	**J**	1.0	0.11	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Barium	**22.4**		2.1	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Beryllium	**0.19**	**J**	0.41	0.059	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Cadmium	1.0	U	1.0	0.12	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Calcium	**18100**		104	18.4	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Chromium	**9.7**		2.1	0.94	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Cobalt	**3.0**		2.1	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Copper	**8.9**		2.1	0.38	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Iron	**6800**		62.2	20.9	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Lead	**4.8**		0.62	0.21	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Magnesium	**9550**		104	10.6	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Manganese	**190**		4.1	0.42	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Nickel	**6.7**		2.1	0.49	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Potassium	**694**		104	16.8	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Selenium	1.3	U	1.3	0.13	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Silver	0.41	U	0.41	0.092	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Sodium	**175**		104	47.4	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Thallium	0.41	U	0.41	0.043	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Vanadium	**12.5**		2.1	0.21	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1
Zinc	**16.4**		8.3	3.2	mg/Kg	☼	10/06/22 08:43	10/07/22 21:21	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.0082	mg/Kg	☼	10/06/22 00:22	10/06/22 03:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.88	mg/Kg	☼	10/10/22 17:57	10/11/22 10:10	1
Percent Moisture (EPA Moisture)	**3.5**		1.0	1.0	%			10/05/22 21:11	1
Percent Solids (EPA Moisture)	**96.5**		1.0	1.0	%			10/05/22 21:11	1

Client Sample ID: SB-06_0-2_20221004

Lab Sample ID: 460-266826-3
Date Collected: 10/04/22 14:00
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 91.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0014	U	0.0014	0.00033	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1

Client Sample ID: SB-06_0-2_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-3
Matrix: Solid
Percent Solids: 91.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.0014	U	0.0014	0.00030	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0014	U	0.0014	0.00043	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,1,2-Trichloroethane	0.0014	U	0.0014	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,1-Dichloroethane	0.0014	U	0.0014	0.00029	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,1-Dichloroethene	0.0014	U	0.0014	0.00032	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2,3-Trichlorobenzene	0.0014	U	0.0014	0.00026	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2,4-Trichlorobenzene	0.0014	U	0.0014	0.00051	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2,4-Trimethylbenzene	0.0014	U	0.0014	0.00035	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2-Dibromo-3-Chloropropane	0.0014	U	0.0014	0.00065	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2-Dichlorobenzene	0.0014	U	0.0014	0.00051	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2-Dichloroethane	0.0014	U	0.0014	0.00042	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,2-Dichloropropane	0.0014	U	0.0014	0.00060	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,3,5-Trimethylbenzene	0.0014	U	0.0014	0.00044	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,3-Dichlorobenzene	0.0014	U	0.0014	0.00052	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
1,4-Dichlorobenzene	0.0014	U	0.0014	0.00032	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
2-Butanone (MEK)	0.0071	U	0.0071	0.00052	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
2-Hexanone	0.0071	U	0.0071	0.0024	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
4-Methyl-2-pentanone (MIBK)	0.0071	U	0.0071	0.0022	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Acetone	0.0085	U	0.0085	0.0081	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Benzene	0.0014	U	0.0014	0.00036	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Bromoform	0.0014	U	0.0014	0.00060	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Bromomethane	0.0028	U	0.0028	0.0014	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Carbon disulfide	0.0014	U	0.0014	0.00038	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Carbon tetrachloride	0.0014	U	0.0014	0.00055	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chlorobenzene	0.0014	U	0.0014	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chlorobromomethane	0.0014	U	0.0014	0.00040	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chlorodibromomethane	0.0014	U	0.0014	0.00027	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chloroethane	0.0014	U	0.0014	0.00074	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chloroform	0.0014	U	0.0014	0.0014	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Chloromethane	0.0014	U	0.0014	0.00061	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
cis-1,2-Dichloroethene	0.0014	U	0.0014	0.00051	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
cis-1,3-Dichloropropene	0.0014	U	0.0014	0.00039	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Cyclohexane	0.0014	U	0.0014	0.00031	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Dichlorobromomethane	0.0014	U	0.0014	0.00036	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Dichlorodifluoromethane	0.0014	U	0.0014	0.00048	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Ethylbenzene	0.0014	U	0.0014	0.00028	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Ethylene Dibromide	0.0014	U	0.0014	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Isopropylbenzene	0.0014	U	0.0014	0.00040	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Methyl acetate	0.0071	U	0.0071	0.0061	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Methyl tert-butyl ether	0.0014	U	0.0014	0.00072	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Methylcyclohexane	0.0014	U	0.0014	0.00071	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Methylene Chloride	0.0028	U	0.0028	0.0016	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
m-Xylene & p-Xylene	0.0014	U	0.0014	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
n-Butylbenzene	0.0014	U	0.0014	0.00042	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
N-Propylbenzene	0.0014	U	0.0014	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
o-Xylene	0.0014	U	0.0014	0.00027	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
sec-Butylbenzene	0.0014	U	0.0014	0.00041	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Styrene	0.0014	U	0.0014	0.00039	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
tert-Butylbenzene	0.0014	U	0.0014	0.00039	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1

Client Sample ID: SB-06_0-2_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-3
Matrix: Solid
Percent Solids: 91.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.0014	U	0.0014	0.00043	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Toluene	0.0014	U	0.0014	0.00033	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
trans-1,2-Dichloroethene	0.0014	U	0.0014	0.00035	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
trans-1,3-Dichloropropene	0.0014	U	0.0014	0.00038	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Trichloroethene	0.0014	U	0.0014	0.00045	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Trichlorofluoromethane	0.0014	U	0.0014	0.00057	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Vinyl chloride	0.0014	U	0.0014	0.00077	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1
Xylenes, Total	0.0028	U	0.0028	0.00025	mg/Kg	☼	10/05/22 20:10	10/07/22 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 145*	*10/05/22 20:10*	*10/07/22 02:43*	*1*
4-Bromofluorobenzene	*116*		*75 - 139*	*10/05/22 20:10*	*10/07/22 02:43*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 139*	*10/05/22 20:10*	*10/07/22 02:43*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*	*10/05/22 20:10*	*10/07/22 02:43*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.36	U	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
1,2,4,5-Tetrachlorobenzene	0.36	U	0.36	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
1,4-Dioxane	0.036	U	0.036	0.032	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,2'-oxybis[1-chloropropane]	0.36	U	0.36	0.0065	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,3,4,6-Tetrachlorophenol	0.36	U	0.36	0.024	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4,5-Trichlorophenol	0.36	U	0.36	0.037	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4,6-Trichlorophenol	0.15	U	0.15	0.046	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4-Dichlorophenol	0.15	U	0.15	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4-Dimethylphenol	0.36	U	0.36	0.043	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4-Dinitrophenol	0.29	U	0.29	0.18	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,4-Dinitrotoluene	0.073	U	0.073	0.039	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2,6-Dinitrotoluene	0.073	U	0.073	0.026	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Chloronaphthalene	0.36	U	0.36	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Chlorophenol	0.36	U	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Methylnaphthalene	0.36	U	0.36	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Methylphenol	0.36	U	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Nitroaniline	0.36	U	0.36	0.028	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
2-Nitrophenol	0.36	U	0.36	0.036	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
3 & 4 Methylphenol	0.36	U	0.36	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
3,3'-Dichlorobenzidine	0.15	U	0.15	0.055	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
3-Nitroaniline	0.36	U	0.36	0.086	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4,6-Dinitro-2-methylphenol	0.29	U	0.29	0.15	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Bromophenyl phenyl ether	0.36	U	0.36	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Chloro-3-methylphenol	0.36	U	0.36	0.020	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Chloroaniline	0.36	U	0.36	0.064	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Chlorophenyl phenyl ether	0.36	U	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Methylphenol	0.36	U	0.36	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Nitroaniline	0.36	U	0.36	0.042	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
4-Nitrophenol	0.73	U	0.73	0.059	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Acenaphthene	0.36	U	0.36	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Acenaphthylene	**0.010**	**J**	0.36	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Acetophenone	0.36	U	0.36	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Anthracene	**0.028**	**J**	0.36	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1

Client Sample ID: SB-06_0-2_20221004
Date Collected: 10/04/22 14:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-3
Matrix: Solid
Percent Solids: 91.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	0.15	U *	0.15	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzaldehyde	0.36	U	0.36	0.060	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzo[a]anthracene	0.036	U	0.036	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzo[a]pyrene	**0.13**		0.036	0.0096	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzo[b]fluoranthene	**0.17**		0.036	0.0094	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzo[g,h,i]perylene	**0.062**	**J**	0.36	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Benzo[k]fluoranthene	**0.066**		0.036	0.0071	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Bis(2-chloroethoxy)methane	0.36	U	0.36	0.028	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Bis(2-chloroethyl)ether	0.036	U	0.036	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Bis(2-ethylhexyl) phthalate	0.36	U	0.36	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Butyl benzyl phthalate	0.36	U	0.36	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Caprolactam	0.36	U *	0.36	0.056	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Carbazole	0.36	U	0.36	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Chrysene	**0.11**	**J**	0.36	0.0061	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Dibenz(a,h)anthracene	0.036	U	0.036	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Dibenzofuran	0.36	U	0.36	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Diethyl phthalate	0.36	U	0.36	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Dimethyl phthalate	0.36	U	0.36	0.082	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Di-n-butyl phthalate	0.36	U	0.36	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Di-n-octyl phthalate	0.36	U	0.36	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Fluoranthene	**0.22**	**J**	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Fluorene	0.36	U	0.36	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Hexachlorobenzene	0.036	U	0.036	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Hexachlorobutadiene	0.073	U	0.073	0.0077	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Hexachlorocyclopentadiene	0.36	U	0.36	0.032	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Hexachloroethane	0.036	U	0.036	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Indeno[1,2,3-cd]pyrene	**0.14**		0.036	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Isophorone	0.15	U	0.15	0.10	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Naphthalene	0.36	U	0.36	0.0063	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Nitrobenzene	0.036	U	0.036	0.020	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
N-Nitrosodi-n-propylamine	0.036	U	0.036	0.026	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
N-Nitrosodiphenylamine	0.36	U	0.36	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Pentachlorophenol	0.29	U	0.29	0.074	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Phenanthrene	**0.12**	**J**	0.36	0.0064	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Phenol	0.36	U	0.36	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1
Pyrene	**0.21**	**J**	0.36	0.0090	mg/Kg	☼	10/05/22 10:12	10/06/22 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 123*	*10/05/22 10:12*	*10/06/22 03:47*	*1*
2-Fluorobiphenyl	*89*		*22 - 122*	*10/05/22 10:12*	*10/06/22 03:47*	*1*
2-Fluorophenol (Surr)	*75*		*18 - 123*	*10/05/22 10:12*	*10/06/22 03:47*	*1*
Nitrobenzene-d5 (Surr)	*79*		*16 - 125*	*10/05/22 10:12*	*10/06/22 03:47*	*1*
Phenol-d5 (Surr)	*77*		*23 - 120*	*10/05/22 10:12*	*10/06/22 03:47*	*1*
Terphenyl-d14 (Surr)	*98*		*25 - 126*	*10/05/22 10:12*	*10/06/22 03:47*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0073	U	0.0073	0.0012	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
4,4'-DDE	0.0073	U	0.0073	0.00086	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
4,4'-DDT	0.0073	U	0.0073	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1

Client Sample ID: SB-06_0-2_20221004

Date Collected: 10/04/22 14:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-3

Matrix: Solid
Percent Solids: 91.4

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
alpha-BHC	0.0022	U	0.0022	0.00074	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
beta-BHC	0.0022	U	0.0022	0.00082	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Chlordane (technical)	0.073	U	0.073	0.018	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
cis-Chlordane	0.0073	U	0.0073	0.0012	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
delta-BHC	0.0022	U	0.0022	0.00045	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Dieldrin	0.0022	U	0.0022	0.00095	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endosulfan I	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endosulfan II	0.0073	U	0.0073	0.0019	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endosulfan sulfate	0.0073	U	0.0073	0.00092	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endrin	0.0073	U	0.0073	0.0010	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endrin aldehyde	0.0073	U	0.0073	0.0017	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Endrin ketone	0.0073	U	0.0073	0.0014	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
gamma-BHC (Lindane)	0.0022	U	0.0022	0.00068	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Heptachlor	0.0073	U	0.0073	0.00086	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Heptachlor epoxide	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Methoxychlor	0.0073	U	0.0073	0.0017	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1
Toxaphene	0.073	U	0.073	0.026	mg/Kg	☼	10/05/22 12:37	10/06/22 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:34*	*1*
DCB Decachlorobiphenyl	*69*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:34*	*1*
Tetrachloro-m-xylene	*73*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:34*	*1*
Tetrachloro-m-xylene	*67*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:34*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1221	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1232	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1242	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1248	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1254	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1260	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor-1262	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Aroclor 1268	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1
Polychlorinated biphenyls, Total	0.073	U	0.073	0.019	mg/Kg	☼	10/05/22 12:32	10/06/22 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*110*		*10 - 150*	*10/05/22 12:32*	*10/06/22 11:57*	*1*
DCB Decachlorobiphenyl	*114*		*10 - 150*	*10/05/22 12:32*	*10/06/22 11:57*	*1*
Tetrachloro-m-xylene	*95*		*42 - 150*	*10/05/22 12:32*	*10/06/22 11:57*	*1*
Tetrachloro-m-xylene	*96*		*42 - 150*	*10/05/22 12:32*	*10/06/22 11:57*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6750**		20.8	5.7	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Arsenic	**3.4**		1.0	0.11	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Barium	**37.3**		2.1	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1

Client Sample ID: SB-06_0-2_20221004

Lab Sample ID: 460-266826-3

Date Collected: 10/04/22 14:00
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 91.4

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.41	J	0.42	0.059	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Cadmium	0.16	J	1.0	0.12	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Calcium	8910		104	18.4	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Chromium	12.3		2.1	0.95	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Cobalt	6.0		2.1	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Copper	27.7		2.1	0.38	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Iron	11500		62.5	21.0	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Lead	30.4		0.62	0.21	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Magnesium	3720		104	10.6	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Manganese	335		4.2	0.42	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Nickel	12.3		2.1	0.49	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Potassium	763		104	16.9	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Selenium	0.19	J	1.3	0.13	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Silver	0.42	U	0.42	0.093	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Sodium	281		104	47.6	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Thallium	0.079	J	0.42	0.043	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Vanadium	17.2		2.1	0.21	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1
Zinc	42.5		8.3	3.2	mg/Kg	☼	10/06/22 08:43	10/07/22 21:50	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.075		0.017	0.0082	mg/Kg	☼	10/06/22 00:22	10/06/22 04:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.2	U	2.2	0.93	mg/Kg	☼	10/10/22 17:57	10/11/22 10:10	1
Percent Moisture (EPA Moisture)	8.6		1.0	1.0	%			10/05/22 21:11	1
Percent Solids (EPA Moisture)	91.4		1.0	1.0	%			10/05/22 21:11	1

Client Sample ID: SB-06_29-31_20221004

Lab Sample ID: 460-266826-4

Date Collected: 10/04/22 14:05
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0012	U	0.0012	0.00028	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,1,2,2-Tetrachloroethane	0.0012	U	0.0012	0.00026	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,1,2-Trichloroethane	0.0012	U	0.0012	0.00022	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,1-Dichloroethane	0.0012	U	0.0012	0.00025	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,1-Dichloroethene	0.0012	U	0.0012	0.00027	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2,3-Trichlorobenzene	0.0012	U	0.0012	0.00022	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2,4-Trichlorobenzene	0.0012	U	0.0012	0.00043	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2,4-Trimethylbenzene	0.0012	U	0.0012	0.00030	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2-Dibromo-3-Chloropropane	0.0012	U	0.0012	0.00056	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2-Dichlorobenzene	0.0012	U	0.0012	0.00044	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2-Dichloroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,2-Dichloropropane	0.0012	U	0.0012	0.00051	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,3,5-Trimethylbenzene	0.0012	U	0.0012	0.00038	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
1,3-Dichlorobenzene	0.0012	U	0.0012	0.00044	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1

Client Sample ID: SB-06_29-31_20221004
Date Collected: 10/04/22 14:05
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-4
Matrix: Solid
Percent Solids: 96.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0012	U	0.0012	0.00027	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
2-Butanone (MEK)	0.0061	U	0.0061	0.00045	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
2-Hexanone	0.0061	U	0.0061	0.0021	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
4-Methyl-2-pentanone (MIBK)	0.0061	U	0.0061	0.0019	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Acetone	0.0073	U	0.0073	0.0069	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Benzene	0.0012	U	0.0012	0.00031	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Bromoform	0.0012	U	0.0012	0.00051	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Bromomethane	0.0024	U	0.0024	0.0012	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Carbon disulfide	0.0012	U	0.0012	0.00032	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Carbon tetrachloride	0.0012	U	0.0012	0.00047	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chlorobenzene	0.0012	U	0.0012	0.00021	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chlorobromomethane	0.0012	U	0.0012	0.00034	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chlorodibromomethane	0.0012	U	0.0012	0.00023	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chloroethane	0.0012	U	0.0012	0.00063	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chloroform	0.0012	U	0.0012	0.0012	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Chloromethane	0.0012	U	0.0012	0.00053	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
cis-1,2-Dichloroethene	0.0012	U	0.0012	0.00043	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
cis-1,3-Dichloropropene	0.0012	U	0.0012	0.00033	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Cyclohexane	0.0012	U	0.0012	0.00027	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Dichlorobromomethane	0.0012	U	0.0012	0.00031	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Dichlorodifluoromethane	0.0012	U	0.0012	0.00041	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Ethylbenzene	0.0012	U	0.0012	0.00024	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Ethylene Dibromide	0.0012	U	0.0012	0.00022	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Isopropylbenzene	0.0012	U	0.0012	0.00035	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Methyl acetate	0.0061	U	0.0061	0.0052	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Methyl tert-butyl ether	0.0012	U	0.0012	0.00062	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Methylcyclohexane	0.0012	U	0.0012	0.00060	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Methylene Chloride	0.0024	U	0.0024	0.0014	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
m-Xylene & p-Xylene	0.0012	U	0.0012	0.00021	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
n-Butylbenzene	0.0012	U	0.0012	0.00036	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
N-Propylbenzene	0.0012	U	0.0012	0.00021	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
o-Xylene	0.0012	U	0.0012	0.00023	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
sec-Butylbenzene	0.0012	U	0.0012	0.00035	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Styrene	0.0012	U	0.0012	0.00034	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
tert-Butylbenzene	0.0012	U	0.0012	0.00033	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Tetrachloroethene	0.00087	J	0.0012	0.00037	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Toluene	0.0012	U	0.0012	0.00028	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
trans-1,2-Dichloroethene	0.0012	U	0.0012	0.00030	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
trans-1,3-Dichloropropene	0.0012	U	0.0012	0.00032	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Trichloroethene	0.0012	U	0.0012	0.00039	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Trichlorofluoromethane	0.0012	U	0.0012	0.00049	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Vinyl chloride	0.0012	U	0.0012	0.00066	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1
Xylenes, Total	0.0024	U	0.0024	0.00021	mg/Kg	☼	10/05/22 20:12	10/07/22 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 145*	*10/05/22 20:12*	*10/07/22 03:08*	*1*
4-Bromofluorobenzene	*107*		*75 - 139*	*10/05/22 20:12*	*10/07/22 03:08*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 139*	*10/05/22 20:12*	*10/07/22 03:08*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*	*10/05/22 20:12*	*10/07/22 03:08*	*1*

Client Sample ID: SB-06_29-31_20221004
Date Collected: 10/04/22 14:05
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-4
Matrix: Solid
Percent Solids: 96.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0062	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.035	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.044	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4-Dimethylphenol	0.34	U	0.34	0.041	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4-Dinitrophenol	0.28	U	0.28	0.17	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,4-Dinitrotoluene	0.069	U	0.069	0.037	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2,6-Dinitrotoluene	0.069	U	0.069	0.025	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Methylnaphthalene	0.34	U	0.34	0.0096	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.052	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
3-Nitroaniline	0.34	U	0.34	0.081	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4,6-Dinitro-2-methylphenol	0.28	U	0.28	0.14	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.014	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Chloroaniline	0.34	U	0.34	0.061	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
4-Nitrophenol	0.69	U	0.69	0.056	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Acenaphthene	0.34	U	0.34	0.0098	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Acenaphthylene	0.34	U	0.34	0.0098	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Anthracene	**0.023**	**J**	0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Atrazine	0.14	U *	0.14	0.020	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzaldehyde	0.34	U	0.34	0.057	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzo[a]anthracene	0.034	U	0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzo[a]pyrene	**0.053**		0.034	0.0091	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzo[b]fluoranthene	0.034	U	0.034	0.0089	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzo[g,h,i]perylene	**0.024**	**J**	0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Benzo[k]fluoranthene	0.034	U	0.034	0.0067	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.027	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Caprolactam	0.34	U *	0.34	0.053	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Carbazole	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Chrysene	**0.049**	**J**	0.34	0.0058	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Dibenz(a,h)anthracene	0.034	U	0.034	0.015	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1

Client Sample ID: SB-06_29-31_20221004

Date Collected: 10/04/22 14:05
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-4

Matrix: Solid
Percent Solids: 96.5

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Dimethyl phthalate	0.34	U	0.34	0.078	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Fluoranthene	**0.10**	**J**	0.34	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Fluorene	0.34	U	0.34	0.010	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Hexachlorobutadiene	0.069	U	0.069	0.0073	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Indeno[1,2,3-cd]pyrene	**0.071**		0.034	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Isophorone	0.14	U	0.14	0.099	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Naphthalene	0.34	U	0.34	0.0059	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Pentachlorophenol	0.28	U	0.28	0.070	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Phenanthrene	**0.076**	**J**	0.34	0.0060	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Phenol	0.34	U	0.34	0.013	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1
Pyrene	**0.10**	**J**	0.34	0.0085	mg/Kg	☼	10/05/22 10:12	10/06/22 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*10 - 123*	*10/05/22 10:12*	*10/06/22 04:04*	*1*
2-Fluorobiphenyl	*92*		*22 - 122*	*10/05/22 10:12*	*10/06/22 04:04*	*1*
2-Fluorophenol (Surr)	*77*		*18 - 123*	*10/05/22 10:12*	*10/06/22 04:04*	*1*
Nitrobenzene-d5 (Surr)	*80*		*16 - 125*	*10/05/22 10:12*	*10/06/22 04:04*	*1*
Phenol-d5 (Surr)	*77*		*23 - 120*	*10/05/22 10:12*	*10/06/22 04:04*	*1*
Terphenyl-d14 (Surr)	*97*		*25 - 126*	*10/05/22 10:12*	*10/06/22 04:04*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
4,4'-DDE	0.0069	U	0.0069	0.00082	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
alpha-BHC	0.0021	U	0.0021	0.00070	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
beta-BHC	0.0021	U	0.0021	0.00078	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
delta-BHC	0.0021	U	0.0021	0.00042	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Dieldrin	0.0021	U	0.0021	0.00090	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endosulfan I	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endosulfan sulfate	0.0069	U	0.0069	0.00087	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endrin	0.0069	U	0.0069	0.00099	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
gamma-BHC (Lindane)	0.0021	U	0.0021	0.00064	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Heptachlor	0.0069	U	0.0069	0.00082	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1

Client Sample ID: SB-06_29-31_20221004
Date Collected: 10/04/22 14:05
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-4
Matrix: Solid
Percent Solids: 96.5

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/05/22 12:37	10/06/22 07:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:46*	*1*
DCB Decachlorobiphenyl	*56*		*43 - 150*	*10/05/22 12:37*	*10/06/22 07:46*	*1*
Tetrachloro-m-xylene	*65*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:46*	*1*
Tetrachloro-m-xylene	*59*		*26 - 137*	*10/05/22 12:37*	*10/06/22 07:46*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/05/22 12:32	10/06/22 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*10 - 150*	*10/05/22 12:32*	*10/06/22 12:17*	*1*
DCB Decachlorobiphenyl	*100*		*10 - 150*	*10/05/22 12:32*	*10/06/22 12:17*	*1*
Tetrachloro-m-xylene	*85*		*42 - 150*	*10/05/22 12:32*	*10/06/22 12:17*	*1*
Tetrachloro-m-xylene	*99*		*42 - 150*	*10/05/22 12:32*	*10/06/22 12:17*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3730**		20.1	5.5	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Antimony	1.0	U	1.0	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Arsenic	**0.79**	**J**	1.0	0.10	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Barium	**23.0**		2.0	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Beryllium	**0.19**	**J**	0.40	0.057	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Cadmium	1.0	U	1.0	0.11	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Calcium	**22200**		101	17.8	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Chromium	**9.1**		2.0	0.91	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Cobalt	**3.7**		2.0	0.15	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Copper	**9.6**		2.0	0.37	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Iron	**8350**		60.4	20.3	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Lead	**2.2**		0.60	0.20	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Magnesium	**14700**		101	10.3	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Manganese	**176**		4.0	0.41	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Nickel	**7.9**		2.0	0.47	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Potassium	**918**		101	16.3	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Selenium	1.3	U	1.3	0.13	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Silver	0.40	U	0.40	0.090	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Sodium	**281**		101	46.0	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Thallium	**0.049**	**J**	0.40	0.041	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1

Client Sample ID: SB-06_29-31_20221004

Lab Sample ID: 460-266826-4
Date Collected: 10/04/22 14:05
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	15.5		2.0	0.21	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1
Zinc	22.7		8.1	3.1	mg/Kg	☼	10/06/22 08:43	10/07/22 21:52	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.016	0.0075	mg/Kg	☼	10/06/22 00:22	10/06/22 04:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.88	mg/Kg	☼	10/10/22 17:57	10/11/22 10:10	1
Percent Moisture (EPA Moisture)	3.5		1.0	1.0	%			10/05/22 21:11	1
Percent Solids (EPA Moisture)	96.5		1.0	1.0	%			10/05/22 21:11	1

Client Sample ID: SB-01_0-2_20221005

Lab Sample ID: 460-266877-1
Date Collected: 10/05/22 08:10
Matrix: Solid
Date Received: 10/05/22 18:00
Percent Solids: 91.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0013	U	0.0013	0.00031	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,1,2,2-Tetrachloroethane	0.0013	U	0.0013	0.00029	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0013	U	0.0013	0.00040	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,1,2-Trichloroethane	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,1-Dichloroethane	0.0013	U	0.0013	0.00027	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,1-Dichloroethene	0.0013	U	0.0013	0.00030	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2,3-Trichlorobenzene	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2,4-Trichlorobenzene	0.0013	U	0.0013	0.00048	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2,4-Trimethylbenzene	0.00055	J	0.0013	0.00033	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2-Dibromo-3-Chloropropane	0.0013	U	0.0013	0.00061	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2-Dichlorobenzene	0.0013	U	0.0013	0.00048	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2-Dichloroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,2-Dichloropropane	0.0013	U	0.0013	0.00056	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,3,5-Trimethylbenzene	0.0013	U	0.0013	0.00042	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,3-Dichlorobenzene	0.0013	U	0.0013	0.00049	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
1,4-Dichlorobenzene	0.0013	U	0.0013	0.00030	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
2-Butanone (MEK)	0.0067	U	0.0067	0.00049	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
2-Hexanone	0.0067	U	0.0067	0.0023	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
4-Methyl-2-pentanone (MIBK)	0.0067	U	0.0067	0.0021	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Acetone	0.0080	U	0.0080	0.0076	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Benzene	0.0013	U	0.0013	0.00034	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Bromoform	0.0013	U	0.0013	0.00057	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Bromomethane	0.0027	U	0.0027	0.0013	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Carbon disulfide	0.0013	U	0.0013	0.00035	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Carbon tetrachloride	0.0013	U	0.0013	0.00052	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chlorobenzene	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chlorobromomethane	0.0013	U	0.0013	0.00037	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chlorodibromomethane	0.0013	U	0.0013	0.00026	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chloroethane	0.0013	U	0.0013	0.00070	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chloroform	0.0013	U	0.0013	0.0013	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Chloromethane	0.0013	U	0.0013	0.00058	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1

Client Sample ID: SB-01_0-2_20221005
Date Collected: 10/05/22 08:10
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.0013	U	0.0013	0.00048	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
cis-1,3-Dichloropropene	0.0013	U	0.0013	0.00036	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Cyclohexane	0.0013	U	0.0013	0.00029	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Dichlorobromomethane	0.0013	U	0.0013	0.00034	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Dichlorodifluoromethane	0.0013	U	0.0013	0.00045	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Ethylbenzene	0.0013	U	0.0013	0.00027	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Ethylene Dibromide	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Isopropylbenzene	0.0013	U	0.0013	0.00038	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Methyl acetate	0.0067	U	0.0067	0.0057	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Methyl tert-butyl ether	0.0013	U	0.0013	0.00068	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Methylcyclohexane	0.0013	U	0.0013	0.00067	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Methylene Chloride	0.0027	U	0.0027	0.0015	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
m-Xylene & p-Xylene	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
n-Butylbenzene	0.0013	U	0.0013	0.00039	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
N-Propylbenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
o-Xylene	0.0013	U	0.0013	0.00026	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
sec-Butylbenzene	0.0013	U	0.0013	0.00038	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Styrene	0.0013	U	0.0013	0.00037	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
tert-Butylbenzene	0.0013	U	0.0013	0.00037	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Tetrachloroethene	0.0013	U	0.0013	0.00041	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Toluene	0.0013	U	0.0013	0.00031	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
trans-1,2-Dichloroethene	0.0013	U	0.0013	0.00033	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
trans-1,3-Dichloropropene	0.0013	U	0.0013	0.00035	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Trichloroethene	0.0013	U	0.0013	0.00043	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Trichlorofluoromethane	0.0013	U	0.0013	0.00054	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Vinyl chloride	0.0013	U	0.0013	0.00073	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1
Xylenes, Total	0.0027	U	0.0027	0.00023	mg/Kg	☼	10/06/22 16:35	10/08/22 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 145*	*10/06/22 16:35*	*10/08/22 02:26*	*1*
4-Bromofluorobenzene	*111*		*75 - 139*	*10/06/22 16:35*	*10/08/22 02:26*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 139*	*10/06/22 16:35*	*10/08/22 02:26*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*10/06/22 16:35*	*10/08/22 02:26*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**0.081**	**J**	0.36	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
1,2,4,5-Tetrachlorobenzene	0.36	U	0.36	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
1,4-Dioxane	0.036	U	0.036	0.031	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,2'-oxybis[1-chloropropane]	0.36	U	0.36	0.0065	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,3,4,6-Tetrachlorophenol	0.36	U	0.36	0.024	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4,5-Trichlorophenol	0.36	U	0.36	0.037	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.046	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4-Dichlorophenol	0.14	U	0.14	0.023	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4-Dimethylphenol	0.36	U	0.36	0.043	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4-Dinitrophenol	0.29	U	0.29	0.18	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,4-Dinitrotoluene	0.073	U	0.073	0.039	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2,6-Dinitrotoluene	0.073	U	0.073	0.026	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2-Chloronaphthalene	0.36	U	0.36	0.017	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2-Chlorophenol	0.36	U	0.36	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1

Client Sample ID: SB-01_0-2_20221005
Date Collected: 10/05/22 08:10
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.28	J	0.36	0.010	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2-Methylphenol	0.36	U	0.36	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2-Nitroaniline	0.36	U	0.36	0.027	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
2-Nitrophenol	0.36	U	0.36	0.036	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
3 & 4 Methylphenol	0.36	U	0.36	0.022	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.054	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
3-Nitroaniline	0.36	U	0.36	0.085	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4,6-Dinitro-2-methylphenol	0.29	U	0.29	0.15	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Bromophenyl phenyl ether	0.36	U	0.36	0.014	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Chloro-3-methylphenol	0.36	U	0.36	0.020	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Chloroaniline	0.36	U	0.36	0.064	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Chlorophenyl phenyl ether	0.36	U	0.36	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Methylphenol	0.36	U	0.36	0.022	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Nitroaniline	0.36	U	0.36	0.041	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
4-Nitrophenol	0.73	U	0.73	0.059	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Acenaphthene	0.84		0.36	0.010	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Acenaphthylene	0.22	J	0.36	0.010	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Acetophenone	0.36	U	0.36	0.018	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Anthracene	2.3		0.36	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Atrazine	0.14	U	0.14	0.021	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzaldehyde	0.36	U	0.36	0.060	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzo[a]anthracene	6.5		0.036	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzo[a]pyrene	5.3		0.036	0.0096	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzo[b]fluoranthene	7.1		0.036	0.0093	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzo[g,h,i]perylene	3.3		0.36	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Benzo[k]fluoranthene	2.3		0.036	0.0071	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Bis(2-chloroethoxy)methane	0.36	U	0.36	0.028	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Bis(2-chloroethyl)ether	0.036	U	0.036	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Bis(2-ethylhexyl) phthalate	0.36	U	0.36	0.019	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Butyl benzyl phthalate	0.36	U	0.36	0.017	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Caprolactam	0.36	U	0.36	0.056	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Carbazole	0.86		0.36	0.014	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Chrysene	6.0		0.36	0.0061	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Dibenz(a,h)anthracene	0.95		0.036	0.016	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Dibenzofuran	0.50		0.36	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Diethyl phthalate	0.36	U	0.36	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Dimethyl phthalate	0.36	U	0.36	0.082	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Di-n-butyl phthalate	0.36	U	0.36	0.014	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Di-n-octyl phthalate	0.36	U	0.36	0.019	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Fluorene	0.77		0.36	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Hexachlorobenzene	0.036	U	0.036	0.017	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Hexachlorobutadiene	0.073	U	0.073	0.0077	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Hexachlorocyclopentadiene	0.36	U	0.36	0.032	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Hexachloroethane	0.036	U	0.036	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Indeno[1,2,3-cd]pyrene	4.2		0.036	0.014	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Isophorone	0.14	U	0.14	0.10	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Naphthalene	0.37		0.36	0.0062	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Nitrobenzene	0.036	U	0.036	0.020	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
N-Nitrosodi-n-propylamine	0.036	U	0.036	0.026	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1

Client Sample ID: SB-01_0-2_20221005

Date Collected: 10/05/22 08:10
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-1

Matrix: Solid
Percent Solids: 91.7

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.36	U	0.36	0.030	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Pentachlorophenol	0.29	U	0.29	0.074	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1
Phenol	0.36	U	0.36	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 08:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 123*	*10/07/22 10:42*	*10/08/22 08:36*	*1*
2-Fluorobiphenyl	*55*		*22 - 122*	*10/07/22 10:42*	*10/08/22 08:36*	*1*
2-Fluorophenol (Surr)	*50*		*18 - 123*	*10/07/22 10:42*	*10/08/22 08:36*	*1*
Nitrobenzene-d5 (Surr)	*49*		*16 - 125*	*10/07/22 10:42*	*10/08/22 08:36*	*1*
Phenol-d5 (Surr)	*51*		*23 - 120*	*10/07/22 10:42*	*10/08/22 08:36*	*1*
Terphenyl-d14 (Surr)	*64*		*25 - 126*	*10/07/22 10:42*	*10/08/22 08:36*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**18**		1.8	0.063	mg/Kg	☼	10/07/22 10:42	10/09/22 05:30	5
Phenanthrene	**16**		1.8	0.032	mg/Kg	☼	10/07/22 10:42	10/09/22 05:30	5
Pyrene	**17**		1.8	0.045	mg/Kg	☼	10/07/22 10:42	10/09/22 05:30	5

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0073	U	0.0073	0.0012	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
4,4'-DDE	0.0073	U	0.0073	0.00086	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
4,4'-DDT	**0.0033**	**J**	0.0073	0.0013	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Aldrin	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
alpha-BHC	0.0022	U	0.0022	0.00074	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
beta-BHC	0.0022	U	0.0022	0.00082	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Chlordane (technical)	0.073	U	0.073	0.018	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
cis-Chlordane	0.0073	U	0.0073	0.0012	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
delta-BHC	0.0022	U	0.0022	0.00045	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Dieldrin	**0.0020**	**J**	0.0022	0.00095	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endosulfan I	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endosulfan II	0.0073	U	0.0073	0.0019	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endosulfan sulfate	0.0073	U	0.0073	0.00091	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endrin	0.0073	U	0.0073	0.0010	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endrin aldehyde	0.0073	U	0.0073	0.0017	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Endrin ketone	0.0073	U	0.0073	0.0014	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
gamma-BHC (Lindane)	0.0022	U	0.0022	0.00067	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Heptachlor	0.0073	U	0.0073	0.00086	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Heptachlor epoxide	0.0073	U	0.0073	0.0011	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Methoxychlor	0.0073	U	0.0073	0.0017	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1
Toxaphene	0.073	U	0.073	0.026	mg/Kg	☼	10/07/22 11:51	10/10/22 09:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*43 - 150*	*10/07/22 11:51*	*10/10/22 09:14*	*1*
DCB Decachlorobiphenyl	*84*		*43 - 150*	*10/07/22 11:51*	*10/10/22 09:14*	*1*
Tetrachloro-m-xylene	*70*		*26 - 137*	*10/07/22 11:51*	*10/10/22 09:14*	*1*
Tetrachloro-m-xylene	*64*		*26 - 137*	*10/07/22 11:51*	*10/10/22 09:14*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1

Client Sample ID: SB-01_0-2_20221005
Date Collected: 10/05/22 08:10
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1221	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1232	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1242	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1248	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1254	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1260	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor-1262	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Aroclor 1268	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1
Polychlorinated biphenyls, Total	0.073	U	0.073	0.019	mg/Kg	☼	10/07/22 11:56	10/10/22 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*10 - 150*	*10/07/22 11:56*	*10/10/22 11:08*	*1*
DCB Decachlorobiphenyl	*96*		*10 - 150*	*10/07/22 11:56*	*10/10/22 11:08*	*1*
Tetrachloro-m-xylene	*83*		*42 - 150*	*10/07/22 11:56*	*10/10/22 11:08*	*1*
Tetrachloro-m-xylene	*86*		*42 - 150*	*10/07/22 11:56*	*10/10/22 11:08*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5960**		17.3	4.8	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Antimony	**0.25**	**J**	0.87	0.13	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Arsenic	**2.2**		0.87	0.089	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Barium	**35.1**		1.7	0.13	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Beryllium	**0.32**	**J**	0.35	0.049	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Cadmium	**0.098**	**J**	0.87	0.098	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Calcium	**5840**		86.6	15.3	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Chromium	**16.7**		1.7	0.79	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Cobalt	**5.2**		1.7	0.13	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Copper	**15.2**		1.7	0.32	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Iron	**10500**		51.9	17.5	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Lead	**19.1**		0.52	0.17	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Magnesium	**2460**		86.6	8.8	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Manganese	**338**		3.5	0.35	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Nickel	**12.1**		1.7	0.41	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Potassium	**714**		86.6	14.0	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Selenium	1.1	U	1.1	0.11	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Silver	0.35	U	0.35	0.077	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Sodium	**152**		86.6	39.6	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Thallium	**0.058**	**J**	0.35	0.035	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Vanadium	**21.8**		1.7	0.18	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1
Zinc	**28.9**		6.9	2.6	mg/Kg	☼	10/07/22 19:45	10/10/22 14:19	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.017	0.0082	mg/Kg	☼	10/10/22 00:23	10/10/22 03:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.1	U	2.1	0.89	mg/Kg	☼	10/10/22 08:35	10/10/22 11:45	1
Percent Moisture (EPA Moisture)	**8.7**		1.0	1.0	%			10/10/22 19:01	1
Percent Solids (EPA Moisture)	**91.3**		1.0	1.0	%			10/10/22 19:01	1

Client Sample ID: SB-01_31-33_20221005
Date Collected: 10/05/22 08:15
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-2
Matrix: Solid
Percent Solids: 97.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0013	U	0.0013	0.00031	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,1,2,2-Tetrachloroethane	0.0013	U	0.0013	0.00028	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,1,2-Trichloroethane	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,1-Dichloroethane	0.0013	U	0.0013	0.00027	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,1-Dichloroethene	0.0013	U	0.0013	0.00029	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2,3-Trichlorobenzene	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2,4-Trichlorobenzene	0.0013	U	0.0013	0.00047	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2,4-Trimethylbenzene	0.0013	U	0.0013	0.00032	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2-Dibromo-3-Chloropropane	0.0013	U	0.0013	0.00060	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2-Dichlorobenzene	0.0013	U	0.0013	0.00047	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2-Dichloroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,2-Dichloropropane	0.0013	U	0.0013	0.00055	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,3,5-Trimethylbenzene	0.0013	U	0.0013	0.00041	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,3-Dichlorobenzene	0.0013	U	0.0013	0.00048	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
1,4-Dichlorobenzene	0.0013	U	0.0013	0.00029	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
2-Butanone (MEK)	0.0066	U	0.0066	0.00048	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
2-Hexanone	0.0066	U	0.0066	0.0022	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
4-Methyl-2-pentanone (MIBK)	0.0066	U	0.0066	0.0020	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Acetone	0.16		0.0079	0.0075	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Benzene	0.0013	U	0.0013	0.00034	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Bromoform	0.0013	U	0.0013	0.00056	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Bromomethane	0.0026	U	0.0026	0.0013	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Carbon disulfide	0.0013	U *	0.0013	0.00035	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Carbon tetrachloride	0.0013	U	0.0013	0.00051	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chlorobenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chlorobromomethane	0.0013	U	0.0013	0.00037	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chlorodibromomethane	0.0013	U	0.0013	0.00025	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chloroethane	0.0013	U	0.0013	0.00068	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chloroform	0.0013	U	0.0013	0.0013	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Chloromethane	0.0013	U	0.0013	0.00057	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
cis-1,2-Dichloroethene	0.0013	U	0.0013	0.00047	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
cis-1,3-Dichloropropene	0.0013	U	0.0013	0.00036	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Cyclohexane	0.0013	U	0.0013	0.00029	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Dichlorobromomethane	0.0013	U	0.0013	0.00034	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Dichlorodifluoromethane	0.0013	U	0.0013	0.00044	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Ethylbenzene	0.0013	U	0.0013	0.00026	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Ethylene Dibromide	0.0013	U	0.0013	0.00024	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Isopropylbenzene	0.0013	U	0.0013	0.00037	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Methyl acetate	0.0066	U	0.0066	0.0056	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Methyl tert-butyl ether	0.0013	U	0.0013	0.00067	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Methylcyclohexane	0.0013	U	0.0013	0.00065	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Methylene Chloride	0.0026	U	0.0026	0.0015	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
m-Xylene & p-Xylene	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
n-Butylbenzene	0.0013	U	0.0013	0.00039	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
N-Propylbenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
o-Xylene	0.0013	U	0.0013	0.00025	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
sec-Butylbenzene	0.0013	U	0.0013	0.00038	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Styrene	0.0013	U	0.0013	0.00036	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1

Client Sample ID: SB-01_31-33_20221005
Date Collected: 10/05/22 08:15
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-2
Matrix: Solid
Percent Solids: 97.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	0.0013	U	0.0013	0.00036	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Tetrachloroethene	**0.0020**		0.0013	0.00040	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Toluene	0.0013	U	0.0013	0.00031	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
trans-1,2-Dichloroethene	0.0013	U	0.0013	0.00032	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
trans-1,3-Dichloropropene	0.0013	U	0.0013	0.00035	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Trichloroethene	0.0013	U	0.0013	0.00042	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Trichlorofluoromethane	0.0013	U	0.0013	0.00053	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Vinyl chloride	0.0013	U	0.0013	0.00072	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1
Xylenes, Total	0.0026	U	0.0026	0.00023	mg/Kg	☼	10/06/22 16:37	10/08/22 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 145*	*10/06/22 16:37*	*10/08/22 11:50*	*1*
4-Bromofluorobenzene	*115*		*75 - 139*	*10/06/22 16:37*	*10/08/22 11:50*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 139*	*10/06/22 16:37*	*10/08/22 11:50*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*	*10/06/22 16:37*	*10/08/22 11:50*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.34	U	0.34	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
1,2,4,5-Tetrachlorobenzene	0.34	U	0.34	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
1,4-Dioxane	0.034	U	0.034	0.030	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,2'-oxybis[1-chloropropane]	0.34	U	0.34	0.0061	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,3,4,6-Tetrachlorophenol	0.34	U	0.34	0.023	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4,5-Trichlorophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4,6-Trichlorophenol	0.14	U	0.14	0.043	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4-Dichlorophenol	0.14	U	0.14	0.022	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4-Dimethylphenol	0.34	U	0.34	0.040	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4-Dinitrophenol	0.27	U	0.27	0.17	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,4-Dinitrotoluene	0.068	U	0.068	0.036	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2,6-Dinitrotoluene	0.068	U	0.068	0.024	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Chloronaphthalene	0.34	U	0.34	0.016	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Chlorophenol	0.34	U	0.34	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Methylnaphthalene	0.34	U	0.34	0.0095	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Methylphenol	0.34	U	0.34	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Nitroaniline	0.34	U	0.34	0.026	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
2-Nitrophenol	0.34	U	0.34	0.034	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
3 & 4 Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
3,3'-Dichlorobenzidine	0.14	U	0.14	0.051	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
3-Nitroaniline	0.34	U	0.34	0.080	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Bromophenyl phenyl ether	0.34	U	0.34	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Chloro-3-methylphenol	0.34	U	0.34	0.019	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Chloroaniline	0.34	U	0.34	0.060	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Chlorophenyl phenyl ether	0.34	U	0.34	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Methylphenol	0.34	U	0.34	0.021	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Nitroaniline	0.34	U	0.34	0.039	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
4-Nitrophenol	0.68	U	0.68	0.055	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Acenaphthene	0.34	U	0.34	0.0096	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Acenaphthylene	0.34	U	0.34	0.0097	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Acetophenone	0.34	U	0.34	0.017	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1

Client Sample ID: SB-01_31-33_20221005
Date Collected: 10/05/22 08:15
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-2
Matrix: Solid
Percent Solids: 97.6

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.34	U	0.34	0.010	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Atrazine	0.14	U	0.14	0.020	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzaldehyde	0.34	U	0.34	0.056	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzo[a]anthracene	0.034	U	0.034	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzo[a]pyrene	0.034	U	0.034	0.0090	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzo[b]fluoranthene	0.034	U	0.034	0.0087	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzo[g,h,i]perylene	0.34	U	0.34	0.010	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Benzo[k]fluoranthene	0.034	U	0.034	0.0066	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Bis(2-chloroethoxy)methane	0.34	U	0.34	0.026	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Bis(2-chloroethyl)ether	0.034	U	0.034	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Bis(2-ethylhexyl) phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Butyl benzyl phthalate	0.34	U	0.34	0.016	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Caprolactam	0.34	U	0.34	0.053	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Carbazole	0.34	U	0.34	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Chrysene	0.34	U	0.34	0.0057	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Dibenz(a,h)anthracene	0.034	U	0.034	0.015	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Dibenzofuran	0.34	U	0.34	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Diethyl phthalate	0.34	U	0.34	0.011	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Dimethyl phthalate	0.34	U	0.34	0.077	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Di-n-butyl phthalate	0.34	U	0.34	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Di-n-octyl phthalate	0.34	U	0.34	0.018	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Fluoranthene	0.34	U	0.34	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Fluorene	0.34	U	0.34	0.0099	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Hexachlorobenzene	0.034	U	0.034	0.016	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Hexachlorobutadiene	0.068	U	0.068	0.0072	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Hexachlorocyclopentadiene	0.34	U	0.34	0.030	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Hexachloroethane	0.034	U	0.034	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Indeno[1,2,3-cd]pyrene	0.034	U	0.034	0.013	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Isophorone	0.14	U	0.14	0.098	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Naphthalene	0.34	U	0.34	0.0058	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Nitrobenzene	0.034	U	0.034	0.019	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
N-Nitrosodi-n-propylamine	0.034	U	0.034	0.025	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
N-Nitrosodiphenylamine	0.34	U	0.34	0.028	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Pentachlorophenol	0.27	U	0.27	0.069	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Phenanthrene	0.34	U	0.34	0.0059	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Phenol	0.34	U	0.34	0.012	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1
Pyrene	0.34	U	0.34	0.0084	mg/Kg	☼	10/07/22 10:42	10/08/22 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 123*	*10/07/22 10:42*	*10/08/22 06:45*	*1*
2-Fluorobiphenyl	*48*		*22 - 122*	*10/07/22 10:42*	*10/08/22 06:45*	*1*
2-Fluorophenol (Surr)	*47*		*18 - 123*	*10/07/22 10:42*	*10/08/22 06:45*	*1*
Nitrobenzene-d5 (Surr)	*44*		*16 - 125*	*10/07/22 10:42*	*10/08/22 06:45*	*1*
Phenol-d5 (Surr)	*45*		*23 - 120*	*10/07/22 10:42*	*10/08/22 06:45*	*1*
Terphenyl-d14 (Surr)	*57*		*25 - 126*	*10/07/22 10:42*	*10/08/22 06:45*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0069	U	0.0069	0.0012	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
4,4'-DDE	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1

Client Sample ID: SB-01_31-33_20221005

Date Collected: 10/05/22 08:15
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-2

Matrix: Solid
Percent Solids: 97.6

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Aldrin	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
alpha-BHC	0.0020	U	0.0020	0.00070	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
beta-BHC	0.0020	U	0.0020	0.00077	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Chlordane (technical)	0.069	U	0.069	0.017	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
cis-Chlordane	0.0069	U	0.0069	0.0011	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
delta-BHC	0.0020	U	0.0020	0.00042	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Dieldrin	0.0020	U	0.0020	0.00089	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endosulfan I	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endosulfan II	0.0069	U	0.0069	0.0018	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endosulfan sulfate	0.0069	U	0.0069	0.00086	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endrin	0.0069	U	0.0069	0.00098	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endrin aldehyde	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Endrin ketone	0.0069	U	0.0069	0.0013	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00063	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Heptachlor	0.0069	U	0.0069	0.00081	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Heptachlor epoxide	0.0069	U	0.0069	0.0010	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Methoxychlor	0.0069	U	0.0069	0.0016	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1
Toxaphene	0.069	U	0.069	0.025	mg/Kg	☼	10/07/22 11:51	10/10/22 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*43 - 150*	*10/07/22 11:51*	*10/10/22 09:26*	*1*
DCB Decachlorobiphenyl	*43*		*43 - 150*	*10/07/22 11:51*	*10/10/22 09:26*	*1*
Tetrachloro-m-xylene	*47*		*26 - 137*	*10/07/22 11:51*	*10/10/22 09:26*	*1*
Tetrachloro-m-xylene	*42*		*26 - 137*	*10/07/22 11:51*	*10/10/22 09:26*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1221	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1232	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1242	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1248	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1254	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1260	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor-1262	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Aroclor 1268	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1
Polychlorinated biphenyls, Total	0.069	U	0.069	0.018	mg/Kg	☼	10/07/22 11:56	10/10/22 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*10 - 150*	*10/07/22 11:56*	*10/10/22 11:25*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 150*	*10/07/22 11:56*	*10/10/22 11:25*	*1*
Tetrachloro-m-xylene	*88*		*42 - 150*	*10/07/22 11:56*	*10/10/22 11:25*	*1*
Tetrachloro-m-xylene	*87*		*42 - 150*	*10/07/22 11:56*	*10/10/22 11:25*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2340**		16.1	4.4	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Antimony	0.81	U	0.81	0.12	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Arsenic	**0.62**	**J**	0.81	0.083	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1

Client Sample ID: SB-01_31-33_20221005
Lab Sample ID: 460-266877-2

Date Collected: 10/05/22 08:15
Matrix: Solid

Date Received: 10/05/22 18:00
Percent Solids: 97.6

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	20.7		1.6	0.12	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Beryllium	0.12	J	0.32	0.046	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Cadmium	0.81	U	0.81	0.091	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Calcium	7590		80.7	14.3	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Chromium	8.0		1.6	0.73	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Cobalt	2.9		1.6	0.12	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Copper	6.8		1.6	0.30	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Iron	5240		48.4	16.3	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Lead	2.8		0.48	0.16	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Magnesium	4370		80.7	8.2	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Manganese	183		3.2	0.33	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Nickel	5.7		1.6	0.38	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Potassium	383		80.7	13.1	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Selenium	1.0	U	1.0	0.10	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Silver	0.32	U	0.32	0.072	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Sodium	117		80.7	36.9	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Thallium	0.32	U	0.32	0.033	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Vanadium	7.4		1.6	0.17	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1
Zinc	10.2		6.5	2.5	mg/Kg	☼	10/07/22 19:45	10/10/22 14:21	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	U	0.016	0.0076	mg/Kg	☼	10/10/22 00:23	10/10/22 03:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) (SW846 7196A)	2.0	U	2.0	0.87	mg/Kg	☼	10/10/22 08:35	10/10/22 11:45	1
Percent Moisture (EPA Moisture)	1.8		1.0	1.0	%			10/10/22 19:01	1
Percent Solids (EPA Moisture)	98.2		1.0	1.0	%			10/10/22 19:01	1

Surrogate Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-145)	(75-139)	(73-139)	(80-120)
460-266752-1	SB-02_0-2_20221003	109	104	99	110
460-266752-2	SB-02_31-33_20221003	109	101	97	106
460-266752-3	SB-03_0-2_20221003	108	104	97	110
460-266752-4	SB-03_31-33_20221003	98	93	87	99
460-266752-5	SB-04_0-2_20221003	115	111	106	118
460-266752-6	SB-04_32-34_20221003	105	102	96	109
460-266752-7	SB-07_0-2_20221003	115	112	104	116
460-266752-8	SB-07_32-34_20221003	109	112	97	116
460-266826-1	SB-05_0-2_20221004	119	116	100	116
460-266826-2	SB-05_29-31_20221004	111	109	96	110
460-266826-3	SB-06_0-2_20221004	115	116	101	116
460-266826-4	SB-06_29-31_20221004	108	107	93	105
460-266877-1	SB-01_0-2_20221005	97	111	101	103
460-266877-2	SB-01_31-33_20221005	103	115	100	111
LB3 460-870066/1-A	Method Blank	83	83	79	90
LB3 460-870338/1-A	Method Blank	111	112	107	96
LB3 460-870524/1-A	Method Blank	101	118	100	111
LCS 460-870087/3	Lab Control Sample	105	106	96	115
LCS 460-870199/4	Lab Control Sample	88	84	81	95
LCS 460-870277/4	Lab Control Sample	102	103	93	111
LCS 460-870378/4	Lab Control Sample	112	114	101	95
LCS 460-870379/4	Lab Control Sample	107	104	97	114
LCS 460-870501/3	Lab Control Sample	101	100	92	111
LCS 460-870690/5	Lab Control Sample	87	98	84	96
LCS 460-870776/4	Lab Control Sample	94	109	92	103
LCSD 460-870087/4	Lab Control Sample Dup	100	101	92	109
LCSD 460-870199/6	Lab Control Sample Dup	102	100	94	111
LCSD 460-870277/5	Lab Control Sample Dup	101	100	90	107
LCSD 460-870378/5	Lab Control Sample Dup	110	113	101	96
LCSD 460-870379/5	Lab Control Sample Dup	90	93	81	98
LCSD 460-870501/5	Lab Control Sample Dup	101	107	90	114
LCSD 460-870690/6	Lab Control Sample Dup	100	112	96	108
LCSD 460-870776/5	Lab Control Sample Dup	95	110	93	102
MB 460-870087/7	Method Blank	106	101	94	106
MB 460-870199/8	Method Blank	92	86	85	92
MB 460-870277/8	Method Blank	109	103	97	109
MB 460-870378/9	Method Blank	113	115	106	97
MB 460-870379/7	Method Blank	102	99	92	103
MB 460-870501/8	Method Blank	92	103	85	104
MB 460-870690/9	Method Blank	96	112	96	104
MB 460-870776/8	Method Blank	97	112	99	110

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (10-123)	FBP (22-122)	2FP (18-123)	NBZ (16-125)	PHL (23-120)	TPHL (25-126)
460-266324-F-1-A MS	Matrix Spike	64	55	55	53	55	66
460-266324-F-1-B MSD	Matrix Spike Duplicate	69	60	59	57	59	70
460-266752-1	SB-02_0-2_20221003	67	84	72	74	70	87
460-266752-2	SB-02_31-33_20221003	63	82	71	70	68	88
460-266752-3	SB-03_0-2_20221003	67	83	72	73	69	85
460-266752-4	SB-03_31-33_20221003	58	80	72	70	69	82
460-266752-5	SB-04_0-2_20221003	66	81	72	71	69	84
460-266752-6	SB-04_32-34_20221003	67	81	72	70	68	85
460-266752-7	SB-07_0-2_20221003	68	81	69	71	67	81
460-266752-8	SB-07_32-34_20221003	54	80	68	69	66	84
460-266779-B-1-B MS	Matrix Spike	85	79	77	72	75	89
460-266779-B-1-C MSD	Matrix Spike Duplicate	86	78	75	70	74	85
460-266802-E-4-A MS	Matrix Spike	103	104	89	92	89	109
460-266802-E-4-B MSD	Matrix Spike Duplicate	98	97	79	85	80	104
460-266826-1	SB-05_0-2_20221004	75	80	69	71	68	86
460-266826-1 - DL	SB-05_0-2_20221004	112	94	84	85	86	101
460-266826-2	SB-05_29-31_20221004	88	85	70	74	69	91
460-266826-3	SB-06_0-2_20221004	92	89	75	79	77	98
460-266826-4	SB-06_29-31_20221004	88	92	77	80	77	97
460-266877-1	SB-01_0-2_20221005	60	55	50	49	51	64
460-266877-2	SB-01_31-33_20221005	44	48	47	44	45	57
LCS 460-870137/2-A	Lab Control Sample	87	79	73	72	73	84
LCS 460-870226/2-A	Lab Control Sample	93	96	83	88	81	102
LCS 460-870659/2-A	Lab Control Sample	117	100	91	92	93	112
LCSD 460-870137/3-A	Lab Control Sample Dup	91	81	76	74	75	86
LCSD 460-870226/3-A	Lab Control Sample Dup	97	100	87	91	85	106
LCSD 460-870659/3-A	Lab Control Sample Dup	119	101	91	91	94	115
MB 460-870137/1-A	Method Blank	85	78	70	72	71	86
MB 460-870226/1-A	Method Blank	95	97	82	88	81	105
MB 460-870659/1-A	Method Blank	73	67	63	62	62	75

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (43-150)	DCBP2 (43-150)	TCX1 (26-137)	TCX2 (26-137)
460-266735-E-8-F MS	Matrix Spike	61	63	72	72
460-266735-F-8-E MSD	Matrix Spike Duplicate	71	70	80	79
460-266752-1	SB-02_0-2_20221003	69	79	88	93
460-266752-2	SB-02_31-33_20221003	75	80	91	97
460-266752-3	SB-03_0-2_20221003	69	79	84	89
460-266752-4	SB-03_31-33_20221003	74	80	85	91

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(43-150)	(43-150)	(26-137)	(26-137)
460-266752-5	SB-04_0-2_20221003	64	74	74	83
460-266752-6	SB-04_32-34_20221003	78	82	91	95
460-266752-7	SB-07_0-2_20221003	65	75	81	89
460-266752-8	SB-07_32-34_20221003	63	66	74	80
460-266794-E-1-L MS	Matrix Spike	100	58	62	68
460-266794-E-1-M MSD	Matrix Spike Duplicate	60	54	50	57
460-266826-1	SB-05_0-2_20221004	60	57	59	68
460-266826-2	SB-05_29-31_20221004	60	74	71	80
460-266826-3	SB-06_0-2_20221004	69	64	67	73
460-266826-4	SB-06_29-31_20221004	56	66	59	65
460-266877-1	SB-01_0-2_20221005	84	70	64	70
460-266877-2	SB-01_31-33_20221005	43	60	42	47
LCS 460-870105/2-A	Lab Control Sample	63	66	70	75
LCS 460-870258/2-A	Lab Control Sample	70	72	75	79
LCS 460-870672/2-A	Lab Control Sample	88	91	95	98
LCSD 460-870105/3-A	Lab Control Sample Dup	61	65	74	77
LCSD 460-870258/3-A	Lab Control Sample Dup	70	74	78	81
LCSD 460-870672/3-A	Lab Control Sample Dup	84	89	93	98
MB 460-870105/1-A	Method Blank	74	77	77	83
MB 460-870258/1-A	Method Blank	72	74	77	85
MB 460-870672/1-A	Method Blank	80	83	41	92

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(10-150)	(10-150)	(42-150)	(42-150)
460-266735-E-8-D MS	Matrix Spike	101	96	94	93
460-266735-F-8-D MSD	Matrix Spike Duplicate	104	104	96	99
460-266752-1	SB-02_0-2_20221003	93	95	86	91
460-266752-2	SB-02_31-33_20221003	98	101	93	100
460-266752-3	SB-03_0-2_20221003	94	96	86	91
460-266752-4	SB-03_31-33_20221003	91	87	85	86
460-266752-5	SB-04_0-2_20221003	91	90	82	86
460-266752-6	SB-04_32-34_20221003	88	86	81	84
460-266752-7	SB-07_0-2_20221003	85	87	81	85
460-266752-8	SB-07_32-34_20221003	83	82	78	82
460-266794-E-1-I MS	Matrix Spike	111	113	94	90
460-266794-E-1-J MSD	Matrix Spike Duplicate	110	107	92	88
460-266826-1	SB-05_0-2_20221004	103	107	94	84
460-266826-2	SB-05_29-31_20221004	101	105	102	109
460-266826-3	SB-06_0-2_20221004	114	110	96	95
460-266826-4	SB-06_29-31_20221004	100	101	99	85
460-266877-1	SB-01_0-2_20221005	96	93	86	83
460-266877-2	SB-01_31-33_20221005	91	87	87	88
LCS 460-870100/2-A	Lab Control Sample	117	126	95	119

Surrogate Summary

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (10-150)	DCBP2 (10-150)	TCX1 (42-150)	TCX2 (42-150)
LCS 460-870255/2-A	Lab Control Sample	90	96	92	99
LCS 460-870673/2-A	Lab Control Sample	75	69	72	72
LCSD 460-870100/3-A	Lab Control Sample Dup	109	106	99	102
LCSD 460-870255/3-A	Lab Control Sample Dup	95	99	93	81
LCSD 460-870673/3-A	Lab Control Sample Dup	85	81	79	78
MB 460-870100/1-A	Method Blank	105	101	92	97
MB 460-870255/1-A	Method Blank	103	103	97	87
MB 460-870673/1-A	Method Blank	95	89	89	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LB3 460-870066/1-A
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870066

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/04/22 13:25	10/05/22 01:13	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB3 460-870066/1-A
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870066

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.0010	U	0.0010	0.00028	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg		10/04/22 13:25	10/05/22 01:13	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg		10/04/22 13:25	10/05/22 01:13	1

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 145*	*10/04/22 13:25*	*10/05/22 01:13*	*1*
4-Bromofluorobenzene	*83*		*75 - 139*	*10/04/22 13:25*	*10/05/22 01:13*	*1*
Dibromofluoromethane (Surr)	*79*		*73 - 139*	*10/04/22 13:25*	*10/05/22 01:13*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*	*10/04/22 13:25*	*10/05/22 01:13*	*1*

Lab Sample ID: MB 460-870087/7
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/04/22 18:32	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/04/22 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/04/22 18:32	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/04/22 18:32	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/04/22 18:32	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/04/22 18:32	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/04/22 18:32	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/04/22 18:32	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/04/22 18:32	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/04/22 18:32	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/04/22 18:32	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/04/22 18:32	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/04/22 18:32	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/04/22 18:32	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/04/22 18:32	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/04/22 18:32	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/04/22 18:32	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/04/22 18:32	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/04/22 18:32	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/04/22 18:32	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/04/22 18:32	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/04/22 18:32	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/04/22 18:32	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/04/22 18:32	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/04/22 18:32	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/04/22 18:32	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870087/7
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/04/22 18:32	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/04/22 18:32	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/04/22 18:32	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/04/22 18:32	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/04/22 18:32	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/04/22 18:32	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/04/22 18:32	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/04/22 18:32	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/04/22 18:32	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/04/22 18:32	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/04/22 18:32	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/04/22 18:32	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/04/22 18:32	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/04/22 18:32	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/04/22 18:32	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/04/22 18:32	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/04/22 18:32	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/04/22 18:32	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/04/22 18:32	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/04/22 18:32	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/04/22 18:32	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/04/22 18:32	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/04/22 18:32	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/04/22 18:32	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/04/22 18:32	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/04/22 18:32	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/04/22 18:32	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/04/22 18:32	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/04/22 18:32	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/04/22 18:32	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/04/22 18:32	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/04/22 18:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 145*		*10/04/22 18:32*	*1*
4-Bromofluorobenzene	*101*		*75 - 139*		*10/04/22 18:32*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 139*		*10/04/22 18:32*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/04/22 18:32*	*1*

Lab Sample ID: LCS 460-870087/3
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0168		mg/Kg		84	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0223		mg/Kg		111	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0168		mg/Kg		84	75 - 141
1,1,2-Trichloroethane	0.0200	0.0201		mg/Kg		101	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870087/3
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0200	0.0189		mg/Kg		95	77 - 129
1,1-Dichloroethene	0.0200	0.0168		mg/Kg		84	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0186		mg/Kg		93	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0186		mg/Kg		93	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0211		mg/Kg		106	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0181		mg/Kg		90	60 - 124
1,2-Dichlorobenzene	0.0200	0.0193		mg/Kg		96	80 - 120
1,2-Dichloroethane	0.0200	0.0171		mg/Kg		86	75 - 123
1,2-Dichloropropane	0.0200	0.0197		mg/Kg		98	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0212		mg/Kg		106	79 - 120
1,3-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 120
1,4-Dichlorobenzene	0.0200	0.0188		mg/Kg		94	80 - 120
2-Butanone (MEK)	0.100	0.0823		mg/Kg		82	75 - 120
2-Hexanone	0.100	0.0856		mg/Kg		86	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0869		mg/Kg		87	80 - 122
Acetone	0.100	0.0916		mg/Kg		92	63 - 131
Benzene	0.0200	0.0211		mg/Kg		106	80 - 123
Bromoform	0.0200	0.0143		mg/Kg		72	70 - 125
Bromomethane	0.0200	0.0149		mg/Kg		75	64 - 150
Carbon disulfide	0.0200	0.0166		mg/Kg		83	76 - 120
Carbon tetrachloride	0.0200	0.0153		mg/Kg		77	77 - 121
Chlorobenzene	0.0200	0.0189		mg/Kg		95	80 - 120
Chlorobromomethane	0.0200	0.0163		mg/Kg		81	76 - 127
Chlorodibromomethane	0.0200	0.0170		mg/Kg		85	80 - 120
Chloroethane	0.0200	0.0165		mg/Kg		83	68 - 132
Chloroform	0.0200	0.0181		mg/Kg		90	79 - 126
Chloromethane	0.0200	0.0175		mg/Kg		87	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0171		mg/Kg		86	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0198		mg/Kg		99	80 - 120
Cyclohexane	0.0200	0.0187		mg/Kg		93	70 - 132
Dichlorobromomethane	0.0200	0.0167		mg/Kg		84	73 - 124
Dichlorodifluoromethane	0.0200	0.0151		mg/Kg		76	62 - 150
Ethylbenzene	0.0200	0.0194		mg/Kg		97	76 - 120
Ethylene Dibromide	0.0200	0.0182		mg/Kg		91	79 - 120
Isopropylbenzene	0.0200	0.0193		mg/Kg		97	80 - 120
Methyl acetate	0.0400	0.0343		mg/Kg		86	58 - 143
Methyl tert-butyl ether	0.0200	0.0165		mg/Kg		82	80 - 125
Methylcyclohexane	0.0200	0.0186		mg/Kg		93	70 - 133
Methylene Chloride	0.0200	0.0170		mg/Kg		85	76 - 120
m-Xylene & p-Xylene	0.0200	0.0189		mg/Kg		95	80 - 120
n-Butylbenzene	0.0200	0.0228		mg/Kg		114	68 - 150
N-Propylbenzene	0.0200	0.0212		mg/Kg		106	78 - 130
o-Xylene	0.0200	0.0190		mg/Kg		95	80 - 120
sec-Butylbenzene	0.0200	0.0215		mg/Kg		108	78 - 136
Styrene	0.0200	0.0184		mg/Kg		92	80 - 120
tert-Butylbenzene	0.0200	0.0201		mg/Kg		101	80 - 128
Tetrachloroethene	0.0200	0.0178		mg/Kg		89	78 - 123
Toluene	0.0200	0.0204		mg/Kg		102	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0177		mg/Kg		89	78 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870087/3
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
trans-1,3-Dichloropropene			0.0200	0.0183		mg/Kg		91	80 - 120		
Trichloroethene			0.0200	0.0178		mg/Kg		89	79 - 120		
Trichlorofluoromethane			0.0200	0.0156		mg/Kg		78	76 - 142		
Vinyl chloride			0.0200	0.0189		mg/Kg		95	72 - 131		
Xylenes, Total			0.0400	0.0379		mg/Kg		95	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 145*
4-Bromofluorobenzene	*106*		*75 - 139*
Dibromofluoromethane (Surr)	*96*		*73 - 139*
Toluene-d8 (Surr)	*115*		*80 - 120*

Lab Sample ID: LCSD 460-870087/4
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			0.0200	0.0165		mg/Kg		83	78 - 120	2	30
1,1,2,2-Tetrachloroethane			0.0200	0.0225		mg/Kg		113	66 - 123	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0200	0.0172		mg/Kg		86	75 - 141	2	30
1,1,2-Trichloroethane			0.0200	0.0198		mg/Kg		99	80 - 120	2	30
1,1-Dichloroethane			0.0200	0.0191		mg/Kg		95	77 - 129	1	30
1,1-Dichloroethene			0.0200	0.0170		mg/Kg		85	70 - 132	1	30
1,2,3-Trichlorobenzene			0.0200	0.0180		mg/Kg		90	44 - 120	3	30
1,2,4-Trichlorobenzene			0.0200	0.0184		mg/Kg		92	68 - 150	1	30
1,2,4-Trimethylbenzene			0.0200	0.0208		mg/Kg		104	79 - 120	2	30
1,2-Dibromo-3-Chloropropane			0.0200	0.0178		mg/Kg		89	60 - 124	2	30
1,2-Dichlorobenzene			0.0200	0.0192		mg/Kg		96	80 - 120	1	30
1,2-Dichloroethane			0.0200	0.0176		mg/Kg		88	75 - 123	3	30
1,2-Dichloropropane			0.0200	0.0195		mg/Kg		98	73 - 124	1	30
1,3,5-Trimethylbenzene			0.0200	0.0205		mg/Kg		103	79 - 120	3	30
1,3-Dichlorobenzene			0.0200	0.0189		mg/Kg		94	80 - 120	1	30
1,4-Dichlorobenzene			0.0200	0.0185		mg/Kg		92	80 - 120	2	30
2-Butanone (MEK)			0.100	0.0804		mg/Kg		80	75 - 120	2	30
2-Hexanone			0.100	0.0824		mg/Kg		82	70 - 128	4	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0842		mg/Kg		84	80 - 122	3	30
Acetone			0.100	0.0894		mg/Kg		89	63 - 131	2	30
Benzene			0.0200	0.0212		mg/Kg		106	80 - 123	0	30
Bromoform			0.0200	0.0147		mg/Kg		73	70 - 125	2	30
Bromomethane			0.0200	0.0154		mg/Kg		77	64 - 150	3	30
Carbon disulfide			0.0200	0.0168		mg/Kg		84	76 - 120	1	30
Carbon tetrachloride			0.0200	0.0161		mg/Kg		80	77 - 121	5	30
Chlorobenzene			0.0200	0.0187		mg/Kg		93	80 - 120	1	30
Chlorobromomethane			0.0200	0.0166		mg/Kg		83	76 - 127	2	30
Chlorodibromomethane			0.0200	0.0167		mg/Kg		83	80 - 120	2	30
Chloroethane			0.0200	0.0170		mg/Kg		85	68 - 132	3	30
Chloroform			0.0200	0.0179		mg/Kg		89	79 - 126	1	30
Chloromethane			0.0200	0.0192		mg/Kg		96	63 - 130	9	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870087/4
Matrix: Solid
Analysis Batch: 870087

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.0200	0.0168		mg/Kg		84	80 - 123	2	30
cis-1,3-Dichloropropene	0.0200	0.0196		mg/Kg		98	80 - 120	1	30
Cyclohexane	0.0200	0.0191		mg/Kg		95	70 - 132	2	30
Dichlorobromomethane	0.0200	0.0168		mg/Kg		84	73 - 124	0	30
Dichlorodifluoromethane	0.0200	0.0179		mg/Kg		90	62 - 150	17	30
Ethylbenzene	0.0200	0.0191		mg/Kg		95	76 - 120	2	30
Ethylene Dibromide	0.0200	0.0179		mg/Kg		90	79 - 120	1	30
Isopropylbenzene	0.0200	0.0192		mg/Kg		96	80 - 120	1	30
Methyl acetate	0.0400	0.0406		mg/Kg		101	58 - 143	17	30
Methyl tert-butyl ether	0.0200	0.0167		mg/Kg		83	80 - 125	1	30
Methylcyclohexane	0.0200	0.0185		mg/Kg		93	70 - 133	1	30
Methylene Chloride	0.0200	0.0168		mg/Kg		84	76 - 120	1	30
m-Xylene & p-Xylene	0.0200	0.0188		mg/Kg		94	80 - 120	0	30
n-Butylbenzene	0.0200	0.0218		mg/Kg		109	68 - 150	5	30
N-Propylbenzene	0.0200	0.0205		mg/Kg		102	78 - 130	3	30
o-Xylene	0.0200	0.0191		mg/Kg		96	80 - 120	1	30
sec-Butylbenzene	0.0200	0.0210		mg/Kg		105	78 - 136	3	30
Styrene	0.0200	0.0179		mg/Kg		89	80 - 120	3	30
tert-Butylbenzene	0.0200	0.0196		mg/Kg		98	80 - 128	3	30
Tetrachloroethene	0.0200	0.0176		mg/Kg		88	78 - 123	1	30
Toluene	0.0200	0.0201		mg/Kg		101	80 - 120	1	30
trans-1,2-Dichloroethene	0.0200	0.0176		mg/Kg		88	78 - 120	1	30
trans-1,3-Dichloropropene	0.0200	0.0177		mg/Kg		89	80 - 120	3	30
Trichloroethene	0.0200	0.0175		mg/Kg		87	79 - 120	2	30
Trichlorofluoromethane	0.0200	0.0167		mg/Kg		83	76 - 142	7	30
Vinyl chloride	0.0200	0.0197		mg/Kg		98	72 - 131	4	30
Xylenes, Total	0.0400	0.0380		mg/Kg		95	80 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 145*
4-Bromofluorobenzene	*101*		*75 - 139*
Dibromofluoromethane (Surr)	*92*		*73 - 139*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: MB 460-870199/8
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 11:02	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/05/22 11:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/05/22 11:02	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 11:02	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/05/22 11:02	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 11:02	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 11:02	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 11:02	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/05/22 11:02	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870199/8
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/05/22 11:02	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 11:02	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/05/22 11:02	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/05/22 11:02	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/05/22 11:02	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/05/22 11:02	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 11:02	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/05/22 11:02	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/05/22 11:02	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/05/22 11:02	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/05/22 11:02	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/05/22 11:02	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/05/22 11:02	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/05/22 11:02	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 11:02	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/05/22 11:02	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 11:02	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 11:02	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/05/22 11:02	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/05/22 11:02	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/05/22 11:02	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/05/22 11:02	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 11:02	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 11:02	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/05/22 11:02	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/05/22 11:02	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/05/22 11:02	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/05/22 11:02	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 11:02	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 11:02	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/05/22 11:02	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/05/22 11:02	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/05/22 11:02	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/05/22 11:02	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/05/22 11:02	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 11:02	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 11:02	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/05/22 11:02	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 11:02	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 11:02	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 11:02	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/05/22 11:02	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 11:02	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/05/22 11:02	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 11:02	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/05/22 11:02	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/05/22 11:02	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/05/22 11:02	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/05/22 11:02	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		72 - 145		10/05/22 11:02	1
4-Bromofluorobenzene	86		75 - 139		10/05/22 11:02	1
Dibromofluoromethane (Surr)	85		73 - 139		10/05/22 11:02	1
Toluene-d8 (Surr)	92		80 - 120		10/05/22 11:02	1

Lab Sample ID: LCS 460-870199/4
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0168		mg/Kg		84	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0223		mg/Kg		112	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0179		mg/Kg		89	75 - 141
1,1,2-Trichloroethane	0.0200	0.0211		mg/Kg		105	80 - 120
1,1-Dichloroethane	0.0200	0.0193		mg/Kg		96	77 - 129
1,1-Dichloroethene	0.0200	0.0176		mg/Kg		88	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0168		mg/Kg		84	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0160		mg/Kg		80	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0190		mg/Kg		95	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0164		mg/Kg		82	60 - 124
1,2-Dichlorobenzene	0.0200	0.0179		mg/Kg		90	80 - 120
1,2-Dichloroethane	0.0200	0.0179		mg/Kg		89	75 - 123
1,2-Dichloropropane	0.0200	0.0203		mg/Kg		102	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0193		mg/Kg		96	79 - 120
1,3-Dichlorobenzene	0.0200	0.0181		mg/Kg		91	80 - 120
1,4-Dichlorobenzene	0.0200	0.0176		mg/Kg		88	80 - 120
2-Butanone (MEK)	0.100	0.0765		mg/Kg		77	75 - 120
2-Hexanone	0.100	0.0820		mg/Kg		82	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0830		mg/Kg		83	80 - 122
Acetone	0.100	0.0913		mg/Kg		91	63 - 131
Benzene	0.0200	0.0213		mg/Kg		106	80 - 123
Bromoform	0.0200	0.0145		mg/Kg		73	70 - 125
Bromomethane	0.0200	0.0167		mg/Kg		84	64 - 150
Carbon disulfide	0.0200	0.0179		mg/Kg		89	76 - 120
Carbon tetrachloride	0.0200	0.0158		mg/Kg		79	77 - 121
Chlorobenzene	0.0200	0.0188		mg/Kg		94	80 - 120
Chlorobromomethane	0.0200	0.0160		mg/Kg		80	76 - 127
Chlorodibromomethane	0.0200	0.0165		mg/Kg		82	80 - 120
Chloroethane	0.0200	0.0199		mg/Kg		99	68 - 132
Chloroform	0.0200	0.0178		mg/Kg		89	79 - 126
Chloromethane	0.0200	0.0206		mg/Kg		103	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0175		mg/Kg		87	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0193		mg/Kg		97	80 - 120
Cyclohexane	0.0200	0.0184		mg/Kg		92	70 - 132
Dichlorobromomethane	0.0200	0.0170		mg/Kg		85	73 - 124
Dichlorodifluoromethane	0.0200	0.0187		mg/Kg		93	62 - 150
Ethylbenzene	0.0200	0.0187		mg/Kg		94	76 - 120
Ethylene Dibromide	0.0200	0.0181		mg/Kg		90	79 - 120
Isopropylbenzene	0.0200	0.0187		mg/Kg		93	80 - 120
Methyl acetate	0.0400	0.0445		mg/Kg		111	58 - 143
Methyl tert-butyl ether	0.0200	0.0165		mg/Kg		82	80 - 125

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870199/4
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylcyclohexane	0.0200	0.0174		mg/Kg		87	70 - 133
Methylene Chloride	0.0200	0.0181		mg/Kg		91	76 - 120
m-Xylene & p-Xylene	0.0200	0.0184		mg/Kg		92	80 - 120
n-Butylbenzene	0.0200	0.0202		mg/Kg		101	68 - 150
N-Propylbenzene	0.0200	0.0191		mg/Kg		96	78 - 130
o-Xylene	0.0200	0.0180		mg/Kg		90	80 - 120
sec-Butylbenzene	0.0200	0.0188		mg/Kg		94	78 - 136
Styrene	0.0200	0.0179		mg/Kg		90	80 - 120
tert-Butylbenzene	0.0200	0.0182		mg/Kg		91	80 - 128
Tetrachloroethene	0.0200	0.0179		mg/Kg		89	78 - 123
Toluene	0.0200	0.0198		mg/Kg		99	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0178		mg/Kg		89	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0180		mg/Kg		90	80 - 120
Trichloroethene	0.0200	0.0177		mg/Kg		88	79 - 120
Trichlorofluoromethane	0.0200	0.0182		mg/Kg		91	76 - 142
Vinyl chloride	0.0200	0.0213		mg/Kg		106	72 - 131
Xylenes, Total	0.0400	0.0364		mg/Kg		91	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 145*
4-Bromofluorobenzene	*84*		*75 - 139*
Dibromofluoromethane (Surr)	*81*		*73 - 139*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: LCSD 460-870199/6
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0177		mg/Kg		88	78 - 120	5	30
1,1,2,2-Tetrachloroethane	0.0200	0.0237		mg/Kg		119	66 - 123	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0192		mg/Kg		96	75 - 141	7	30
1,1,2-Trichloroethane	0.0200	0.0212		mg/Kg		106	80 - 120	0	30
1,1-Dichloroethane	0.0200	0.0203		mg/Kg		101	77 - 129	5	30
1,1-Dichloroethene	0.0200	0.0191		mg/Kg		96	70 - 132	8	30
1,2,3-Trichlorobenzene	0.0200	0.0181		mg/Kg		91	44 - 120	8	30
1,2,4-Trichlorobenzene	0.0200	0.0184		mg/Kg		92	68 - 150	14	30
1,2,4-Trimethylbenzene	0.0200	0.0207		mg/Kg		103	79 - 120	8	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0173		mg/Kg		87	60 - 124	5	30
1,2-Dichlorobenzene	0.0200	0.0197		mg/Kg		99	80 - 120	10	30
1,2-Dichloroethane	0.0200	0.0188		mg/Kg		94	75 - 123	5	30
1,2-Dichloropropane	0.0200	0.0211		mg/Kg		106	73 - 124	4	30
1,3,5-Trimethylbenzene	0.0200	0.0210		mg/Kg		105	79 - 120	8	30
1,3-Dichlorobenzene	0.0200	0.0191		mg/Kg		96	80 - 120	5	30
1,4-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 120	8	30
2-Butanone (MEK)	0.100	0.0812		mg/Kg		81	75 - 120	6	30
2-Hexanone	0.100	0.0840		mg/Kg		84	70 - 128	2	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0862		mg/Kg		86	80 - 122	4	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870199/6
Matrix: Solid
Analysis Batch: 870199

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone			0.100	0.0952		mg/Kg		95	63 - 131	4	30
Benzene			0.0200	0.0226		mg/Kg		113	80 - 123	6	30
Bromoform			0.0200	0.0148		mg/Kg		74	70 - 125	2	30
Bromomethane			0.0200	0.0166		mg/Kg		83	64 - 150	1	30
Carbon disulfide			0.0200	0.0190		mg/Kg		95	76 - 120	6	30
Carbon tetrachloride			0.0200	0.0169		mg/Kg		84	77 - 121	7	30
Chlorobenzene			0.0200	0.0196		mg/Kg		98	80 - 120	4	30
Chlorobromomethane			0.0200	0.0172		mg/Kg		86	76 - 127	8	30
Chlorodibromomethane			0.0200	0.0178		mg/Kg		89	80 - 120	8	30
Chloroethane			0.0200	0.0185		mg/Kg		93	68 - 132	7	30
Chloroform			0.0200	0.0192		mg/Kg		96	79 - 126	8	30
Chloromethane			0.0200	0.0199		mg/Kg		100	63 - 130	3	30
cis-1,2-Dichloroethene			0.0200	0.0184		mg/Kg		92	80 - 123	5	30
cis-1,3-Dichloropropene			0.0200	0.0202		mg/Kg		101	80 - 120	5	30
Cyclohexane			0.0200	0.0197		mg/Kg		99	70 - 132	7	30
Dichlorobromomethane			0.0200	0.0181		mg/Kg		90	73 - 124	6	30
Dichlorodifluoromethane			0.0200	0.0179		mg/Kg		89	62 - 150	4	30
Ethylbenzene			0.0200	0.0200		mg/Kg		100	76 - 120	7	30
Ethylene Dibromide			0.0200	0.0188		mg/Kg		94	79 - 120	4	30
Isopropylbenzene			0.0200	0.0202		mg/Kg		101	80 - 120	8	30
Methyl acetate			0.0400	0.0478		mg/Kg		119	58 - 143	7	30
Methyl tert-butyl ether			0.0200	0.0176		mg/Kg		88	80 - 125	7	30
Methylcyclohexane			0.0200	0.0196		mg/Kg		98	70 - 133	12	30
Methylene Chloride			0.0200	0.0193		mg/Kg		97	76 - 120	7	30
m-Xylene & p-Xylene			0.0200	0.0194		mg/Kg		97	80 - 120	5	30
n-Butylbenzene			0.0200	0.0224		mg/Kg		112	68 - 150	10	30
N-Propylbenzene			0.0200	0.0211		mg/Kg		105	78 - 130	10	30
o-Xylene			0.0200	0.0192		mg/Kg		96	80 - 120	6	30
sec-Butylbenzene			0.0200	0.0212		mg/Kg		106	78 - 136	12	30
Styrene			0.0200	0.0187		mg/Kg		94	80 - 120	4	30
tert-Butylbenzene			0.0200	0.0199		mg/Kg		100	80 - 128	9	30
Tetrachloroethene			0.0200	0.0189		mg/Kg		94	78 - 123	5	30
Toluene			0.0200	0.0209		mg/Kg		104	80 - 120	5	30
trans-1,2-Dichloroethene			0.0200	0.0188		mg/Kg		94	78 - 120	6	30
trans-1,3-Dichloropropene			0.0200	0.0183		mg/Kg		91	80 - 120	2	30
Trichloroethene			0.0200	0.0188		mg/Kg		94	79 - 120	6	30
Trichlorofluoromethane			0.0200	0.0175		mg/Kg		87	76 - 142	4	30
Vinyl chloride			0.0200	0.0195		mg/Kg		98	72 - 131	9	30
Xylenes, Total			0.0400	0.0386		mg/Kg		97	80 - 120	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 145*
4-Bromofluorobenzene	*100*		*75 - 139*
Dibromofluoromethane (Surr)	*94*		*73 - 139*
Toluene-d8 (Surr)	*111*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870277/8
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 22:16	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/05/22 22:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/05/22 22:16	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 22:16	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/05/22 22:16	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 22:16	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 22:16	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 22:16	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/05/22 22:16	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/05/22 22:16	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 22:16	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/05/22 22:16	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/05/22 22:16	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/05/22 22:16	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/05/22 22:16	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 22:16	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/05/22 22:16	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/05/22 22:16	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/05/22 22:16	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/05/22 22:16	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/05/22 22:16	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/05/22 22:16	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/05/22 22:16	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 22:16	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/05/22 22:16	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 22:16	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 22:16	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/05/22 22:16	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/05/22 22:16	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/05/22 22:16	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/05/22 22:16	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/05/22 22:16	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 22:16	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/05/22 22:16	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/05/22 22:16	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/05/22 22:16	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/05/22 22:16	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 22:16	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 22:16	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/05/22 22:16	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/05/22 22:16	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/05/22 22:16	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/05/22 22:16	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/05/22 22:16	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 22:16	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/05/22 22:16	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/05/22 22:16	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/05/22 22:16	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870277/8
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 22:16	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/05/22 22:16	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/05/22 22:16	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/05/22 22:16	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/05/22 22:16	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/05/22 22:16	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/05/22 22:16	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/05/22 22:16	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/05/22 22:16	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/05/22 22:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 145*		*10/05/22 22:16*	*1*
4-Bromofluorobenzene	*103*		*75 - 139*		*10/05/22 22:16*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 139*		*10/05/22 22:16*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*10/05/22 22:16*	*1*

Lab Sample ID: LCS 460-870277/4
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0168		mg/Kg		84	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0214		mg/Kg		107	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0162		mg/Kg		81	75 - 141
1,1,2-Trichloroethane	0.0200	0.0202		mg/Kg		101	80 - 120
1,1-Dichloroethane	0.0200	0.0192		mg/Kg		96	77 - 129
1,1-Dichloroethene	0.0200	0.0165		mg/Kg		83	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0174		mg/Kg		87	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0167		mg/Kg		83	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0193		mg/Kg		97	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0166		mg/Kg		83	60 - 124
1,2-Dichlorobenzene	0.0200	0.0186		mg/Kg		93	80 - 120
1,2-Dichloroethane	0.0200	0.0180		mg/Kg		90	75 - 123
1,2-Dichloropropane	0.0200	0.0198		mg/Kg		99	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0196		mg/Kg		98	79 - 120
1,3-Dichlorobenzene	0.0200	0.0178		mg/Kg		89	80 - 120
1,4-Dichlorobenzene	0.0200	0.0181		mg/Kg		90	80 - 120
2-Butanone (MEK)	0.100	0.0759		mg/Kg		76	75 - 120
2-Hexanone	0.100	0.0809		mg/Kg		81	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0821		mg/Kg		82	80 - 122
Acetone	0.100	0.0781		mg/Kg		78	63 - 131
Benzene	0.0200	0.0213		mg/Kg		106	80 - 123
Bromoform	0.0200	0.0143		mg/Kg		72	70 - 125
Bromomethane	0.0200	0.0163		mg/Kg		81	64 - 150
Carbon disulfide	0.0200	0.0159		mg/Kg		79	76 - 120
Carbon tetrachloride	0.0200	0.0150	*	mg/Kg		75	77 - 121
Chlorobenzene	0.0200	0.0186		mg/Kg		93	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870277/4
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobromomethane	0.0200	0.0163		mg/Kg		81	76 - 127
Chlorodibromomethane	0.0200	0.0168		mg/Kg		84	80 - 120
Chloroethane	0.0200	0.0187		mg/Kg		93	68 - 132
Chloroform	0.0200	0.0183		mg/Kg		92	79 - 126
Chloromethane	0.0200	0.0194		mg/Kg		97	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0170		mg/Kg		85	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0195		mg/Kg		98	80 - 120
Cyclohexane	0.0200	0.0182		mg/Kg		91	70 - 132
Dichlorobromomethane	0.0200	0.0172		mg/Kg		86	73 - 124
Dichlorodifluoromethane	0.0200	0.0162		mg/Kg		81	62 - 150
Ethylbenzene	0.0200	0.0187		mg/Kg		93	76 - 120
Ethylene Dibromide	0.0200	0.0178		mg/Kg		89	79 - 120
Isopropylbenzene	0.0200	0.0186		mg/Kg		93	80 - 120
Methyl acetate	0.0400	0.0354		mg/Kg		88	58 - 143
Methyl tert-butyl ether	0.0200	0.0165		mg/Kg		83	80 - 125
Methylcyclohexane	0.0200	0.0183		mg/Kg		92	70 - 133
Methylene Chloride	0.0200	0.0173		mg/Kg		86	76 - 120
m-Xylene & p-Xylene	0.0200	0.0183		mg/Kg		92	80 - 120
n-Butylbenzene	0.0200	0.0206		mg/Kg		103	68 - 150
N-Propylbenzene	0.0200	0.0199		mg/Kg		100	78 - 130
o-Xylene	0.0200	0.0182		mg/Kg		91	80 - 120
sec-Butylbenzene	0.0200	0.0199		mg/Kg		99	78 - 136
Styrene	0.0200	0.0180		mg/Kg		90	80 - 120
tert-Butylbenzene	0.0200	0.0194		mg/Kg		97	80 - 128
Tetrachloroethene	0.0200	0.0179		mg/Kg		89	78 - 123
Toluene	0.0200	0.0201		mg/Kg		101	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0181		mg/Kg		91	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0180		mg/Kg		90	80 - 120
Trichloroethene	0.0200	0.0179		mg/Kg		89	79 - 120
Trichlorofluoromethane	0.0200	0.0172		mg/Kg		86	76 - 142
Vinyl chloride	0.0200	0.0196		mg/Kg		98	72 - 131
Xylenes, Total	0.0400	0.0365		mg/Kg		91	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 145*
4-Bromofluorobenzene	*103*		*75 - 139*
Dibromofluoromethane (Surr)	*93*		*73 - 139*
Toluene-d8 (Surr)	*111*		*80 - 120*

Lab Sample ID: LCSD 460-870277/5
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0163		mg/Kg		81	78 - 120	3	30
1,1,2,2-Tetrachloroethane	0.0200	0.0232		mg/Kg		116	66 - 123	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0168		mg/Kg		84	75 - 141	3	30
1,1,2-Trichloroethane	0.0200	0.0206		mg/Kg		103	80 - 120	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870277/5
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0200	0.0197		mg/Kg		98	77 - 129	2	30
1,1-Dichloroethene	0.0200	0.0171		mg/Kg		86	70 - 132	4	30
1,2,3-Trichlorobenzene	0.0200	0.0148		mg/Kg		74	44 - 120	16	30
1,2,4-Trichlorobenzene	0.0200	0.0138		mg/Kg		69	68 - 150	19	30
1,2,4-Trimethylbenzene	0.0200	0.0172		mg/Kg		86	79 - 120	12	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0177		mg/Kg		89	60 - 124	6	30
1,2-Dichlorobenzene	0.0200	0.0174		mg/Kg		87	80 - 120	6	30
1,2-Dichloroethane	0.0200	0.0184		mg/Kg		92	75 - 123	2	30
1,2-Dichloropropane	0.0200	0.0202		mg/Kg		101	73 - 124	2	30
1,3,5-Trimethylbenzene	0.0200	0.0169		mg/Kg		85	79 - 120	15	30
1,3-Dichlorobenzene	0.0200	0.0169		mg/Kg		85	80 - 120	5	30
1,4-Dichlorobenzene	0.0200	0.0170		mg/Kg		85	80 - 120	6	30
2-Butanone (MEK)	0.100	0.0795		mg/Kg		79	75 - 120	5	30
2-Hexanone	0.100	0.0833		mg/Kg		83	70 - 128	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0844		mg/Kg		84	80 - 122	3	30
Acetone	0.100	0.0950		mg/Kg		95	63 - 131	20	30
Benzene	0.0200	0.0210		mg/Kg		105	80 - 123	1	30
Bromoform	0.0200	0.0146		mg/Kg		73	70 - 125	2	30
Bromomethane	0.0200	0.0165		mg/Kg		83	64 - 150	2	30
Carbon disulfide	0.0200	0.0174		mg/Kg		87	76 - 120	9	30
Carbon tetrachloride	0.0200	0.0152	*	mg/Kg		76	77 - 121	2	30
Chlorobenzene	0.0200	0.0184		mg/Kg		92	80 - 120	1	30
Chlorobromomethane	0.0200	0.0169		mg/Kg		84	76 - 127	3	30
Chlorodibromomethane	0.0200	0.0163		mg/Kg		82	80 - 120	3	30
Chloroethane	0.0200	0.0188		mg/Kg		94	68 - 132	1	30
Chloroform	0.0200	0.0184		mg/Kg		92	79 - 126	0	30
Chloromethane	0.0200	0.0201		mg/Kg		100	63 - 130	4	30
cis-1,2-Dichloroethene	0.0200	0.0175		mg/Kg		87	80 - 123	3	30
cis-1,3-Dichloropropene	0.0200	0.0197		mg/Kg		99	80 - 120	1	30
Cyclohexane	0.0200	0.0166		mg/Kg		83	70 - 132	9	30
Dichlorobromomethane	0.0200	0.0174		mg/Kg		87	73 - 124	1	30
Dichlorodifluoromethane	0.0200	0.0166		mg/Kg		83	62 - 150	2	30
Ethylbenzene	0.0200	0.0174		mg/Kg		87	76 - 120	7	30
Ethylene Dibromide	0.0200	0.0180		mg/Kg		90	79 - 120	1	30
Isopropylbenzene	0.0200	0.0162		mg/Kg		81	80 - 120	13	30
Methyl acetate	0.0400	0.0464		mg/Kg		116	58 - 143	27	30
Methyl tert-butyl ether	0.0200	0.0182		mg/Kg		91	80 - 125	10	30
Methylcyclohexane	0.0200	0.0142		mg/Kg		71	70 - 133	25	30
Methylene Chloride	0.0200	0.0183		mg/Kg		91	76 - 120	5	30
m-Xylene & p-Xylene	0.0200	0.0173		mg/Kg		86	80 - 120	6	30
n-Butylbenzene	0.0200	0.0159		mg/Kg		79	68 - 150	26	30
N-Propylbenzene	0.0200	0.0172		mg/Kg		86	78 - 130	15	30
o-Xylene	0.0200	0.0173		mg/Kg		86	80 - 120	5	30
sec-Butylbenzene	0.0200	0.0155	*	mg/Kg		77	78 - 136	25	30
Styrene	0.0200	0.0174		mg/Kg		87	80 - 120	3	30
tert-Butylbenzene	0.0200	0.0150	*	mg/Kg		75	80 - 128	26	30
Tetrachloroethene	0.0200	0.0156		mg/Kg		78	78 - 123	13	30
Toluene	0.0200	0.0196		mg/Kg		98	80 - 120	3	30
trans-1,2-Dichloroethene	0.0200	0.0178		mg/Kg		89	78 - 120	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870277/5
Matrix: Solid
Analysis Batch: 870277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			0.0200	0.0181		mg/Kg		91	80 - 120	1	30
Trichloroethene			0.0200	0.0177		mg/Kg		88	79 - 120	1	30
Trichlorofluoromethane			0.0200	0.0176		mg/Kg		88	76 - 142	2	30
Vinyl chloride			0.0200	0.0201		mg/Kg		100	72 - 131	2	30
Xylenes, Total			0.0400	0.0346		mg/Kg		86	80 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 145*
4-Bromofluorobenzene	*100*		*75 - 139*
Dibromofluoromethane (Surr)	*90*		*73 - 139*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: LB3 460-870338/1-A
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870338

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg		10/05/22 19:31	10/06/22 08:00	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB3 460-870338/1-A
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870338

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg		10/05/22 19:31	10/06/22 08:00	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg		10/05/22 19:31	10/06/22 08:00	1

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 145*	*10/05/22 19:31*	*10/06/22 08:00*	*1*
4-Bromofluorobenzene	*112*		*75 - 139*	*10/05/22 19:31*	*10/06/22 08:00*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 139*	*10/05/22 19:31*	*10/06/22 08:00*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*	*10/05/22 19:31*	*10/06/22 08:00*	*1*

Lab Sample ID: MB 460-870378/9
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 07:37	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 07:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 07:37	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 07:37	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 07:37	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 07:37	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 07:37	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 07:37	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 07:37	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870378/9
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/06/22 07:37	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 07:37	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 07:37	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/06/22 07:37	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 07:37	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/06/22 07:37	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 07:37	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/06/22 07:37	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/06/22 07:37	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/06/22 07:37	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/06/22 07:37	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 07:37	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/06/22 07:37	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/06/22 07:37	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 07:37	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/06/22 07:37	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 07:37	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 07:37	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 07:37	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/06/22 07:37	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/06/22 07:37	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/06/22 07:37	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 07:37	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 07:37	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/06/22 07:37	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 07:37	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/06/22 07:37	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/06/22 07:37	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 07:37	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 07:37	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/06/22 07:37	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/06/22 07:37	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/06/22 07:37	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/06/22 07:37	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/06/22 07:37	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 07:37	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 07:37	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 07:37	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 07:37	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 07:37	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 07:37	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 07:37	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 07:37	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 07:37	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 07:37	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/06/22 07:37	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/06/22 07:37	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/06/22 07:37	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/06/22 07:37	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		72 - 145		10/06/22 07:37	1
4-Bromofluorobenzene	115		75 - 139		10/06/22 07:37	1
Dibromofluoromethane (Surr)	106		73 - 139		10/06/22 07:37	1
Toluene-d8 (Surr)	97		80 - 120		10/06/22 07:37	1

Lab Sample ID: LCS 460-870378/4
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0220		mg/Kg		110	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0211		mg/Kg		105	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0235		mg/Kg		117	75 - 141
1,1,2-Trichloroethane	0.0200	0.0197		mg/Kg		99	80 - 120
1,1-Dichloroethane	0.0200	0.0227		mg/Kg		114	77 - 129
1,1-Dichloroethene	0.0200	0.0230		mg/Kg		115	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0197		mg/Kg		99	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0198		mg/Kg		99	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0195		mg/Kg		97	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0200		mg/Kg		100	60 - 124
1,2-Dichlorobenzene	0.0200	0.0201		mg/Kg		100	80 - 120
1,2-Dichloroethane	0.0200	0.0241		mg/Kg		121	75 - 123
1,2-Dichloropropane	0.0200	0.0207		mg/Kg		103	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0195		mg/Kg		97	79 - 120
1,3-Dichlorobenzene	0.0200	0.0208		mg/Kg		104	80 - 120
1,4-Dichlorobenzene	0.0200	0.0205		mg/Kg		102	80 - 120
2-Butanone (MEK)	0.100	0.0858		mg/Kg		86	75 - 120
2-Hexanone	0.100	0.0997		mg/Kg		100	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0998		mg/Kg		100	80 - 122
Acetone	0.100	0.103		mg/Kg		103	63 - 131
Benzene	0.0200	0.0207		mg/Kg		103	80 - 123
Bromoform	0.0200	0.0199		mg/Kg		99	70 - 125
Bromomethane	0.0200	0.0167		mg/Kg		84	64 - 150
Carbon disulfide	0.0200	0.0239		mg/Kg		119	76 - 120
Carbon tetrachloride	0.0200	0.0216		mg/Kg		108	77 - 121
Chlorobenzene	0.0200	0.0200		mg/Kg		100	80 - 120
Chlorobromomethane	0.0200	0.0214		mg/Kg		107	76 - 127
Chlorodibromomethane	0.0200	0.0195		mg/Kg		98	80 - 120
Chloroethane	0.0200	0.0222		mg/Kg		111	68 - 132
Chloroform	0.0200	0.0215		mg/Kg		107	79 - 126
Chloromethane	0.0200	0.0204		mg/Kg		102	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0208		mg/Kg		104	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0202		mg/Kg		101	80 - 120
Cyclohexane	0.0200	0.0216		mg/Kg		108	70 - 132
Dichlorobromomethane	0.0200	0.0209		mg/Kg		105	73 - 124
Dichlorodifluoromethane	0.0200	0.0203		mg/Kg		102	62 - 150
Ethylbenzene	0.0200	0.0200		mg/Kg		100	76 - 120
Ethylene Dibromide	0.0200	0.0201		mg/Kg		100	79 - 120
Isopropylbenzene	0.0200	0.0200		mg/Kg		100	80 - 120
Methyl acetate	0.0400	0.0565		mg/Kg		141	58 - 143
Methyl tert-butyl ether	0.0200	0.0228		mg/Kg		114	80 - 125

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870378/4
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylcyclohexane	0.0200	0.0207		mg/Kg		103	70 - 133
Methylene Chloride	0.0200	0.0218		mg/Kg		109	76 - 120
m-Xylene & p-Xylene	0.0200	0.0194		mg/Kg		97	80 - 120
n-Butylbenzene	0.0200	0.0208		mg/Kg		104	68 - 150
N-Propylbenzene	0.0200	0.0212		mg/Kg		106	78 - 130
o-Xylene	0.0200	0.0195		mg/Kg		98	80 - 120
sec-Butylbenzene	0.0200	0.0205		mg/Kg		102	78 - 136
Styrene	0.0200	0.0197		mg/Kg		99	80 - 120
tert-Butylbenzene	0.0200	0.0203		mg/Kg		102	80 - 128
Tetrachloroethene	0.0200	0.0211		mg/Kg		105	78 - 123
Toluene	0.0200	0.0199		mg/Kg		99	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0226		mg/Kg		113	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0204		mg/Kg		102	80 - 120
Trichloroethene	0.0200	0.0202		mg/Kg		101	79 - 120
Trichlorofluoromethane	0.0200	0.0228		mg/Kg		114	76 - 142
Vinyl chloride	0.0200	0.0227		mg/Kg		113	72 - 131
Xylenes, Total	0.0400	0.0390		mg/Kg		97	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 145*
4-Bromofluorobenzene	*114*		*75 - 139*
Dibromofluoromethane (Surr)	*101*		*73 - 139*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: LCSD 460-870378/5
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0214		mg/Kg		107	78 - 120	2	30
1,1,2,2-Tetrachloroethane	0.0200	0.0197		mg/Kg		98	66 - 123	7	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0232		mg/Kg		116	75 - 141	1	30
1,1,2-Trichloroethane	0.0200	0.0192		mg/Kg		96	80 - 120	3	30
1,1-Dichloroethane	0.0200	0.0221		mg/Kg		110	77 - 129	3	30
1,1-Dichloroethene	0.0200	0.0225		mg/Kg		113	70 - 132	2	30
1,2,3-Trichlorobenzene	0.0200	0.0195		mg/Kg		97	44 - 120	1	30
1,2,4-Trichlorobenzene	0.0200	0.0196		mg/Kg		98	68 - 150	1	30
1,2,4-Trimethylbenzene	0.0200	0.0190		mg/Kg		95	79 - 120	3	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0183		mg/Kg		91	60 - 124	9	30
1,2-Dichlorobenzene	0.0200	0.0194		mg/Kg		97	80 - 120	4	30
1,2-Dichloroethane	0.0200	0.0230		mg/Kg		115	75 - 123	5	30
1,2-Dichloropropane	0.0200	0.0199		mg/Kg		99	73 - 124	4	30
1,3,5-Trimethylbenzene	0.0200	0.0188		mg/Kg		94	79 - 120	4	30
1,3-Dichlorobenzene	0.0200	0.0202		mg/Kg		101	80 - 120	3	30
1,4-Dichlorobenzene	0.0200	0.0201		mg/Kg		100	80 - 120	2	30
2-Butanone (MEK)	0.100	0.0806		mg/Kg		81	75 - 120	6	30
2-Hexanone	0.100	0.0988		mg/Kg		99	70 - 128	1	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0994		mg/Kg		99	80 - 122	0	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870378/5
Matrix: Solid
Analysis Batch: 870378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone			0.100	0.0992		mg/Kg		99	63 - 131	3	30
Benzene			0.0200	0.0199		mg/Kg		100	80 - 123	4	30
Bromoform			0.0200	0.0191		mg/Kg		95	70 - 125	4	30
Bromomethane			0.0200	0.0159		mg/Kg		80	64 - 150	5	30
Carbon disulfide			0.0200	0.0229		mg/Kg		114	76 - 120	4	30
Carbon tetrachloride			0.0200	0.0208		mg/Kg		104	77 - 121	4	30
Chlorobenzene			0.0200	0.0192		mg/Kg		96	80 - 120	4	30
Chlorobromomethane			0.0200	0.0199		mg/Kg		100	76 - 127	7	30
Chlorodibromomethane			0.0200	0.0189		mg/Kg		95	80 - 120	3	30
Chloroethane			0.0200	0.0221		mg/Kg		110	68 - 132	1	30
Chloroform			0.0200	0.0208		mg/Kg		104	79 - 126	3	30
Chloromethane			0.0200	0.0197		mg/Kg		99	63 - 130	3	30
cis-1,2-Dichloroethene			0.0200	0.0203		mg/Kg		101	80 - 123	3	30
cis-1,3-Dichloropropene			0.0200	0.0194		mg/Kg		97	80 - 120	4	30
Cyclohexane			0.0200	0.0211		mg/Kg		106	70 - 132	2	30
Dichlorobromomethane			0.0200	0.0204		mg/Kg		102	73 - 124	3	30
Dichlorodifluoromethane			0.0200	0.0188		mg/Kg		94	62 - 150	8	30
Ethylbenzene			0.0200	0.0192		mg/Kg		96	76 - 120	4	30
Ethylene Dibromide			0.0200	0.0193		mg/Kg		96	79 - 120	4	30
Isopropylbenzene			0.0200	0.0193		mg/Kg		96	80 - 120	4	30
Methyl acetate			0.0400	0.0520		mg/Kg		130	58 - 143	8	30
Methyl tert-butyl ether			0.0200	0.0222		mg/Kg		111	80 - 125	3	30
Methylcyclohexane			0.0200	0.0203		mg/Kg		102	70 - 133	2	30
Methylene Chloride			0.0200	0.0210		mg/Kg		105	76 - 120	4	30
m-Xylene & p-Xylene			0.0200	0.0188		mg/Kg		94	80 - 120	3	30
n-Butylbenzene			0.0200	0.0202		mg/Kg		101	68 - 150	3	30
N-Propylbenzene			0.0200	0.0204		mg/Kg		102	78 - 130	4	30
o-Xylene			0.0200	0.0192		mg/Kg		96	80 - 120	2	30
sec-Butylbenzene			0.0200	0.0197		mg/Kg		99	78 - 136	4	30
Styrene			0.0200	0.0192		mg/Kg		96	80 - 120	3	30
tert-Butylbenzene			0.0200	0.0195		mg/Kg		97	80 - 128	4	30
Tetrachloroethene			0.0200	0.0206		mg/Kg		103	78 - 123	2	30
Toluene			0.0200	0.0192		mg/Kg		96	80 - 120	3	30
trans-1,2-Dichloroethene			0.0200	0.0213		mg/Kg		106	78 - 120	6	30
trans-1,3-Dichloropropene			0.0200	0.0200		mg/Kg		100	80 - 120	2	30
Trichloroethene			0.0200	0.0196		mg/Kg		98	79 - 120	3	30
Trichlorofluoromethane			0.0200	0.0222		mg/Kg		111	76 - 142	3	30
Vinyl chloride			0.0200	0.0217		mg/Kg		108	72 - 131	5	30
Xylenes, Total			0.0400	0.0380		mg/Kg		95	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*72 - 145*
4-Bromofluorobenzene	*113*		*75 - 139*
Dibromofluoromethane (Surr)	*101*		*73 - 139*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870379/7
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 09:57	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 09:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 09:57	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 09:57	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 09:57	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 09:57	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 09:57	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 09:57	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 09:57	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/06/22 09:57	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 09:57	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 09:57	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/06/22 09:57	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 09:57	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/06/22 09:57	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 09:57	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/06/22 09:57	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/06/22 09:57	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/06/22 09:57	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/06/22 09:57	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 09:57	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/06/22 09:57	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/06/22 09:57	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 09:57	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/06/22 09:57	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 09:57	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 09:57	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 09:57	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/06/22 09:57	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/06/22 09:57	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/06/22 09:57	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 09:57	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 09:57	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/06/22 09:57	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 09:57	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/06/22 09:57	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/06/22 09:57	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 09:57	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 09:57	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/06/22 09:57	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/06/22 09:57	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/06/22 09:57	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/06/22 09:57	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/06/22 09:57	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 09:57	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 09:57	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 09:57	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 09:57	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870379/7
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 09:57	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 09:57	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 09:57	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 09:57	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 09:57	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 09:57	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/06/22 09:57	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/06/22 09:57	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/06/22 09:57	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/06/22 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 145*		*10/06/22 09:57*	*1*
4-Bromofluorobenzene	*99*		*75 - 139*		*10/06/22 09:57*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 139*		*10/06/22 09:57*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/06/22 09:57*	*1*

Lab Sample ID: LCS 460-870379/4
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0167		mg/Kg		84	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0230		mg/Kg		115	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0184		mg/Kg		92	75 - 141
1,1,2-Trichloroethane	0.0200	0.0195		mg/Kg		97	80 - 120
1,1-Dichloroethane	0.0200	0.0189		mg/Kg		95	77 - 129
1,1-Dichloroethene	0.0200	0.0177		mg/Kg		88	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0181		mg/Kg		90	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0180		mg/Kg		90	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0203		mg/Kg		101	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0174		mg/Kg		87	60 - 124
1,2-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 120
1,2-Dichloroethane	0.0200	0.0173		mg/Kg		86	75 - 123
1,2-Dichloropropane	0.0200	0.0198		mg/Kg		99	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0203		mg/Kg		101	79 - 120
1,3-Dichlorobenzene	0.0200	0.0189		mg/Kg		95	80 - 120
1,4-Dichlorobenzene	0.0200	0.0185		mg/Kg		92	80 - 120
2-Butanone (MEK)	0.100	0.0815		mg/Kg		81	75 - 120
2-Hexanone	0.100	0.0879		mg/Kg		88	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0905		mg/Kg		91	80 - 122
Acetone	0.100	0.0950		mg/Kg		95	63 - 131
Benzene	0.0200	0.0207		mg/Kg		104	80 - 123
Bromoform	0.0200	0.0135	*	mg/Kg		68	70 - 125
Bromomethane	0.0200	0.0160		mg/Kg		80	64 - 150
Carbon disulfide	0.0200	0.0180		mg/Kg		90	76 - 120
Carbon tetrachloride	0.0200	0.0166		mg/Kg		83	77 - 121
Chlorobenzene	0.0200	0.0185		mg/Kg		92	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870379/4
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobromomethane	0.0200	0.0156		mg/Kg		78	76 - 127
Chlorodibromomethane	0.0200	0.0162		mg/Kg		81	80 - 120
Chloroethane	0.0200	0.0183		mg/Kg		91	68 - 132
Chloroform	0.0200	0.0181		mg/Kg		90	79 - 126
Chloromethane	0.0200	0.0204		mg/Kg		102	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0172		mg/Kg		86	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0193		mg/Kg		96	80 - 120
Cyclohexane	0.0200	0.0187		mg/Kg		94	70 - 132
Dichlorobromomethane	0.0200	0.0172		mg/Kg		86	73 - 124
Dichlorodifluoromethane	0.0200	0.0179		mg/Kg		90	62 - 150
Ethylbenzene	0.0200	0.0193		mg/Kg		96	76 - 120
Ethylene Dibromide	0.0200	0.0176		mg/Kg		88	79 - 120
Isopropylbenzene	0.0200	0.0190		mg/Kg		95	80 - 120
Methyl acetate	0.0400	0.0412		mg/Kg		103	58 - 143
Methyl tert-butyl ether	0.0200	0.0165		mg/Kg		83	80 - 125
Methylcyclohexane	0.0200	0.0189		mg/Kg		94	70 - 133
Methylene Chloride	0.0200	0.0172		mg/Kg		86	76 - 120
m-Xylene & p-Xylene	0.0200	0.0185		mg/Kg		92	80 - 120
n-Butylbenzene	0.0200	0.0227		mg/Kg		113	68 - 150
N-Propylbenzene	0.0200	0.0207		mg/Kg		104	78 - 130
o-Xylene	0.0200	0.0183		mg/Kg		91	80 - 120
sec-Butylbenzene	0.0200	0.0210		mg/Kg		105	78 - 136
Styrene	0.0200	0.0178		mg/Kg		89	80 - 120
tert-Butylbenzene	0.0200	0.0197		mg/Kg		98	80 - 128
Tetrachloroethene	0.0200	0.0179		mg/Kg		90	78 - 123
Toluene	0.0200	0.0200		mg/Kg		100	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0173		mg/Kg		87	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0178		mg/Kg		89	80 - 120
Trichloroethene	0.0200	0.0174		mg/Kg		87	79 - 120
Trichlorofluoromethane	0.0200	0.0172		mg/Kg		86	76 - 142
Vinyl chloride	0.0200	0.0195		mg/Kg		97	72 - 131
Xylenes, Total	0.0400	0.0367		mg/Kg		92	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 145*
4-Bromofluorobenzene	*104*		*75 - 139*
Dibromofluoromethane (Surr)	*97*		*73 - 139*
Toluene-d8 (Surr)	*114*		*80 - 120*

Lab Sample ID: LCSD 460-870379/5
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0189		mg/Kg		94	78 - 120	12	30
1,1,2,2-Tetrachloroethane	0.0200	0.0222		mg/Kg		111	66 - 123	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0216		mg/Kg		108	75 - 141	16	30
1,1,2-Trichloroethane	0.0200	0.0203		mg/Kg		101	80 - 120	4	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870379/5
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0200	0.0210		mg/Kg		105	77 - 129	10	30
1,1-Dichloroethene	0.0200	0.0205		mg/Kg		102	70 - 132	15	30
1,2,3-Trichlorobenzene	0.0200	0.0184		mg/Kg		92	44 - 120	2	30
1,2,4-Trichlorobenzene	0.0200	0.0189		mg/Kg		95	68 - 150	5	30
1,2,4-Trimethylbenzene	0.0200	0.0219		mg/Kg		110	79 - 120	8	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0167		mg/Kg		84	60 - 124	4	30
1,2-Dichlorobenzene	0.0200	0.0196		mg/Kg		98	80 - 120	3	30
1,2-Dichloroethane	0.0200	0.0178		mg/Kg		89	75 - 123	3	30
1,2-Dichloropropane	0.0200	0.0210		mg/Kg		105	73 - 124	6	30
1,3,5-Trimethylbenzene	0.0200	0.0227		mg/Kg		113	79 - 120	11	30
1,3-Dichlorobenzene	0.0200	0.0199		mg/Kg		99	80 - 120	5	30
1,4-Dichlorobenzene	0.0200	0.0199		mg/Kg		99	80 - 120	7	30
2-Butanone (MEK)	0.100	0.0760		mg/Kg		76	75 - 120	7	30
2-Hexanone	0.100	0.0836		mg/Kg		84	70 - 128	5	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0842		mg/Kg		84	80 - 122	7	30
Acetone	0.100	0.0903		mg/Kg		90	63 - 131	5	30
Benzene	0.0200	0.0229		mg/Kg		114	80 - 123	10	30
Bromoform	0.0200	0.0146		mg/Kg		73	70 - 125	8	30
Bromomethane	0.0200	0.0183		mg/Kg		92	64 - 150	13	30
Carbon disulfide	0.0200	0.0210		mg/Kg		105	76 - 120	15	30
Carbon tetrachloride	0.0200	0.0181		mg/Kg		91	77 - 121	9	30
Chlorobenzene	0.0200	0.0197		mg/Kg		99	80 - 120	7	30
Chlorobromomethane	0.0200	0.0165		mg/Kg		83	76 - 127	6	30
Chlorodibromomethane	0.0200	0.0166		mg/Kg		83	80 - 120	2	30
Chloroethane	0.0200	0.0210		mg/Kg		105	68 - 132	14	30
Chloroform	0.0200	0.0195		mg/Kg		97	79 - 126	7	30
Chloromethane	0.0200	0.0247		mg/Kg		124	63 - 130	19	30
cis-1,2-Dichloroethene	0.0200	0.0185		mg/Kg		93	80 - 123	8	30
cis-1,3-Dichloropropene	0.0200	0.0199		mg/Kg		99	80 - 120	3	30
Cyclohexane	0.0200	0.0217		mg/Kg		109	70 - 132	15	30
Dichlorobromomethane	0.0200	0.0174		mg/Kg		87	73 - 124	1	30
Dichlorodifluoromethane	0.0200	0.0213		mg/Kg		107	62 - 150	17	30
Ethylbenzene	0.0200	0.0206		mg/Kg		103	76 - 120	6	30
Ethylene Dibromide	0.0200	0.0175		mg/Kg		88	79 - 120	0	30
Isopropylbenzene	0.0200	0.0217		mg/Kg		108	80 - 120	13	30
Methyl acetate	0.0400	0.0357		mg/Kg		89	58 - 143	15	30
Methyl tert-butyl ether	0.0200	0.0168		mg/Kg		84	80 - 125	2	30
Methylcyclohexane	0.0200	0.0215		mg/Kg		108	70 - 133	13	30
Methylene Chloride	0.0200	0.0186		mg/Kg		93	76 - 120	7	30
m-Xylene & p-Xylene	0.0200	0.0205		mg/Kg		102	80 - 120	10	30
n-Butylbenzene	0.0200	0.0249		mg/Kg		124	68 - 150	9	30
N-Propylbenzene	0.0200	0.0223		mg/Kg		111	78 - 130	7	30
o-Xylene	0.0200	0.0203		mg/Kg		102	80 - 120	11	30
sec-Butylbenzene	0.0200	0.0232		mg/Kg		116	78 - 136	10	30
Styrene	0.0200	0.0195		mg/Kg		97	80 - 120	9	30
tert-Butylbenzene	0.0200	0.0215		mg/Kg		108	80 - 128	9	30
Tetrachloroethene	0.0200	0.0202		mg/Kg		101	78 - 123	12	30
Toluene	0.0200	0.0212		mg/Kg		106	80 - 120	6	30
trans-1,2-Dichloroethene	0.0200	0.0199		mg/Kg		100	78 - 120	14	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870379/5
Matrix: Solid
Analysis Batch: 870379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			0.0200	0.0180		mg/Kg		90	80 - 120	1	30
Trichloroethene			0.0200	0.0192		mg/Kg		96	79 - 120	10	30
Trichlorofluoromethane			0.0200	0.0197		mg/Kg		99	76 - 142	14	30
Vinyl chloride			0.0200	0.0239		mg/Kg		119	72 - 131	20	30
Xylenes, Total			0.0400	0.0408		mg/Kg		102	80 - 120	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 145*
4-Bromofluorobenzene	*93*		*75 - 139*
Dibromofluoromethane (Surr)	*81*		*73 - 139*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 460-870501/8
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 20:11	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 20:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 20:11	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 20:11	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/06/22 20:11	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 20:11	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 20:11	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 20:11	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 20:11	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/06/22 20:11	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 20:11	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/06/22 20:11	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/06/22 20:11	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 20:11	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/06/22 20:11	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 20:11	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/06/22 20:11	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/06/22 20:11	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/06/22 20:11	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/06/22 20:11	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 20:11	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/06/22 20:11	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/06/22 20:11	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 20:11	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/06/22 20:11	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 20:11	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 20:11	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 20:11	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/06/22 20:11	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/06/22 20:11	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/06/22 20:11	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870501/8
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/06/22 20:11	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 20:11	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/06/22 20:11	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/06/22 20:11	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/06/22 20:11	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/06/22 20:11	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 20:11	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 20:11	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/06/22 20:11	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/06/22 20:11	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/06/22 20:11	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/06/22 20:11	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/06/22 20:11	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 20:11	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/06/22 20:11	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/06/22 20:11	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/06/22 20:11	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 20:11	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/06/22 20:11	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/06/22 20:11	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/06/22 20:11	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/06/22 20:11	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/06/22 20:11	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/06/22 20:11	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/06/22 20:11	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/06/22 20:11	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/06/22 20:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 145*		*10/06/22 20:11*	*1*
4-Bromofluorobenzene	*103*		*75 - 139*		*10/06/22 20:11*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 139*		*10/06/22 20:11*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/06/22 20:11*	*1*

Lab Sample ID: LCS 460-870501/3
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0168		mg/Kg		84	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0223		mg/Kg		112	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0182		mg/Kg		91	75 - 141
1,1,2-Trichloroethane	0.0200	0.0213		mg/Kg		106	80 - 120
1,1-Dichloroethane	0.0200	0.0197		mg/Kg		99	77 - 129
1,1-Dichloroethene	0.0200	0.0176		mg/Kg		88	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0193		mg/Kg		97	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0192		mg/Kg		96	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0197		mg/Kg		99	79 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870501/3
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.0200	0.0174		mg/Kg		87	60 - 124
1,2-Dichlorobenzene	0.0200	0.0197		mg/Kg		99	80 - 120
1,2-Dichloroethane	0.0200	0.0176		mg/Kg		88	75 - 123
1,2-Dichloropropane	0.0200	0.0202		mg/Kg		101	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0200		mg/Kg		100	79 - 120
1,3-Dichlorobenzene	0.0200	0.0192		mg/Kg		96	80 - 120
1,4-Dichlorobenzene	0.0200	0.0190		mg/Kg		95	80 - 120
2-Butanone (MEK)	0.100	0.0750		mg/Kg		75	75 - 120
2-Hexanone	0.100	0.0815		mg/Kg		82	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0832		mg/Kg		83	80 - 122
Acetone	0.100	0.0917		mg/Kg		92	63 - 131
Benzene	0.0200	0.0220		mg/Kg		110	80 - 123
Bromoform	0.0200	0.0147		mg/Kg		74	70 - 125
Bromomethane	0.0200	0.0169		mg/Kg		85	64 - 150
Carbon disulfide	0.0200	0.0183		mg/Kg		91	76 - 120
Carbon tetrachloride	0.0200	0.0161		mg/Kg		81	77 - 121
Chlorobenzene	0.0200	0.0193		mg/Kg		96	80 - 120
Chlorobromomethane	0.0200	0.0159		mg/Kg		79	76 - 127
Chlorodibromomethane	0.0200	0.0167		mg/Kg		84	80 - 120
Chloroethane	0.0200	0.0191		mg/Kg		96	68 - 132
Chloroform	0.0200	0.0184		mg/Kg		92	79 - 126
Chloromethane	0.0200	0.0197		mg/Kg		99	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0172		mg/Kg		86	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0197		mg/Kg		98	80 - 120
Cyclohexane	0.0200	0.0185		mg/Kg		92	70 - 132
Dichlorobromomethane	0.0200	0.0173		mg/Kg		87	73 - 124
Dichlorodifluoromethane	0.0200	0.0172		mg/Kg		86	62 - 150
Ethylbenzene	0.0200	0.0200		mg/Kg		100	76 - 120
Ethylene Dibromide	0.0200	0.0184		mg/Kg		92	79 - 120
Isopropylbenzene	0.0200	0.0195		mg/Kg		97	80 - 120
Methyl acetate	0.0400	0.0449		mg/Kg		112	58 - 143
Methyl tert-butyl ether	0.0200	0.0182		mg/Kg		91	80 - 125
Methylcyclohexane	0.0200	0.0179		mg/Kg		90	70 - 133
Methylene Chloride	0.0200	0.0171		mg/Kg		86	76 - 120
m-Xylene & p-Xylene	0.0200	0.0191		mg/Kg		96	80 - 120
n-Butylbenzene	0.0200	0.0235		mg/Kg		118	68 - 150
N-Propylbenzene	0.0200	0.0202		mg/Kg		101	78 - 130
o-Xylene	0.0200	0.0185		mg/Kg		93	80 - 120
sec-Butylbenzene	0.0200	0.0213		mg/Kg		107	78 - 136
Styrene	0.0200	0.0186		mg/Kg		93	80 - 120
tert-Butylbenzene	0.0200	0.0189		mg/Kg		94	80 - 128
Tetrachloroethene	0.0200	0.0185		mg/Kg		92	78 - 123
Toluene	0.0200	0.0207		mg/Kg		104	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0161		mg/Kg		80	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0183		mg/Kg		92	80 - 120
Trichloroethene	0.0200	0.0176		mg/Kg		88	79 - 120
Trichlorofluoromethane	0.0200	0.0172		mg/Kg		86	76 - 142
Vinyl chloride	0.0200	0.0200		mg/Kg		100	72 - 131
Xylenes, Total	0.0400	0.0376		mg/Kg		94	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		72 - 145
4-Bromofluorobenzene	100		75 - 139
Dibromofluoromethane (Surr)	92		73 - 139
Toluene-d8 (Surr)	111		80 - 120

Lab Sample ID: LCSD 460-870501/5
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			0.0200	0.0164		mg/Kg		82	78 - 120	3	30
1,1,2,2-Tetrachloroethane			0.0200	0.0244		mg/Kg		122	66 - 123	9	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0200	0.0161		mg/Kg		81	75 - 141	12	30
1,1,2-Trichloroethane			0.0200	0.0205		mg/Kg		102	80 - 120	4	30
1,1-Dichloroethane			0.0200	0.0192		mg/Kg		96	77 - 129	3	30
1,1-Dichloroethene			0.0200	0.0156		mg/Kg		78	70 - 132	12	30
1,2,3-Trichlorobenzene			0.0200	0.0173		mg/Kg		87	44 - 120	11	30
1,2,4-Trichlorobenzene			0.0200	0.0167		mg/Kg		83	68 - 150	14	30
1,2,4-Trimethylbenzene			0.0200	0.0203		mg/Kg		101	79 - 120	3	30
1,2-Dibromo-3-Chloropropane			0.0200	0.0185		mg/Kg		93	60 - 124	6	30
1,2-Dichlorobenzene			0.0200	0.0187		mg/Kg		94	80 - 120	5	30
1,2-Dichloroethane			0.0200	0.0172		mg/Kg		86	75 - 123	2	30
1,2-Dichloropropane			0.0200	0.0197		mg/Kg		98	73 - 124	3	30
1,3,5-Trimethylbenzene			0.0200	0.0208		mg/Kg		104	79 - 120	4	30
1,3-Dichlorobenzene			0.0200	0.0184		mg/Kg		92	80 - 120	4	30
1,4-Dichlorobenzene			0.0200	0.0189		mg/Kg		95	80 - 120	1	30
2-Butanone (MEK)			0.100	0.0766		mg/Kg		77	75 - 120	2	30
2-Hexanone			0.100	0.0796		mg/Kg		80	70 - 128	2	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0807		mg/Kg		81	80 - 122	3	30
Acetone			0.100	0.0914		mg/Kg		91	63 - 131	0	30
Benzene			0.0200	0.0219		mg/Kg		110	80 - 123	0	30
Bromoform			0.0200	0.0144		mg/Kg		72	70 - 125	2	30
Bromomethane			0.0200	0.0166		mg/Kg		83	64 - 150	2	30
Carbon disulfide			0.0200	0.0166		mg/Kg		83	76 - 120	10	30
Carbon tetrachloride			0.0200	0.0156		mg/Kg		78	77 - 121	4	30
Chlorobenzene			0.0200	0.0189		mg/Kg		95	80 - 120	2	30
Chlorobromomethane			0.0200	0.0164		mg/Kg		82	76 - 127	3	30
Chlorodibromomethane			0.0200	0.0173		mg/Kg		87	80 - 120	3	30
Chloroethane			0.0200	0.0188		mg/Kg		94	68 - 132	2	30
Chloroform			0.0200	0.0179		mg/Kg		90	79 - 126	2	30
Chloromethane			0.0200	0.0214		mg/Kg		107	63 - 130	8	30
cis-1,2-Dichloroethene			0.0200	0.0168		mg/Kg		84	80 - 123	2	30
cis-1,3-Dichloropropene			0.0200	0.0193		mg/Kg		96	80 - 120	2	30
Cyclohexane			0.0200	0.0185		mg/Kg		93	70 - 132	0	30
Dichlorobromomethane			0.0200	0.0167		mg/Kg		84	73 - 124	4	30
Dichlorodifluoromethane			0.0200	0.0173		mg/Kg		87	62 - 150	1	30
Ethylbenzene			0.0200	0.0192		mg/Kg		96	76 - 120	4	30
Ethylene Dibromide			0.0200	0.0183		mg/Kg		91	79 - 120	1	30
Isopropylbenzene			0.0200	0.0198		mg/Kg		99	80 - 120	2	30
Methyl acetate			0.0400	0.0451		mg/Kg		113	58 - 143	0	30
Methyl tert-butyl ether			0.0200	0.0160		mg/Kg		80	80 - 125	13	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870501/5
Matrix: Solid
Analysis Batch: 870501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methylcyclohexane			0.0200	0.0171		mg/Kg		85	70 - 133	5	30
Methylene Chloride			0.0200	0.0172		mg/Kg		86	76 - 120	0	30
m-Xylene & p-Xylene			0.0200	0.0182		mg/Kg		91	80 - 120	5	30
n-Butylbenzene			0.0200	0.0214		mg/Kg		107	68 - 150	9	30
N-Propylbenzene			0.0200	0.0207		mg/Kg		104	78 - 130	2	30
o-Xylene			0.0200	0.0180		mg/Kg		90	80 - 120	3	30
sec-Butylbenzene			0.0200	0.0201		mg/Kg		101	78 - 136	6	30
Styrene			0.0200	0.0180		mg/Kg		90	80 - 120	3	30
tert-Butylbenzene			0.0200	0.0191		mg/Kg		95	80 - 128	1	30
Tetrachloroethene			0.0200	0.0179		mg/Kg		89	78 - 123	3	30
Toluene			0.0200	0.0203		mg/Kg		102	80 - 120	2	30
trans-1,2-Dichloroethene			0.0200	0.0175		mg/Kg		88	78 - 120	9	30
trans-1,3-Dichloropropene			0.0200	0.0177		mg/Kg		89	80 - 120	3	30
Trichloroethene			0.0200	0.0174		mg/Kg		87	79 - 120	1	30
Trichlorofluoromethane			0.0200	0.0162		mg/Kg		81	76 - 142	5	30
Vinyl chloride			0.0200	0.0195		mg/Kg		98	72 - 131	2	30
Xylenes, Total			0.0400	0.0363		mg/Kg		91	80 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 145*
4-Bromofluorobenzene	*107*		*75 - 139*
Dibromofluoromethane (Surr)	*90*		*73 - 139*
Toluene-d8 (Surr)	*114*		*80 - 120*

Lab Sample ID: LB3 460-870524/1-A
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870524

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg		10/06/22 16:34	10/07/22 22:15	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB3 460-870524/1-A
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870524

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0060	U	0.0060	0.0057	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg		10/06/22 16:34	10/07/22 22:15	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg		10/06/22 16:34	10/07/22 22:15	1

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 145*	*10/06/22 16:34*	*10/07/22 22:15*	*1*
4-Bromofluorobenzene	*118*		*75 - 139*	*10/06/22 16:34*	*10/07/22 22:15*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 139*	*10/06/22 16:34*	*10/07/22 22:15*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*	*10/06/22 16:34*	*10/07/22 22:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870690/9
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/07/22 21:50	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/07/22 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/07/22 21:50	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/07/22 21:50	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/07/22 21:50	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/07/22 21:50	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/07/22 21:50	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/07/22 21:50	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/07/22 21:50	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/07/22 21:50	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/07/22 21:50	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/07/22 21:50	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/07/22 21:50	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/07/22 21:50	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/07/22 21:50	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/07/22 21:50	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/07/22 21:50	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/07/22 21:50	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/07/22 21:50	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/07/22 21:50	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/07/22 21:50	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/07/22 21:50	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/07/22 21:50	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/07/22 21:50	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/07/22 21:50	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/07/22 21:50	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/07/22 21:50	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/07/22 21:50	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/07/22 21:50	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/07/22 21:50	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/07/22 21:50	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/07/22 21:50	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/07/22 21:50	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/07/22 21:50	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/07/22 21:50	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/07/22 21:50	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/07/22 21:50	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/07/22 21:50	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/07/22 21:50	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/07/22 21:50	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/07/22 21:50	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/07/22 21:50	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/07/22 21:50	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/07/22 21:50	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/07/22 21:50	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/07/22 21:50	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/07/22 21:50	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/07/22 21:50	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870690/9
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/07/22 21:50	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/07/22 21:50	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/07/22 21:50	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/07/22 21:50	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/07/22 21:50	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/07/22 21:50	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/07/22 21:50	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/07/22 21:50	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/07/22 21:50	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/07/22 21:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 145*		*10/07/22 21:50*	*1*
4-Bromofluorobenzene	*112*		*75 - 139*		*10/07/22 21:50*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 139*		*10/07/22 21:50*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/07/22 21:50*	*1*

Lab Sample ID: LCS 460-870690/5
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0202		mg/Kg		101	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0206		mg/Kg		103	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0167		mg/Kg		84	75 - 141
1,1,2-Trichloroethane	0.0200	0.0200		mg/Kg		100	80 - 120
1,1-Dichloroethane	0.0200	0.0198		mg/Kg		99	77 - 129
1,1-Dichloroethene	0.0200	0.0155		mg/Kg		78	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0223		mg/Kg		112	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0230		mg/Kg		115	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0228		mg/Kg		114	79 - 120
1,2-Dibromo-3-Chloropropane	0.0200	0.0197		mg/Kg		98	60 - 124
1,2-Dichlorobenzene	0.0200	0.0219		mg/Kg		110	80 - 120
1,2-Dichloroethane	0.0200	0.0186		mg/Kg		93	75 - 123
1,2-Dichloropropane	0.0200	0.0205		mg/Kg		102	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0230		mg/Kg		115	79 - 120
1,3-Dichlorobenzene	0.0200	0.0216		mg/Kg		108	80 - 120
1,4-Dichlorobenzene	0.0200	0.0212		mg/Kg		106	80 - 120
2-Butanone (MEK)	0.100	0.0969		mg/Kg		97	75 - 120
2-Hexanone	0.100	0.0968		mg/Kg		97	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0978		mg/Kg		98	80 - 122
Acetone	0.100	0.0766		mg/Kg		77	63 - 131
Benzene	0.0200	0.0216		mg/Kg		108	80 - 123
Bromoform	0.0200	0.0184		mg/Kg		92	70 - 125
Bromomethane	0.0200	0.0169		mg/Kg		85	64 - 150
Carbon disulfide	0.0200	0.0151		mg/Kg		76	76 - 120
Carbon tetrachloride	0.0200	0.0204		mg/Kg		102	77 - 121
Chlorobenzene	0.0200	0.0215		mg/Kg		107	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870690/5
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobromomethane	0.0200	0.0198		mg/Kg		99	76 - 127
Chlorodibromomethane	0.0200	0.0203		mg/Kg		102	80 - 120
Chloroethane	0.0200	0.0158		mg/Kg		79	68 - 132
Chloroform	0.0200	0.0193		mg/Kg		97	79 - 126
Chloromethane	0.0200	0.0160		mg/Kg		80	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0194		mg/Kg		97	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0201		mg/Kg		100	80 - 120
Cyclohexane	0.0200	0.0210		mg/Kg		105	70 - 132
Dichlorobromomethane	0.0200	0.0193		mg/Kg		97	73 - 124
Dichlorodifluoromethane	0.0200	0.0138		mg/Kg		69	62 - 150
Ethylbenzene	0.0200	0.0221		mg/Kg		110	76 - 120
Ethylene Dibromide	0.0200	0.0201		mg/Kg		101	79 - 120
Isopropylbenzene	0.0200	0.0225		mg/Kg		113	80 - 120
Methyl acetate	0.0400	0.0339		mg/Kg		85	58 - 143
Methyl tert-butyl ether	0.0200	0.0181		mg/Kg		90	80 - 125
Methylcyclohexane	0.0200	0.0205		mg/Kg		103	70 - 133
Methylene Chloride	0.0200	0.0183		mg/Kg		92	76 - 120
m-Xylene & p-Xylene	0.0200	0.0217		mg/Kg		109	80 - 120
n-Butylbenzene	0.0200	0.0230		mg/Kg		115	68 - 150
N-Propylbenzene	0.0200	0.0229		mg/Kg		114	78 - 130
o-Xylene	0.0200	0.0212		mg/Kg		106	80 - 120
sec-Butylbenzene	0.0200	0.0232		mg/Kg		116	78 - 136
Styrene	0.0200	0.0208		mg/Kg		104	80 - 120
tert-Butylbenzene	0.0200	0.0228		mg/Kg		114	80 - 128
Tetrachloroethene	0.0200	0.0237		mg/Kg		118	78 - 123
Toluene	0.0200	0.0217		mg/Kg		109	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0197		mg/Kg		98	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0190		mg/Kg		95	80 - 120
Trichloroethene	0.0200	0.0202		mg/Kg		101	79 - 120
Trichlorofluoromethane	0.0200	0.0184		mg/Kg		92	76 - 142
Vinyl chloride	0.0200	0.0175		mg/Kg		88	72 - 131
Xylenes, Total	0.0400	0.0430		mg/Kg		107	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 145*
4-Bromofluorobenzene	*98*		*75 - 139*
Dibromofluoromethane (Surr)	*84*		*73 - 139*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: LCSD 460-870690/6
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0200	0.0202		mg/Kg		101	78 - 120	0	30
1,1,2,2-Tetrachloroethane	0.0200	0.0211		mg/Kg		106	66 - 123	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0163		mg/Kg		82	75 - 141	2	30
1,1,2-Trichloroethane	0.0200	0.0208		mg/Kg		104	80 - 120	4	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870690/6
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0200	0.0204		mg/Kg		102	77 - 129	3	30
1,1-Dichloroethene	0.0200	0.0156		mg/Kg		78	70 - 132	0	30
1,2,3-Trichlorobenzene	0.0200	0.0225		mg/Kg		113	44 - 120	1	30
1,2,4-Trichlorobenzene	0.0200	0.0224		mg/Kg		112	68 - 150	3	30
1,2,4-Trimethylbenzene	0.0200	0.0216		mg/Kg		108	79 - 120	6	30
1,2-Dibromo-3-Chloropropane	0.0200	0.0195		mg/Kg		98	60 - 124	1	30
1,2-Dichlorobenzene	0.0200	0.0214		mg/Kg		107	80 - 120	2	30
1,2-Dichloroethane	0.0200	0.0182		mg/Kg		91	75 - 123	2	30
1,2-Dichloropropane	0.0200	0.0196		mg/Kg		98	73 - 124	4	30
1,3,5-Trimethylbenzene	0.0200	0.0218		mg/Kg		109	79 - 120	5	30
1,3-Dichlorobenzene	0.0200	0.0218		mg/Kg		109	80 - 120	1	30
1,4-Dichlorobenzene	0.0200	0.0210		mg/Kg		105	80 - 120	1	30
2-Butanone (MEK)	0.100	0.0902		mg/Kg		90	75 - 120	7	30
2-Hexanone	0.100	0.0909		mg/Kg		91	70 - 128	6	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0915		mg/Kg		92	80 - 122	7	30
Acetone	0.100	0.0740		mg/Kg		74	63 - 131	3	30
Benzene	0.0200	0.0214		mg/Kg		107	80 - 123	1	30
Bromoform	0.0200	0.0190		mg/Kg		95	70 - 125	3	30
Bromomethane	0.0200	0.0168		mg/Kg		84	64 - 150	1	30
Carbon disulfide	0.0200	0.0152		mg/Kg		76	76 - 120	0	30
Carbon tetrachloride	0.0200	0.0197		mg/Kg		99	77 - 121	3	30
Chlorobenzene	0.0200	0.0208		mg/Kg		104	80 - 120	3	30
Chlorobromomethane	0.0200	0.0193		mg/Kg		97	76 - 127	2	30
Chlorodibromomethane	0.0200	0.0199		mg/Kg		99	80 - 120	2	30
Chloroethane	0.0200	0.0153		mg/Kg		76	68 - 132	3	30
Chloroform	0.0200	0.0192		mg/Kg		96	79 - 126	1	30
Chloromethane	0.0200	0.0151		mg/Kg		75	63 - 130	6	30
cis-1,2-Dichloroethene	0.0200	0.0191		mg/Kg		96	80 - 123	1	30
cis-1,3-Dichloropropene	0.0200	0.0203		mg/Kg		101	80 - 120	1	30
Cyclohexane	0.0200	0.0210		mg/Kg		105	70 - 132	0	30
Dichlorobromomethane	0.0200	0.0183		mg/Kg		92	73 - 124	6	30
Dichlorodifluoromethane	0.0200	0.0146		mg/Kg		73	62 - 150	6	30
Ethylbenzene	0.0200	0.0212		mg/Kg		106	76 - 120	4	30
Ethylene Dibromide	0.0200	0.0198		mg/Kg		99	79 - 120	2	30
Isopropylbenzene	0.0200	0.0219		mg/Kg		109	80 - 120	3	30
Methyl acetate	0.0400	0.0300		mg/Kg		75	58 - 143	12	30
Methyl tert-butyl ether	0.0200	0.0175		mg/Kg		87	80 - 125	4	30
Methylcyclohexane	0.0200	0.0204		mg/Kg		102	70 - 133	1	30
Methylene Chloride	0.0200	0.0156		mg/Kg		78	76 - 120	16	30
m-Xylene & p-Xylene	0.0200	0.0208		mg/Kg		104	80 - 120	4	30
n-Butylbenzene	0.0200	0.0222		mg/Kg		111	68 - 150	3	30
N-Propylbenzene	0.0200	0.0220		mg/Kg		110	78 - 130	4	30
o-Xylene	0.0200	0.0214		mg/Kg		107	80 - 120	1	30
sec-Butylbenzene	0.0200	0.0218		mg/Kg		109	78 - 136	6	30
Styrene	0.0200	0.0203		mg/Kg		102	80 - 120	2	30
tert-Butylbenzene	0.0200	0.0209		mg/Kg		104	80 - 128	9	30
Tetrachloroethene	0.0200	0.0236		mg/Kg		118	78 - 123	0	30
Toluene	0.0200	0.0214		mg/Kg		107	80 - 120	1	30
trans-1,2-Dichloroethene	0.0200	0.0165		mg/Kg		82	78 - 120	18	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870690/6
Matrix: Solid
Analysis Batch: 870690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			0.0200	0.0187		mg/Kg		93	80 - 120	2	30
Trichloroethene			0.0200	0.0197		mg/Kg		98	79 - 120	3	30
Trichlorofluoromethane			0.0200	0.0186		mg/Kg		93	76 - 142	1	30
Vinyl chloride			0.0200	0.0169		mg/Kg		85	72 - 131	4	30
Xylenes, Total			0.0400	0.0422		mg/Kg		105	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 145*
4-Bromofluorobenzene	*112*		*75 - 139*
Dibromofluoromethane (Surr)	*96*		*73 - 139*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: MB 460-870776/8
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00023	mg/Kg			10/08/22 11:24	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/08/22 11:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/08/22 11:24	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg			10/08/22 11:24	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg			10/08/22 11:24	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg			10/08/22 11:24	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/08/22 11:24	1
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/08/22 11:24	1
1,2,4-Trimethylbenzene	0.0010	U	0.0010	0.00025	mg/Kg			10/08/22 11:24	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00046	mg/Kg			10/08/22 11:24	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00036	mg/Kg			10/08/22 11:24	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg			10/08/22 11:24	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00042	mg/Kg			10/08/22 11:24	1
1,3,5-Trimethylbenzene	0.0010	U	0.0010	0.00031	mg/Kg			10/08/22 11:24	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00037	mg/Kg			10/08/22 11:24	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00023	mg/Kg			10/08/22 11:24	1
2-Butanone (MEK)	0.0050	U	0.0050	0.00037	mg/Kg			10/08/22 11:24	1
2-Hexanone	0.0050	U	0.0050	0.0017	mg/Kg			10/08/22 11:24	1
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.0050	0.0016	mg/Kg			10/08/22 11:24	1
Acetone	0.0060	U	0.0060	0.0057	mg/Kg			10/08/22 11:24	1
Benzene	0.0010	U	0.0010	0.00026	mg/Kg			10/08/22 11:24	1
Bromoform	0.0010	U	0.0010	0.00043	mg/Kg			10/08/22 11:24	1
Bromomethane	0.0020	U	0.0020	0.0010	mg/Kg			10/08/22 11:24	1
Carbon disulfide	0.0010	U	0.0010	0.00027	mg/Kg			10/08/22 11:24	1
Carbon tetrachloride	0.0010	U	0.0010	0.00039	mg/Kg			10/08/22 11:24	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/08/22 11:24	1
Chlorobromomethane	0.0010	U	0.0010	0.00028	mg/Kg			10/08/22 11:24	1
Chlorodibromomethane	0.0010	U	0.0010	0.00019	mg/Kg			10/08/22 11:24	1
Chloroethane	0.0010	U	0.0010	0.00052	mg/Kg			10/08/22 11:24	1
Chloroform	0.0010	U	0.0010	0.00097	mg/Kg			10/08/22 11:24	1
Chloromethane	0.0010	U	0.0010	0.00044	mg/Kg			10/08/22 11:24	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870776/8
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00036	mg/Kg			10/08/22 11:24	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/08/22 11:24	1
Cyclohexane	0.0010	U	0.0010	0.00022	mg/Kg			10/08/22 11:24	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg			10/08/22 11:24	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00034	mg/Kg			10/08/22 11:24	1
Ethylbenzene	0.0010	U	0.0010	0.00020	mg/Kg			10/08/22 11:24	1
Ethylene Dibromide	0.0010	U	0.0010	0.00018	mg/Kg			10/08/22 11:24	1
Isopropylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/08/22 11:24	1
Methyl acetate	0.0050	U	0.0050	0.0043	mg/Kg			10/08/22 11:24	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00051	mg/Kg			10/08/22 11:24	1
Methylcyclohexane	0.0010	U	0.0010	0.00050	mg/Kg			10/08/22 11:24	1
Methylene Chloride	0.0020	U	0.0020	0.0011	mg/Kg			10/08/22 11:24	1
m-Xylene & p-Xylene	0.0010	U	0.0010	0.00017	mg/Kg			10/08/22 11:24	1
n-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/08/22 11:24	1
N-Propylbenzene	0.0010	U	0.0010	0.00018	mg/Kg			10/08/22 11:24	1
o-Xylene	0.0010	U	0.0010	0.00019	mg/Kg			10/08/22 11:24	1
sec-Butylbenzene	0.0010	U	0.0010	0.00029	mg/Kg			10/08/22 11:24	1
Styrene	0.0010	U	0.0010	0.00028	mg/Kg			10/08/22 11:24	1
tert-Butylbenzene	0.0010	U	0.0010	0.00028	mg/Kg			10/08/22 11:24	1
Tetrachloroethene	0.0010	U	0.0010	0.00031	mg/Kg			10/08/22 11:24	1
Toluene	0.0010	U	0.0010	0.00023	mg/Kg			10/08/22 11:24	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg			10/08/22 11:24	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg			10/08/22 11:24	1
Trichloroethene	0.0010	U	0.0010	0.00032	mg/Kg			10/08/22 11:24	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00041	mg/Kg			10/08/22 11:24	1
Vinyl chloride	0.0010	U	0.0010	0.00055	mg/Kg			10/08/22 11:24	1
Xylenes, Total	0.0020	U	0.0020	0.00017	mg/Kg			10/08/22 11:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 145*		*10/08/22 11:24*	*1*
4-Bromofluorobenzene	*112*		*75 - 139*		*10/08/22 11:24*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 139*		*10/08/22 11:24*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*10/08/22 11:24*	*1*

Lab Sample ID: LCS 460-870776/4
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0200	0.0188		mg/Kg		94	78 - 120
1,1,2,2-Tetrachloroethane	0.0200	0.0199		mg/Kg		99	66 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0150		mg/Kg		75	75 - 141
1,1,2-Trichloroethane	0.0200	0.0190		mg/Kg		95	80 - 120
1,1-Dichloroethane	0.0200	0.0189		mg/Kg		95	77 - 129
1,1-Dichloroethene	0.0200	0.0146		mg/Kg		73	70 - 132
1,2,3-Trichlorobenzene	0.0200	0.0211		mg/Kg		105	44 - 120
1,2,4-Trichlorobenzene	0.0200	0.0203		mg/Kg		101	68 - 150
1,2,4-Trimethylbenzene	0.0200	0.0203		mg/Kg		102	79 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870776/4
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.0200	0.0178		mg/Kg		89	60 - 124
1,2-Dichlorobenzene	0.0200	0.0200		mg/Kg		100	80 - 120
1,2-Dichloroethane	0.0200	0.0170		mg/Kg		85	75 - 123
1,2-Dichloropropane	0.0200	0.0184		mg/Kg		92	73 - 124
1,3,5-Trimethylbenzene	0.0200	0.0209		mg/Kg		105	79 - 120
1,3-Dichlorobenzene	0.0200	0.0203		mg/Kg		102	80 - 120
1,4-Dichlorobenzene	0.0200	0.0196		mg/Kg		98	80 - 120
2-Butanone (MEK)	0.100	0.0891		mg/Kg		89	75 - 120
2-Hexanone	0.100	0.0865		mg/Kg		87	70 - 128
4-Methyl-2-pentanone (MIBK)	0.100	0.0879		mg/Kg		88	80 - 122
Acetone	0.100	0.0709		mg/Kg		71	63 - 131
Benzene	0.0200	0.0198		mg/Kg		99	80 - 123
Bromoform	0.0200	0.0170		mg/Kg		85	70 - 125
Bromomethane	0.0200	0.0160		mg/Kg		80	64 - 150
Carbon disulfide	0.0200	0.0137	*	mg/Kg		69	76 - 120
Carbon tetrachloride	0.0200	0.0186		mg/Kg		93	77 - 121
Chlorobenzene	0.0200	0.0194		mg/Kg		97	80 - 120
Chlorobromomethane	0.0200	0.0178		mg/Kg		89	76 - 127
Chlorodibromomethane	0.0200	0.0184		mg/Kg		92	80 - 120
Chloroethane	0.0200	0.0152		mg/Kg		76	68 - 132
Chloroform	0.0200	0.0179		mg/Kg		90	79 - 126
Chloromethane	0.0200	0.0154		mg/Kg		77	63 - 130
cis-1,2-Dichloroethene	0.0200	0.0175		mg/Kg		88	80 - 123
cis-1,3-Dichloropropene	0.0200	0.0187		mg/Kg		93	80 - 120
Cyclohexane	0.0200	0.0202		mg/Kg		101	70 - 132
Dichlorobromomethane	0.0200	0.0174		mg/Kg		87	73 - 124
Dichlorodifluoromethane	0.0200	0.0168		mg/Kg		84	62 - 150
Ethylbenzene	0.0200	0.0199		mg/Kg		99	76 - 120
Ethylene Dibromide	0.0200	0.0185		mg/Kg		93	79 - 120
Isopropylbenzene	0.0200	0.0203		mg/Kg		102	80 - 120
Methyl acetate	0.0400	0.0325		mg/Kg		81	58 - 143
Methyl tert-butyl ether	0.0200	0.0173		mg/Kg		87	80 - 125
Methylcyclohexane	0.0200	0.0200		mg/Kg		100	70 - 133
Methylene Chloride	0.0200	0.0170		mg/Kg		85	76 - 120
m-Xylene & p-Xylene	0.0200	0.0198		mg/Kg		99	80 - 120
n-Butylbenzene	0.0200	0.0210		mg/Kg		105	68 - 150
N-Propylbenzene	0.0200	0.0209		mg/Kg		104	78 - 130
o-Xylene	0.0200	0.0189		mg/Kg		95	80 - 120
sec-Butylbenzene	0.0200	0.0212		mg/Kg		106	78 - 136
Styrene	0.0200	0.0189		mg/Kg		95	80 - 120
tert-Butylbenzene	0.0200	0.0211		mg/Kg		105	80 - 128
Tetrachloroethene	0.0200	0.0219		mg/Kg		109	78 - 123
Toluene	0.0200	0.0200		mg/Kg		100	80 - 120
trans-1,2-Dichloroethene	0.0200	0.0183		mg/Kg		92	78 - 120
trans-1,3-Dichloropropene	0.0200	0.0180		mg/Kg		90	80 - 120
Trichloroethene	0.0200	0.0193		mg/Kg		96	79 - 120
Trichlorofluoromethane	0.0200	0.0182		mg/Kg		91	76 - 142
Vinyl chloride	0.0200	0.0168		mg/Kg		84	72 - 131
Xylenes, Total	0.0400	0.0387		mg/Kg		97	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		72 - 145
4-Bromofluorobenzene	109		75 - 139
Dibromofluoromethane (Surr)	92		73 - 139
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 460-870776/5
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			0.0200	0.0187		mg/Kg		93	78 - 120	1	30
1,1,2,2-Tetrachloroethane			0.0200	0.0197		mg/Kg		99	66 - 123	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0200	0.0156		mg/Kg		78	75 - 141	4	30
1,1,2-Trichloroethane			0.0200	0.0183		mg/Kg		91	80 - 120	4	30
1,1-Dichloroethane			0.0200	0.0186		mg/Kg		93	77 - 129	2	30
1,1-Dichloroethene			0.0200	0.0146		mg/Kg		73	70 - 132	0	30
1,2,3-Trichlorobenzene			0.0200	0.0213		mg/Kg		106	44 - 120	1	30
1,2,4-Trichlorobenzene			0.0200	0.0209		mg/Kg		105	68 - 150	3	30
1,2,4-Trimethylbenzene			0.0200	0.0208		mg/Kg		104	79 - 120	2	30
1,2-Dibromo-3-Chloropropane			0.0200	0.0195		mg/Kg		97	60 - 124	9	30
1,2-Dichlorobenzene			0.0200	0.0203		mg/Kg		102	80 - 120	2	30
1,2-Dichloroethane			0.0200	0.0173		mg/Kg		86	75 - 123	2	30
1,2-Dichloropropane			0.0200	0.0188		mg/Kg		94	73 - 124	2	30
1,3,5-Trimethylbenzene			0.0200	0.0208		mg/Kg		104	79 - 120	1	30
1,3-Dichlorobenzene			0.0200	0.0207		mg/Kg		103	80 - 120	2	30
1,4-Dichlorobenzene			0.0200	0.0200		mg/Kg		100	80 - 120	2	30
2-Butanone (MEK)			0.100	0.0867		mg/Kg		87	75 - 120	3	30
2-Hexanone			0.100	0.0858		mg/Kg		86	70 - 128	1	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0878		mg/Kg		88	80 - 122	0	30
Acetone			0.100	0.0714		mg/Kg		71	63 - 131	1	30
Benzene			0.0200	0.0200		mg/Kg		100	80 - 123	1	30
Bromoform			0.0200	0.0171		mg/Kg		85	70 - 125	0	30
Bromomethane			0.0200	0.0170		mg/Kg		85	64 - 150	6	30
Carbon disulfide			0.0200	0.0136	*	mg/Kg		68	76 - 120	1	30
Carbon tetrachloride			0.0200	0.0192		mg/Kg		96	77 - 121	3	30
Chlorobenzene			0.0200	0.0196		mg/Kg		98	80 - 120	1	30
Chlorobromomethane			0.0200	0.0180		mg/Kg		90	76 - 127	1	30
Chlorodibromomethane			0.0200	0.0181		mg/Kg		91	80 - 120	2	30
Chloroethane			0.0200	0.0156		mg/Kg		78	68 - 132	3	30
Chloroform			0.0200	0.0180		mg/Kg		90	79 - 126	0	30
Chloromethane			0.0200	0.0163		mg/Kg		82	63 - 130	6	30
cis-1,2-Dichloroethene			0.0200	0.0176		mg/Kg		88	80 - 123	0	30
cis-1,3-Dichloropropene			0.0200	0.0183		mg/Kg		91	80 - 120	2	30
Cyclohexane			0.0200	0.0198		mg/Kg		99	70 - 132	2	30
Dichlorobromomethane			0.0200	0.0177		mg/Kg		88	73 - 124	2	30
Dichlorodifluoromethane			0.0200	0.0182		mg/Kg		91	62 - 150	8	30
Ethylbenzene			0.0200	0.0196		mg/Kg		98	76 - 120	1	30
Ethylene Dibromide			0.0200	0.0178		mg/Kg		89	79 - 120	4	30
Isopropylbenzene			0.0200	0.0205		mg/Kg		103	80 - 120	1	30
Methyl acetate			0.0400	0.0335		mg/Kg		84	58 - 143	3	30
Methyl tert-butyl ether			0.0200	0.0174		mg/Kg		87	80 - 125	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870776/5
Matrix: Solid
Analysis Batch: 870776

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methylcyclohexane			0.0200	0.0199		mg/Kg		100	70 - 133	0	30
Methylene Chloride			0.0200	0.0171		mg/Kg		85	76 - 120	1	30
m-Xylene & p-Xylene			0.0200	0.0195		mg/Kg		98	80 - 120	2	30
n-Butylbenzene			0.0200	0.0214		mg/Kg		107	68 - 150	2	30
N-Propylbenzene			0.0200	0.0215		mg/Kg		107	78 - 130	3	30
o-Xylene			0.0200	0.0194		mg/Kg		97	80 - 120	2	30
sec-Butylbenzene			0.0200	0.0212		mg/Kg		106	78 - 136	0	30
Styrene			0.0200	0.0188		mg/Kg		94	80 - 120	1	30
tert-Butylbenzene			0.0200	0.0208		mg/Kg		104	80 - 128	1	30
Tetrachloroethene			0.0200	0.0210		mg/Kg		105	78 - 123	4	30
Toluene			0.0200	0.0195		mg/Kg		97	80 - 120	3	30
trans-1,2-Dichloroethene			0.0200	0.0187		mg/Kg		93	78 - 120	2	30
trans-1,3-Dichloropropene			0.0200	0.0177		mg/Kg		89	80 - 120	1	30
Trichloroethene			0.0200	0.0183		mg/Kg		92	79 - 120	5	30
Trichlorofluoromethane			0.0200	0.0190		mg/Kg		95	76 - 142	4	30
Vinyl chloride			0.0200	0.0173		mg/Kg		87	72 - 131	3	30
Xylenes, Total			0.0400	0.0389		mg/Kg		97	80 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 145*
4-Bromofluorobenzene	*110*		*75 - 139*
Dibromofluoromethane (Surr)	*93*		*73 - 139*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-870137/1-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870137

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
1,2,4,5-Tetrachlorobenzene	0.33	U	0.33	0.010	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
1,4-Dioxane	0.033	U	0.033	0.029	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,2'-oxybis[1-chloropropane]	0.33	U	0.33	0.0060	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,3,4,6-Tetrachlorophenol	0.33	U	0.33	0.022	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4,5-Trichlorophenol	0.33	U	0.33	0.034	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4,6-Trichlorophenol	0.13	U	0.13	0.042	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4-Dichlorophenol	0.13	U	0.13	0.021	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4-Dimethylphenol	0.33	U	0.33	0.039	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4-Dinitrophenol	0.27	U	0.27	0.16	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,4-Dinitrotoluene	0.067	U	0.067	0.036	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2,6-Dinitrotoluene	0.067	U	0.067	0.024	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Chloronaphthalene	0.33	U	0.33	0.015	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Chlorophenol	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Methylnaphthalene	0.33	U	0.33	0.0093	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Methylphenol	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Nitroaniline	0.33	U	0.33	0.025	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
2-Nitrophenol	0.33	U	0.33	0.033	mg/Kg		10/04/22 18:31	10/04/22 23:36	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870137/1-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870137

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
3,3'-Dichlorobenzidine	0.13	U	0.13	0.050	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
3-Nitroaniline	0.33	U	0.33	0.079	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Bromophenyl phenyl ether	0.33	U	0.33	0.013	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Chloro-3-methylphenol	0.33	U	0.33	0.019	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Chloroaniline	0.33	U	0.33	0.059	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Chlorophenyl phenyl ether	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Nitroaniline	0.33	U	0.33	0.038	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
4-Nitrophenol	0.67	U	0.67	0.054	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Acenaphthene	0.33	U	0.33	0.0094	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Acenaphthylene	0.33	U	0.33	0.0095	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Acetophenone	0.33	U	0.33	0.016	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Anthracene	0.33	U	0.33	0.010	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Atrazine	0.13	U	0.13	0.019	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzaldehyde	0.33	U	0.33	0.055	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzo[a]anthracene	0.033	U	0.033	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzo[a]pyrene	0.033	U	0.033	0.0088	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzo[b]fluoranthene	0.033	U	0.033	0.0086	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzo[g,h,i]perylene	0.33	U	0.33	0.0098	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Benzo[k]fluoranthene	0.033	U	0.033	0.0065	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Bis(2-chloroethoxy)methane	0.33	U	0.33	0.026	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Bis(2-chloroethyl)ether	0.033	U	0.033	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Bis(2-ethylhexyl) phthalate	0.33	U	0.33	0.017	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Butyl benzyl phthalate	0.33	U	0.33	0.016	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Caprolactam	0.33	U	0.33	0.051	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Carbazole	0.33	U	0.33	0.013	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Chrysene	0.33	U	0.33	0.0056	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Dibenz(a,h)anthracene	0.033	U	0.033	0.014	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Dibenzofuran	0.33	U	0.33	0.011	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Diethyl phthalate	0.33	U	0.33	0.011	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Dimethyl phthalate	0.33	U	0.33	0.075	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Di-n-butyl phthalate	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Di-n-octyl phthalate	0.33	U	0.33	0.018	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Fluoranthene	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Fluorene	0.33	U	0.33	0.0097	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Hexachlorobenzene	0.033	U	0.033	0.016	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Hexachlorobutadiene	0.067	U	0.067	0.0070	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Hexachlorocyclopentadiene	0.33	U	0.33	0.029	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Hexachloroethane	0.033	U	0.033	0.011	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Indeno[1,2,3-cd]pyrene	0.033	U	0.033	0.013	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Isophorone	0.13	U	0.13	0.096	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Naphthalene	0.33	U	0.33	0.0057	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Nitrobenzene	0.033	U	0.033	0.018	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
N-Nitrosodi-n-propylamine	0.033	U	0.033	0.024	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
N-Nitrosodiphenylamine	0.33	U	0.33	0.027	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Pentachlorophenol	0.27	U	0.27	0.068	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Phenanthrene	0.33	U	0.33	0.0058	mg/Kg		10/04/22 18:31	10/04/22 23:36	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870137/1-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870137

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.33	U	0.33	0.012	mg/Kg		10/04/22 18:31	10/04/22 23:36	1
Pyrene	0.33	U	0.33	0.0082	mg/Kg		10/04/22 18:31	10/04/22 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 123*	*10/04/22 18:31*	*10/04/22 23:36*	*1*
2-Fluorobiphenyl	*78*		*22 - 122*	*10/04/22 18:31*	*10/04/22 23:36*	*1*
2-Fluorophenol (Surr)	*70*		*18 - 123*	*10/04/22 18:31*	*10/04/22 23:36*	*1*
Nitrobenzene-d5 (Surr)	*72*		*16 - 125*	*10/04/22 18:31*	*10/04/22 23:36*	*1*
Phenol-d5 (Surr)	*71*		*23 - 120*	*10/04/22 18:31*	*10/04/22 23:36*	*1*
Terphenyl-d14 (Surr)	*86*		*25 - 126*	*10/04/22 18:31*	*10/04/22 23:36*	*1*

Lab Sample ID: LCS 460-870137/2-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	3.33	3.04		mg/Kg		91	59 - 120
1,2,4,5-Tetrachlorobenzene	3.33	3.14		mg/Kg		94	60 - 120
1,4-Dioxane	3.33	2.53		mg/Kg		76	21 - 120
2,2'-oxybis[1-chloropropane]	3.33	2.34		mg/Kg		70	49 - 126
2,3,4,6-Tetrachlorophenol	3.33	3.02		mg/Kg		91	54 - 120
2,4,5-Trichlorophenol	3.33	3.01		mg/Kg		90	59 - 120
2,4,6-Trichlorophenol	3.33	2.92		mg/Kg		88	58 - 120
2,4-Dichlorophenol	3.33	2.88		mg/Kg		86	66 - 120
2,4-Dimethylphenol	3.33	2.66		mg/Kg		80	67 - 120
2,4-Dinitrophenol	6.67	6.09		mg/Kg		91	36 - 129
2,4-Dinitrotoluene	3.33	3.02		mg/Kg		91	65 - 124
2,6-Dinitrotoluene	3.33	3.06		mg/Kg		92	67 - 121
2-Chloronaphthalene	3.33	3.02		mg/Kg		91	60 - 120
2-Chlorophenol	3.33	2.73		mg/Kg		82	63 - 120
2-Methylnaphthalene	3.33	2.48		mg/Kg		75	64 - 120
2-Methylphenol	3.33	2.69		mg/Kg		81	63 - 120
2-Nitroaniline	3.33	2.43		mg/Kg		73	48 - 120
2-Nitrophenol	3.33	2.86		mg/Kg		86	64 - 120
3 & 4 Methylphenol	3.33	2.77		mg/Kg		83	61 - 120
3,3'-Dichlorobenzidine	3.33	3.20		mg/Kg		96	13 - 136
3-Nitroaniline	3.33	2.70		mg/Kg		81	39 - 122
4,6-Dinitro-2-methylphenol	6.67	6.20		mg/Kg		93	50 - 136
4-Bromophenyl phenyl ether	3.33	3.07		mg/Kg		92	67 - 120
4-Chloro-3-methylphenol	3.33	2.81		mg/Kg		84	66 - 120
4-Chloroaniline	3.33	2.67		mg/Kg		80	15 - 128
4-Chlorophenyl phenyl ether	3.33	2.95		mg/Kg		88	62 - 120
4-Methylphenol	3.33	2.77		mg/Kg		83	61 - 120
4-Nitroaniline	3.33	2.51		mg/Kg		75	55 - 120
4-Nitrophenol	6.67	5.03		mg/Kg		75	52 - 123
Acenaphthene	3.33	2.65		mg/Kg		79	49 - 120
Acenaphthylene	3.33	2.82		mg/Kg		85	64 - 120
Acetophenone	3.33	2.54		mg/Kg		76	61 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870137/2-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	3.33	2.85		mg/Kg		86	67 - 120
Atrazine	1.33	1.23		mg/Kg		92	29 - 150
Benzaldehyde	1.33	1.02		mg/Kg		77	34 - 150
Benzo[a]anthracene	3.33	2.93		mg/Kg		88	62 - 120
Benzo[a]pyrene	3.33	2.74		mg/Kg		82	73 - 123
Benzo[b]fluoranthene	3.33	2.94		mg/Kg		88	70 - 125
Benzo[g,h,i]perylene	3.33	3.18		mg/Kg		95	66 - 120
Benzo[k]fluoranthene	3.33	2.93		mg/Kg		88	67 - 122
Bis(2-chloroethoxy)methane	3.33	2.69		mg/Kg		81	62 - 120
Bis(2-chloroethyl)ether	3.33	2.71		mg/Kg		81	60 - 120
Bis(2-ethylhexyl) phthalate	3.33	3.18		mg/Kg		95	59 - 125
Butyl benzyl phthalate	3.33	3.21		mg/Kg		96	62 - 127
Caprolactam	1.33	1.12		mg/Kg		84	36 - 150
Carbazole	3.33	2.84		mg/Kg		85	64 - 120
Chrysene	3.33	2.77		mg/Kg		83	63 - 120
Dibenz(a,h)anthracene	3.33	3.37		mg/Kg		101	66 - 128
Dibenzofuran	3.33	2.98		mg/Kg		89	61 - 120
Diethyl phthalate	3.33	2.86		mg/Kg		86	63 - 120
Dimethyl phthalate	3.33	3.03		mg/Kg		91	65 - 120
Di-n-butyl phthalate	3.33	2.97		mg/Kg		89	66 - 120
Di-n-octyl phthalate	3.33	3.08		mg/Kg		92	65 - 133
Fluoranthene	3.33	2.79		mg/Kg		84	61 - 120
Fluorene	3.33	2.93		mg/Kg		88	60 - 120
Hexachlorobenzene	3.33	2.97		mg/Kg		89	66 - 120
Hexachlorobutadiene	3.33	2.80		mg/Kg		84	62 - 120
Hexachlorocyclopentadiene	3.33	2.83		mg/Kg		85	38 - 120
Hexachloroethane	3.33	2.75		mg/Kg		82	61 - 120
Indeno[1,2,3-cd]pyrene	3.33	3.59		mg/Kg		108	62 - 130
Isophorone	3.33	2.72		mg/Kg		82	67 - 120
Naphthalene	3.33	2.77		mg/Kg		83	63 - 120
Nitrobenzene	3.33	2.70		mg/Kg		81	63 - 120
N-Nitrosodi-n-propylamine	3.33	2.55		mg/Kg		76	61 - 120
N-Nitrosodiphenylamine	3.33	2.92		mg/Kg		88	63 - 120
Pentachlorophenol	6.67	5.05		mg/Kg		76	37 - 126
Phenanthrene	3.33	2.86		mg/Kg		86	66 - 120
Phenol	3.33	2.79		mg/Kg		84	63 - 120
Pyrene	3.33	3.01		mg/Kg		90	61 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*87*		*10 - 123*
2-Fluorobiphenyl	*79*		*22 - 122*
2-Fluorophenol (Surr)	*73*		*18 - 123*
Nitrobenzene-d5 (Surr)	*72*		*16 - 125*
Phenol-d5 (Surr)	*73*		*23 - 120*
Terphenyl-d14 (Surr)	*84*		*25 - 126*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870137/3-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870137

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl			3.33	3.14		mg/Kg		94	59 - 120	3	30
1,2,4,5-Tetrachlorobenzene			3.33	3.23		mg/Kg		97	60 - 120	3	30
1,4-Dioxane			3.33	2.59		mg/Kg		78	21 - 120	2	30
2,2'-oxybis[1-chloropropane]			3.33	2.39		mg/Kg		72	49 - 126	2	30
2,3,4,6-Tetrachlorophenol			3.33	3.10		mg/Kg		93	54 - 120	3	30
2,4,5-Trichlorophenol			3.33	3.14		mg/Kg		94	59 - 120	4	30
2,4,6-Trichlorophenol			3.33	3.01		mg/Kg		90	58 - 120	3	30
2,4-Dichlorophenol			3.33	3.00		mg/Kg		90	66 - 120	4	30
2,4-Dimethylphenol			3.33	2.78		mg/Kg		83	67 - 120	4	30
2,4-Dinitrophenol			6.67	6.46		mg/Kg		97	36 - 129	6	30
2,4-Dinitrotoluene			3.33	3.17		mg/Kg		95	65 - 124	5	30
2,6-Dinitrotoluene			3.33	3.17		mg/Kg		95	67 - 121	3	30
2-Chloronaphthalene			3.33	3.13		mg/Kg		94	60 - 120	4	30
2-Chlorophenol			3.33	2.81		mg/Kg		84	63 - 120	3	30
2-Methylnaphthalene			3.33	2.58		mg/Kg		77	64 - 120	4	30
2-Methylphenol			3.33	2.82		mg/Kg		85	63 - 120	5	30
2-Nitroaniline			3.33	2.52		mg/Kg		76	48 - 120	4	30
2-Nitrophenol			3.33	3.00		mg/Kg		90	64 - 120	5	30
3 & 4 Methylphenol			3.33	2.87		mg/Kg		86	61 - 120	4	30
3,3'-Dichlorobenzidine			3.33	3.38		mg/Kg		101	13 - 136	5	30
3-Nitroaniline			3.33	2.82		mg/Kg		85	39 - 122	4	30
4,6-Dinitro-2-methylphenol			6.67	6.50		mg/Kg		97	50 - 136	5	30
4-Bromophenyl phenyl ether			3.33	3.18		mg/Kg		95	67 - 120	3	30
4-Chloro-3-methylphenol			3.33	2.87		mg/Kg		86	66 - 120	2	30
4-Chloroaniline			3.33	2.68		mg/Kg		80	15 - 128	0	30
4-Chlorophenyl phenyl ether			3.33	3.05		mg/Kg		91	62 - 120	3	30
4-Methylphenol			3.33	2.87		mg/Kg		86	61 - 120	4	30
4-Nitroaniline			3.33	2.71		mg/Kg		81	55 - 120	7	30
4-Nitrophenol			6.67	5.48		mg/Kg		82	52 - 123	9	30
Acenaphthene			3.33	2.72		mg/Kg		82	49 - 120	3	30
Acenaphthylene			3.33	2.90		mg/Kg		87	64 - 120	3	30
Acetophenone			3.33	2.64		mg/Kg		79	61 - 120	4	30
Anthracene			3.33	2.96		mg/Kg		89	67 - 120	4	30
Atrazine			1.33	1.28		mg/Kg		96	29 - 150	4	30
Benzaldehyde			1.33	1.04		mg/Kg		78	34 - 150	2	30
Benzo[a]anthracene			3.33	3.12		mg/Kg		94	62 - 120	6	30
Benzo[a]pyrene			3.33	2.92		mg/Kg		88	73 - 123	6	30
Benzo[b]fluoranthene			3.33	3.12		mg/Kg		94	70 - 125	6	30
Benzo[g,h,i]perylene			3.33	3.39		mg/Kg		102	66 - 120	7	30
Benzo[k]fluoranthene			3.33	3.10		mg/Kg		93	67 - 122	6	30
Bis(2-chloroethoxy)methane			3.33	2.84		mg/Kg		85	62 - 120	5	30
Bis(2-chloroethyl)ether			3.33	2.80		mg/Kg		84	60 - 120	3	30
Bis(2-ethylhexyl) phthalate			3.33	3.30		mg/Kg		99	59 - 125	4	30
Butyl benzyl phthalate			3.33	3.34		mg/Kg		100	62 - 127	4	30
Caprolactam			1.33	1.17		mg/Kg		87	36 - 150	4	30
Carbazole			3.33	2.97		mg/Kg		89	64 - 120	4	30
Chrysene			3.33	2.87		mg/Kg		86	63 - 120	4	30
Dibenz(a,h)anthracene			3.33	3.54		mg/Kg		106	66 - 128	5	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870137/3-A
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870137

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran			3.33	3.04		mg/Kg		91	61 - 120	2	30
Diethyl phthalate			3.33	2.96		mg/Kg		89	63 - 120	3	30
Dimethyl phthalate			3.33	3.15		mg/Kg		95	65 - 120	4	30
Di-n-butyl phthalate			3.33	3.08		mg/Kg		92	66 - 120	4	30
Di-n-octyl phthalate			3.33	3.25		mg/Kg		97	65 - 133	5	30
Fluoranthene			3.33	2.91		mg/Kg		87	61 - 120	4	30
Fluorene			3.33	3.05		mg/Kg		91	60 - 120	4	30
Hexachlorobenzene			3.33	3.13		mg/Kg		94	66 - 120	5	30
Hexachlorobutadiene			3.33	2.95		mg/Kg		89	62 - 120	5	30
Hexachlorocyclopentadiene			3.33	2.91		mg/Kg		87	38 - 120	3	30
Hexachloroethane			3.33	2.82		mg/Kg		85	61 - 120	3	30
Indeno[1,2,3-cd]pyrene			3.33	3.84		mg/Kg		115	62 - 130	7	30
Isophorone			3.33	2.83		mg/Kg		85	67 - 120	4	30
Naphthalene			3.33	2.88		mg/Kg		86	63 - 120	4	30
Nitrobenzene			3.33	2.80		mg/Kg		84	63 - 120	4	30
N-Nitrosodi-n-propylamine			3.33	2.64		mg/Kg		79	61 - 120	3	30
N-Nitrosodiphenylamine			3.33	3.04		mg/Kg		91	63 - 120	4	30
Pentachlorophenol			6.67	5.35		mg/Kg		80	37 - 126	6	30
Phenanthrene			3.33	2.94		mg/Kg		88	66 - 120	3	30
Phenol			3.33	2.87		mg/Kg		86	63 - 120	3	30
Pyrene			3.33	3.18		mg/Kg		95	61 - 121	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*91*		*10 - 123*
2-Fluorobiphenyl	*81*		*22 - 122*
2-Fluorophenol (Surr)	*76*		*18 - 123*
Nitrobenzene-d5 (Surr)	*74*		*16 - 125*
Phenol-d5 (Surr)	*75*		*23 - 120*
Terphenyl-d14 (Surr)	*86*		*25 - 126*

Lab Sample ID: 460-266779-B-1-B MS
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	0.35	U	3.54	3.24		mg/Kg	☼	92	59 - 120
1,2,4,5-Tetrachlorobenzene	0.35	U	3.54	3.29		mg/Kg	☼	93	60 - 120
1,4-Dioxane	0.035	U	3.54	2.23		mg/Kg	☼	63	21 - 120
2,2'-oxybis[1-chloropropane]	0.35	U	3.54	2.46		mg/Kg	☼	70	49 - 126
2,3,4,6-Tetrachlorophenol	0.35	U	3.54	3.13		mg/Kg	☼	89	54 - 120
2,4,5-Trichlorophenol	0.35	U	3.54	3.16		mg/Kg	☼	89	59 - 120
2,4,6-Trichlorophenol	0.14	U	3.54	3.17		mg/Kg	☼	90	58 - 120
2,4-Dichlorophenol	0.14	U	3.54	3.17		mg/Kg	☼	90	66 - 120
2,4-Dimethylphenol	0.35	U	3.54	2.98		mg/Kg	☼	84	67 - 120
2,4-Dinitrophenol	0.28	U	7.08	3.83		mg/Kg	☼	54	36 - 129
2,4-Dinitrotoluene	0.071	U	3.54	3.19		mg/Kg	☼	90	65 - 124
2,6-Dinitrotoluene	0.071	U	3.54	3.21		mg/Kg	☼	91	67 - 121
2-Chloronaphthalene	0.35	U	3.54	3.26		mg/Kg	☼	92	60 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266779-B-1-B MS
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorophenol	0.35	U	3.54	2.97		mg/Kg	☼	84	63 - 120
2-Methylnaphthalene	0.18	J	3.54	2.88		mg/Kg	☼	76	64 - 120
2-Methylphenol	0.35	U	3.54	2.95		mg/Kg	☼	83	63 - 120
2-Nitroaniline	0.35	U	3.54	2.63		mg/Kg	☼	74	48 - 120
2-Nitrophenol	0.35	U	3.54	3.07		mg/Kg	☼	87	64 - 120
3 & 4 Methylphenol	0.35	U	3.54	3.11		mg/Kg	☼	88	61 - 120
3,3'-Dichlorobenzidine	0.14	U	3.54	1.69		mg/Kg	☼	48	13 - 136
3-Nitroaniline	0.35	U	3.54	2.21		mg/Kg	☼	62	39 - 122
4,6-Dinitro-2-methylphenol	0.28	U	7.08	5.09		mg/Kg	☼	72	50 - 136
4-Bromophenyl phenyl ether	0.35	U	3.54	3.29		mg/Kg	☼	93	67 - 120
4-Chloro-3-methylphenol	0.35	U	3.54	3.06		mg/Kg	☼	87	66 - 120
4-Chloroaniline	0.35	U	3.54	1.54		mg/Kg	☼	43	15 - 128
4-Chlorophenyl phenyl ether	0.35	U	3.54	3.18		mg/Kg	☼	90	62 - 120
4-Methylphenol	0.35	U	3.54	3.11		mg/Kg	☼	88	61 - 120
4-Nitroaniline	0.35	U	3.54	2.58		mg/Kg	☼	73	55 - 120
4-Nitrophenol	0.71	U	7.08	5.33		mg/Kg	☼	75	52 - 123
Acenaphthene	0.35	U	3.54	2.87		mg/Kg	☼	81	49 - 120
Acenaphthylene	0.35	U	3.54	2.99		mg/Kg	☼	85	64 - 120
Acetophenone	0.35	U	3.54	2.82		mg/Kg	☼	80	61 - 120
Anthracene	0.35	U	3.54	3.06		mg/Kg	☼	86	67 - 120
Atrazine	0.14	U	1.42	1.38		mg/Kg	☼	98	29 - 150
Benzaldehyde	0.35	U	1.42	1.16	E	mg/Kg	☼	82	34 - 150
Benzo[a]anthracene	0.016	J	3.54	3.16		mg/Kg	☼	89	62 - 120
Benzo[a]pyrene	0.035	U	3.54	2.92		mg/Kg	☼	83	73 - 123
Benzo[b]fluoranthene	0.011	J	3.54	3.24		mg/Kg	☼	91	70 - 125
Benzo[g,h,i]perylene	0.35	U	3.54	3.35		mg/Kg	☼	95	66 - 120
Benzo[k]fluoranthene	0.035	U	3.54	3.09		mg/Kg	☼	87	67 - 122
Bis(2-chloroethoxy)methane	0.35	U	3.54	2.96		mg/Kg	☼	84	62 - 120
Bis(2-chloroethyl)ether	0.035	U	3.54	2.90		mg/Kg	☼	82	60 - 120
Bis(2-ethylhexyl) phthalate	0.023	J	3.54	3.42		mg/Kg	☼	96	59 - 125
Butyl benzyl phthalate	0.35	U	3.54	3.48		mg/Kg	☼	98	62 - 127
Caprolactam	0.35	U	1.42	1.30		mg/Kg	☼	92	36 - 150
Carbazole	0.35	U	3.54	2.96		mg/Kg	☼	84	64 - 120
Chrysene	0.014	J	3.54	2.89		mg/Kg	☼	81	63 - 120
Dibenz(a,h)anthracene	0.035	U	3.54	3.54		mg/Kg	☼	100	66 - 128
Dibenzofuran	0.35	U	3.54	3.18		mg/Kg	☼	90	61 - 120
Diethyl phthalate	0.35	U	3.54	3.02		mg/Kg	☼	85	63 - 120
Dimethyl phthalate	0.35	U	3.54	3.25		mg/Kg	☼	92	65 - 120
Di-n-butyl phthalate	0.35	U	3.54	3.16		mg/Kg	☼	89	66 - 120
Di-n-octyl phthalate	0.35	U	3.54	3.44		mg/Kg	☼	97	65 - 133
Fluoranthene	0.031	J	3.54	2.92		mg/Kg	☼	82	61 - 120
Fluorene	0.35	U	3.54	3.14		mg/Kg	☼	89	60 - 120
Hexachlorobenzene	0.035	U	3.54	3.21		mg/Kg	☼	91	66 - 120
Hexachlorobutadiene	0.071	U	3.54	3.00		mg/Kg	☼	85	62 - 120
Hexachlorocyclopentadiene	0.35	U	3.54	2.95		mg/Kg	☼	83	38 - 120
Hexachloroethane	0.035	U	3.54	2.91		mg/Kg	☼	82	61 - 120
Indeno[1,2,3-cd]pyrene	0.035	U	3.54	3.74		mg/Kg	☼	106	62 - 130
Isophorone	0.14	U	3.54	2.95		mg/Kg	☼	83	67 - 120
Naphthalene	0.054	J	3.54	3.05		mg/Kg	☼	85	63 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266779-B-1-B MS
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrobenzene	0.035	U	3.54	2.94		mg/Kg	☼	83	63 - 120
N-Nitrosodi-n-propylamine	0.035	U	3.54	2.78		mg/Kg	☼	79	61 - 120
N-Nitrosodiphenylamine	0.35	U	3.54	3.16		mg/Kg	☼	89	63 - 120
Pentachlorophenol	0.28	U	7.08	5.02		mg/Kg	☼	71	37 - 126
Phenanthrene	0.038	J	3.54	3.07		mg/Kg	☼	86	66 - 120
Phenol	0.35	U	3.54	3.08		mg/Kg	☼	87	63 - 120
Pyrene	0.027	J	3.54	3.53		mg/Kg	☼	99	61 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 123*
2-Fluorobiphenyl	*79*		*22 - 122*
2-Fluorophenol (Surr)	*77*		*18 - 123*
Nitrobenzene-d5 (Surr)	*72*		*16 - 125*
Phenol-d5 (Surr)	*75*		*23 - 120*
Terphenyl-d14 (Surr)	*89*		*25 - 126*

Lab Sample ID: 460-266779-B-1-C MSD
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	0.35	U	3.54	3.16		mg/Kg	☼	89	59 - 120	3	30
1,2,4,5-Tetrachlorobenzene	0.35	U	3.54	3.21		mg/Kg	☼	91	60 - 120	3	30
1,4-Dioxane	0.035	U	3.54	2.10		mg/Kg	☼	59	21 - 120	6	30
2,2'-oxybis[1-chloropropane]	0.35	U	3.54	2.38		mg/Kg	☼	67	49 - 126	3	30
2,3,4,6-Tetrachlorophenol	0.35	U	3.54	3.08		mg/Kg	☼	87	54 - 120	2	30
2,4,5-Trichlorophenol	0.35	U	3.54	3.12		mg/Kg	☼	88	59 - 120	1	30
2,4,6-Trichlorophenol	0.14	U	3.54	3.08		mg/Kg	☼	87	58 - 120	3	30
2,4-Dichlorophenol	0.14	U	3.54	3.14		mg/Kg	☼	89	66 - 120	1	30
2,4-Dimethylphenol	0.35	U	3.54	2.88		mg/Kg	☼	81	67 - 120	3	30
2,4-Dinitrophenol	0.28	U	7.08	3.74		mg/Kg	☼	53	36 - 129	3	30
2,4-Dinitrotoluene	0.071	U	3.54	3.16		mg/Kg	☼	89	65 - 124	1	30
2,6-Dinitrotoluene	0.071	U	3.54	3.25		mg/Kg	☼	92	67 - 121	1	30
2-Chloronaphthalene	0.35	U	3.54	3.12		mg/Kg	☼	88	60 - 120	4	30
2-Chlorophenol	0.35	U	3.54	2.91		mg/Kg	☼	82	63 - 120	2	30
2-Methylnaphthalene	0.18	J	3.54	2.87		mg/Kg	☼	76	64 - 120	0	30
2-Methylphenol	0.35	U	3.54	2.98		mg/Kg	☼	84	63 - 120	1	30
2-Nitroaniline	0.35	U	3.54	2.52		mg/Kg	☼	71	48 - 120	4	30
2-Nitrophenol	0.35	U	3.54	3.02		mg/Kg	☼	85	64 - 120	2	30
3 & 4 Methylphenol	0.35	U	3.54	3.05		mg/Kg	☼	86	61 - 120	2	30
3,3'-Dichlorobenzidine	0.14	U	3.54	1.74		mg/Kg	☼	49	13 - 136	3	30
3-Nitroaniline	0.35	U	3.54	2.21		mg/Kg	☼	63	39 - 122	0	30
4,6-Dinitro-2-methylphenol	0.28	U	7.08	4.92		mg/Kg	☼	69	50 - 136	3	30
4-Bromophenyl phenyl ether	0.35	U	3.54	3.18		mg/Kg	☼	90	67 - 120	3	30
4-Chloro-3-methylphenol	0.35	U	3.54	3.03		mg/Kg	☼	86	66 - 120	1	30
4-Chloroaniline	0.35	U	3.54	1.60		mg/Kg	☼	45	15 - 128	4	30
4-Chlorophenyl phenyl ether	0.35	U	3.54	3.12		mg/Kg	☼	88	62 - 120	2	30
4-Methylphenol	0.35	U	3.54	3.05		mg/Kg	☼	86	61 - 120	2	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266779-B-1-C MSD
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870137

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Nitroaniline	0.35	U	3.54	2.57		mg/Kg	☼	73	55 - 120	0	30
4-Nitrophenol	0.71	U	7.08	5.36		mg/Kg	☼	76	52 - 123	1	30
Acenaphthene	0.35	U	3.54	2.78		mg/Kg	☼	79	49 - 120	3	30
Acenaphthylene	0.35	U	3.54	2.97		mg/Kg	☼	84	64 - 120	1	30
Acetophenone	0.35	U	3.54	2.72		mg/Kg	☼	77	61 - 120	4	30
Anthracene	0.35	U	3.54	2.98		mg/Kg	☼	84	67 - 120	3	30
Atrazine	0.14	U	1.42	1.41		mg/Kg	☼	100	29 - 150	2	30
Benzaldehyde	0.35	U	1.42	1.16	E	mg/Kg	☼	82	34 - 150	0	30
Benzo[a]anthracene	0.016	J	3.54	3.04		mg/Kg	☼	85	62 - 120	4	30
Benzo[a]pyrene	0.035	U	3.54	2.86		mg/Kg	☼	81	73 - 123	2	30
Benzo[b]fluoranthene	0.011	J	3.54	3.18		mg/Kg	☼	90	70 - 125	2	30
Benzo[g,h,i]perylene	0.35	U	3.54	3.29		mg/Kg	☼	93	66 - 120	2	30
Benzo[k]fluoranthene	0.035	U	3.54	3.04		mg/Kg	☼	86	67 - 122	2	30
Bis(2-chloroethoxy)methane	0.35	U	3.54	2.89		mg/Kg	☼	82	62 - 120	2	30
Bis(2-chloroethyl)ether	0.035	U	3.54	2.80		mg/Kg	☼	79	60 - 120	4	30
Bis(2-ethylhexyl) phthalate	0.023	J	3.54	3.28		mg/Kg	☼	92	59 - 125	4	30
Butyl benzyl phthalate	0.35	U	3.54	3.41		mg/Kg	☼	96	62 - 127	2	30
Caprolactam	0.35	U	1.42	1.31		mg/Kg	☼	93	36 - 150	1	30
Carbazole	0.35	U	3.54	2.93		mg/Kg	☼	83	64 - 120	1	30
Chrysene	0.014	J	3.54	2.87		mg/Kg	☼	81	63 - 120	1	30
Dibenz(a,h)anthracene	0.035	U	3.54	3.48		mg/Kg	☼	98	66 - 128	2	30
Dibenzofuran	0.35	U	3.54	3.12		mg/Kg	☼	88	61 - 120	2	30
Diethyl phthalate	0.35	U	3.54	3.03		mg/Kg	☼	86	63 - 120	0	30
Dimethyl phthalate	0.35	U	3.54	3.20		mg/Kg	☼	91	65 - 120	1	30
Di-n-butyl phthalate	0.35	U	3.54	3.09		mg/Kg	☼	87	66 - 120	2	30
Di-n-octyl phthalate	0.35	U	3.54	3.27		mg/Kg	☼	92	65 - 133	5	30
Fluoranthene	0.031	J	3.54	2.91		mg/Kg	☼	81	61 - 120	0	30
Fluorene	0.35	U	3.54	3.09		mg/Kg	☼	87	60 - 120	1	30
Hexachlorobenzene	0.035	U	3.54	3.12		mg/Kg	☼	88	66 - 120	3	30
Hexachlorobutadiene	0.071	U	3.54	2.91		mg/Kg	☼	82	62 - 120	3	30
Hexachlorocyclopentadiene	0.35	U	3.54	2.81		mg/Kg	☼	79	38 - 120	5	30
Hexachloroethane	0.035	U	3.54	2.77		mg/Kg	☼	78	61 - 120	5	30
Indeno[1,2,3-cd]pyrene	0.035	U	3.54	3.68		mg/Kg	☼	104	62 - 130	2	30
Isophorone	0.14	U	3.54	2.85		mg/Kg	☼	80	67 - 120	4	30
Naphthalene	0.054	J	3.54	2.97		mg/Kg	☼	82	63 - 120	3	30
Nitrobenzene	0.035	U	3.54	2.89		mg/Kg	☼	82	63 - 120	2	30
N-Nitrosodi-n-propylamine	0.035	U	3.54	2.75		mg/Kg	☼	78	61 - 120	1	30
N-Nitrosodiphenylamine	0.35	U	3.54	3.06		mg/Kg	☼	86	63 - 120	3	30
Pentachlorophenol	0.28	U	7.08	5.24		mg/Kg	☼	74	37 - 126	4	30
Phenanthrene	0.038	J	3.54	3.02		mg/Kg	☼	84	66 - 120	2	30
Phenol	0.35	U	3.54	3.00		mg/Kg	☼	85	63 - 120	3	30
Pyrene	0.027	J	3.54	3.29		mg/Kg	☼	92	61 - 121	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 123*
2-Fluorobiphenyl	*78*		*22 - 122*
2-Fluorophenol (Surr)	*75*		*18 - 123*
Nitrobenzene-d5 (Surr)	*70*		*16 - 125*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266779-B-1-C MSD
Matrix: Solid
Analysis Batch: 870154

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870137

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Phenol-d5 (Surr)	*74*		*23 - 120*
Terphenyl-d14 (Surr)	*85*		*25 - 126*

Lab Sample ID: MB 460-870226/1-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870226

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
1,2,4,5-Tetrachlorobenzene	0.33	U	0.33	0.010	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
1,4-Dioxane	0.033	U	0.033	0.029	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,2'-oxybis[1-chloropropane]	0.33	U	0.33	0.0060	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,3,4,6-Tetrachlorophenol	0.33	U	0.33	0.022	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4,5-Trichlorophenol	0.33	U	0.33	0.034	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4,6-Trichlorophenol	0.13	U	0.13	0.042	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4-Dichlorophenol	0.13	U	0.13	0.021	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4-Dimethylphenol	0.33	U	0.33	0.039	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4-Dinitrophenol	0.27	U	0.27	0.16	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,4-Dinitrotoluene	0.067	U	0.067	0.036	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2,6-Dinitrotoluene	0.067	U	0.067	0.024	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Chloronaphthalene	0.33	U	0.33	0.015	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Chlorophenol	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Methylnaphthalene	0.33	U	0.33	0.0093	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Methylphenol	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Nitroaniline	0.33	U	0.33	0.025	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
2-Nitrophenol	0.33	U	0.33	0.033	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
3 & 4 Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
3,3'-Dichlorobenzidine	0.13	U	0.13	0.050	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
3-Nitroaniline	0.33	U	0.33	0.079	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Bromophenyl phenyl ether	0.33	U	0.33	0.013	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Chloro-3-methylphenol	0.33	U	0.33	0.019	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Chloroaniline	0.33	U	0.33	0.059	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Chlorophenyl phenyl ether	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Nitroaniline	0.33	U	0.33	0.038	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
4-Nitrophenol	0.67	U	0.67	0.054	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Acenaphthene	0.33	U	0.33	0.0094	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Acenaphthylene	0.33	U	0.33	0.0095	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Acetophenone	0.33	U	0.33	0.016	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Anthracene	0.33	U	0.33	0.010	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Atrazine	0.13	U	0.13	0.019	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzaldehyde	0.33	U	0.33	0.055	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzo[a]anthracene	0.033	U	0.033	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzo[a]pyrene	0.033	U	0.033	0.0088	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzo[b]fluoranthene	0.033	U	0.033	0.0086	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzo[g,h,i]perylene	0.33	U	0.33	0.0098	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Benzo[k]fluoranthene	0.033	U	0.033	0.0065	mg/Kg		10/05/22 10:12	10/05/22 19:45	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870226/1-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870226

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.33	U	0.33	0.026	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Bis(2-chloroethyl)ether	0.033	U	0.033	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Bis(2-ethylhexyl) phthalate	0.33	U	0.33	0.017	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Butyl benzyl phthalate	0.33	U	0.33	0.016	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Caprolactam	0.33	U	0.33	0.051	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Carbazole	0.33	U	0.33	0.013	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Chrysene	0.33	U	0.33	0.0056	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Dibenz(a,h)anthracene	0.033	U	0.033	0.014	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Dibenzofuran	0.33	U	0.33	0.011	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Diethyl phthalate	0.33	U	0.33	0.011	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Dimethyl phthalate	0.33	U	0.33	0.075	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Di-n-butyl phthalate	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Di-n-octyl phthalate	0.33	U	0.33	0.018	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Fluoranthene	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Fluorene	0.33	U	0.33	0.0097	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Hexachlorobenzene	0.033	U	0.033	0.016	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Hexachlorobutadiene	0.067	U	0.067	0.0070	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Hexachlorocyclopentadiene	0.33	U	0.33	0.029	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Hexachloroethane	0.033	U	0.033	0.011	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Indeno[1,2,3-cd]pyrene	0.033	U	0.033	0.013	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Isophorone	0.13	U	0.13	0.096	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Naphthalene	0.33	U	0.33	0.0057	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Nitrobenzene	0.033	U	0.033	0.018	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
N-Nitrosodi-n-propylamine	0.033	U	0.033	0.024	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
N-Nitrosodiphenylamine	0.33	U	0.33	0.027	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Pentachlorophenol	0.27	U	0.27	0.068	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Phenanthrene	0.33	U	0.33	0.0058	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Phenol	0.33	U	0.33	0.012	mg/Kg		10/05/22 10:12	10/05/22 19:45	1
Pyrene	0.33	U	0.33	0.0082	mg/Kg		10/05/22 10:12	10/05/22 19:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 123*	*10/05/22 10:12*	*10/05/22 19:45*	*1*
2-Fluorobiphenyl	*97*		*22 - 122*	*10/05/22 10:12*	*10/05/22 19:45*	*1*
2-Fluorophenol (Surr)	*82*		*18 - 123*	*10/05/22 10:12*	*10/05/22 19:45*	*1*
Nitrobenzene-d5 (Surr)	*88*		*16 - 125*	*10/05/22 10:12*	*10/05/22 19:45*	*1*
Phenol-d5 (Surr)	*81*		*23 - 120*	*10/05/22 10:12*	*10/05/22 19:45*	*1*
Terphenyl-d14 (Surr)	*105*		*25 - 126*	*10/05/22 10:12*	*10/05/22 19:45*	*1*

Lab Sample ID: LCS 460-870226/2-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	3.33	2.88		mg/Kg		86	59 - 120
1,2,4,5-Tetrachlorobenzene	3.33	2.98		mg/Kg		89	60 - 120
1,4-Dioxane	3.33	1.75		mg/Kg		52	21 - 120
2,2'-oxybis[1-chloropropane]	3.33	2.27		mg/Kg		68	49 - 126
2,3,4,6-Tetrachlorophenol	3.33	3.08		mg/Kg		92	54 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870226/2-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	3.33	2.80		mg/Kg		84	59 - 120
2,4,6-Trichlorophenol	3.33	3.04		mg/Kg		91	58 - 120
2,4-Dichlorophenol	3.33	2.92		mg/Kg		88	66 - 120
2,4-Dimethylphenol	3.33	2.76		mg/Kg		83	67 - 120
2,4-Dinitrophenol	6.67	5.97		mg/Kg		90	36 - 129
2,4-Dinitrotoluene	3.33	3.32		mg/Kg		100	65 - 124
2,6-Dinitrotoluene	3.33	3.23		mg/Kg		97	67 - 121
2-Chloronaphthalene	3.33	2.87		mg/Kg		86	60 - 120
2-Chlorophenol	3.33	2.51		mg/Kg		75	63 - 120
2-Methylnaphthalene	3.33	2.53		mg/Kg		76	64 - 120
2-Methylphenol	3.33	2.52		mg/Kg		76	63 - 120
2-Nitroaniline	3.33	2.74		mg/Kg		82	48 - 120
2-Nitrophenol	3.33	2.85		mg/Kg		86	64 - 120
3 & 4 Methylphenol	3.33	2.56		mg/Kg		77	61 - 120
3,3'-Dichlorobenzidine	3.33	2.72		mg/Kg		81	13 - 136
3-Nitroaniline	3.33	2.43		mg/Kg		73	39 - 122
4,6-Dinitro-2-methylphenol	6.67	6.81		mg/Kg		102	50 - 136
4-Bromophenyl phenyl ether	3.33	2.90		mg/Kg		87	67 - 120
4-Chloro-3-methylphenol	3.33	2.87		mg/Kg		86	66 - 120
4-Chloroaniline	3.33	2.19		mg/Kg		66	15 - 128
4-Chlorophenyl phenyl ether	3.33	3.01		mg/Kg		90	62 - 120
4-Methylphenol	3.33	2.56		mg/Kg		77	61 - 120
4-Nitroaniline	3.33	2.74		mg/Kg		82	55 - 120
4-Nitrophenol	6.67	4.73		mg/Kg		71	52 - 123
Acenaphthene	3.33	2.90		mg/Kg		87	49 - 120
Acenaphthylene	3.33	2.76		mg/Kg		83	64 - 120
Acetophenone	3.33	2.44		mg/Kg		73	61 - 120
Anthracene	3.33	2.88		mg/Kg		87	67 - 120
Atrazine	1.33	2.70	*	mg/Kg		202	29 - 150
Benzaldehyde	1.33	1.43		mg/Kg		107	34 - 150
Benzo[a]anthracene	3.33	3.10		mg/Kg		93	62 - 120
Benzo[a]pyrene	3.33	3.12		mg/Kg		94	73 - 123
Benzo[b]fluoranthene	3.33	3.28		mg/Kg		98	70 - 125
Benzo[g,h,i]perylene	3.33	2.91		mg/Kg		87	66 - 120
Benzo[k]fluoranthene	3.33	3.42		mg/Kg		103	67 - 122
Bis(2-chloroethoxy)methane	3.33	2.47		mg/Kg		74	62 - 120
Bis(2-chloroethyl)ether	3.33	2.34		mg/Kg		70	60 - 120
Bis(2-ethylhexyl) phthalate	3.33	3.19		mg/Kg		96	59 - 125
Butyl benzyl phthalate	3.33	3.14		mg/Kg		94	62 - 127
Caprolactam	1.33	2.59	*	mg/Kg		194	36 - 150
Carbazole	3.33	2.86		mg/Kg		86	64 - 120
Chrysene	3.33	2.86		mg/Kg		86	63 - 120
Dibenz(a,h)anthracene	3.33	3.32		mg/Kg		99	66 - 128
Dibenzofuran	3.33	3.01		mg/Kg		90	61 - 120
Diethyl phthalate	3.33	3.06		mg/Kg		92	63 - 120
Dimethyl phthalate	3.33	2.96		mg/Kg		89	65 - 120
Di-n-butyl phthalate	3.33	3.07		mg/Kg		92	66 - 120
Di-n-octyl phthalate	3.33	3.33		mg/Kg		100	65 - 133
Fluoranthene	3.33	2.96		mg/Kg		89	61 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870226/2-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870226

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluorene			3.33	2.97		mg/Kg		89	60 - 120		
Hexachlorobenzene			3.33	2.72		mg/Kg		82	66 - 120		
Hexachlorobutadiene			3.33	2.90		mg/Kg		87	62 - 120		
Hexachlorocyclopentadiene			3.33	2.49		mg/Kg		75	38 - 120		
Hexachloroethane			3.33	2.41		mg/Kg		72	61 - 120		
Indeno[1,2,3-cd]pyrene			3.33	2.71		mg/Kg		81	62 - 130		
Isophorone			3.33	2.60		mg/Kg		78	67 - 120		
Naphthalene			3.33	2.75		mg/Kg		82	63 - 120		
Nitrobenzene			3.33	2.58		mg/Kg		78	63 - 120		
N-Nitrosodi-n-propylamine			3.33	2.28		mg/Kg		68	61 - 120		
N-Nitrosodiphenylamine			3.33	2.82		mg/Kg		85	63 - 120		
Pentachlorophenol			6.67	5.29		mg/Kg		79	37 - 126		
Phenanthrene			3.33	2.86		mg/Kg		86	66 - 120		
Phenol			3.33	2.50		mg/Kg		75	63 - 120		
Pyrene			3.33	2.93		mg/Kg		88	61 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 123*
2-Fluorobiphenyl	*96*		*22 - 122*
2-Fluorophenol (Surr)	*83*		*18 - 123*
Nitrobenzene-d5 (Surr)	*88*		*16 - 125*
Phenol-d5 (Surr)	*81*		*23 - 120*
Terphenyl-d14 (Surr)	*102*		*25 - 126*

Lab Sample ID: LCSD 460-870226/3-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870226

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl			3.33	2.88		mg/Kg		86	59 - 120	0	30
1,2,4,5-Tetrachlorobenzene			3.33	2.99		mg/Kg		90	60 - 120	0	30
1,4-Dioxane			3.33	1.80		mg/Kg		54	21 - 120	3	30
2,2'-oxybis[1-chloropropane]			3.33	2.34		mg/Kg		70	49 - 126	3	30
2,3,4,6-Tetrachlorophenol			3.33	3.13		mg/Kg		94	54 - 120	2	30
2,4,5-Trichlorophenol			3.33	3.06		mg/Kg		92	59 - 120	9	30
2,4,6-Trichlorophenol			3.33	3.09		mg/Kg		93	58 - 120	2	30
2,4-Dichlorophenol			3.33	2.98		mg/Kg		89	66 - 120	2	30
2,4-Dimethylphenol			3.33	2.81		mg/Kg		84	67 - 120	2	30
2,4-Dinitrophenol			6.67	6.57		mg/Kg		99	36 - 129	9	30
2,4-Dinitrotoluene			3.33	3.33		mg/Kg		100	65 - 124	0	30
2,6-Dinitrotoluene			3.33	3.24		mg/Kg		97	67 - 121	0	30
2-Chloronaphthalene			3.33	2.94		mg/Kg		88	60 - 120	2	30
2-Chlorophenol			3.33	2.61		mg/Kg		78	63 - 120	4	30
2-Methylnaphthalene			3.33	2.56		mg/Kg		77	64 - 120	1	30
2-Methylphenol			3.33	2.53		mg/Kg		76	63 - 120	0	30
2-Nitroaniline			3.33	2.82		mg/Kg		85	48 - 120	3	30
2-Nitrophenol			3.33	3.02		mg/Kg		91	64 - 120	6	30
3 & 4 Methylphenol			3.33	2.55		mg/Kg		77	61 - 120	0	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870226/3-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	3.33	2.77		mg/Kg		83	13 - 136	2	30
3-Nitroaniline	3.33	2.54		mg/Kg		76	39 - 122	4	30
4,6-Dinitro-2-methylphenol	6.67	7.14		mg/Kg		107	50 - 136	5	30
4-Bromophenyl phenyl ether	3.33	2.94		mg/Kg		88	67 - 120	1	30
4-Chloro-3-methylphenol	3.33	2.91		mg/Kg		87	66 - 120	1	30
4-Chloroaniline	3.33	2.12		mg/Kg		64	15 - 128	3	30
4-Chlorophenyl phenyl ether	3.33	3.07		mg/Kg		92	62 - 120	2	30
4-Methylphenol	3.33	2.55		mg/Kg		77	61 - 120	0	30
4-Nitroaniline	3.33	2.79		mg/Kg		84	55 - 120	2	30
4-Nitrophenol	6.67	4.96		mg/Kg		74	52 - 123	5	30
Acenaphthene	3.33	2.94		mg/Kg		88	49 - 120	1	30
Acenaphthylene	3.33	2.79		mg/Kg		84	64 - 120	1	30
Acetophenone	3.33	2.52		mg/Kg		76	61 - 120	3	30
Anthracene	3.33	2.90		mg/Kg		87	67 - 120	1	30
Atrazine	1.33	2.74	*	mg/Kg		206	29 - 150	2	30
Benzaldehyde	1.33	1.48		mg/Kg		111	34 - 150	4	30
Benzo[a]anthracene	3.33	3.13		mg/Kg		94	62 - 120	1	30
Benzo[a]pyrene	3.33	3.14		mg/Kg		94	73 - 123	1	30
Benzo[b]fluoranthene	3.33	3.28		mg/Kg		98	70 - 125	0	30
Benzo[g,h,i]perylene	3.33	2.91		mg/Kg		87	66 - 120	0	30
Benzo[k]fluoranthene	3.33	3.39		mg/Kg		102	67 - 122	1	30
Bis(2-chloroethoxy)methane	3.33	2.53		mg/Kg		76	62 - 120	2	30
Bis(2-chloroethyl)ether	3.33	2.37		mg/Kg		71	60 - 120	2	30
Bis(2-ethylhexyl) phthalate	3.33	3.17		mg/Kg		95	59 - 125	1	30
Butyl benzyl phthalate	3.33	3.20		mg/Kg		96	62 - 127	2	30
Caprolactam	1.33	2.73	*	mg/Kg		205	36 - 150	5	30
Carbazole	3.33	2.85		mg/Kg		86	64 - 120	0	30
Chrysene	3.33	2.87		mg/Kg		86	63 - 120	1	30
Dibenz(a,h)anthracene	3.33	3.30		mg/Kg		99	66 - 128	1	30
Dibenzofuran	3.33	3.01		mg/Kg		90	61 - 120	0	30
Diethyl phthalate	3.33	3.08		mg/Kg		93	63 - 120	1	30
Dimethyl phthalate	3.33	3.04		mg/Kg		91	65 - 120	3	30
Di-n-butyl phthalate	3.33	3.07		mg/Kg		92	66 - 120	0	30
Di-n-octyl phthalate	3.33	3.34		mg/Kg		100	65 - 133	0	30
Fluoranthene	3.33	2.97		mg/Kg		89	61 - 120	0	30
Fluorene	3.33	3.06		mg/Kg		92	60 - 120	3	30
Hexachlorobenzene	3.33	2.70		mg/Kg		81	66 - 120	1	30
Hexachlorobutadiene	3.33	2.98		mg/Kg		89	62 - 120	3	30
Hexachlorocyclopentadiene	3.33	2.55		mg/Kg		77	38 - 120	3	30
Hexachloroethane	3.33	2.48		mg/Kg		74	61 - 120	3	30
Indeno[1,2,3-cd]pyrene	3.33	2.98		mg/Kg		89	62 - 130	10	30
Isophorone	3.33	2.65		mg/Kg		80	67 - 120	2	30
Naphthalene	3.33	2.86		mg/Kg		86	63 - 120	4	30
Nitrobenzene	3.33	2.66		mg/Kg		80	63 - 120	3	30
N-Nitrosodi-n-propylamine	3.33	2.37		mg/Kg		71	61 - 120	4	30
N-Nitrosodiphenylamine	3.33	2.83		mg/Kg		85	63 - 120	0	30
Pentachlorophenol	6.67	5.40		mg/Kg		81	37 - 126	2	30
Phenanthrene	3.33	2.86		mg/Kg		86	66 - 120	0	30
Phenol	3.33	2.55		mg/Kg		77	63 - 120	2	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870226/3-A
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870226

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene			3.33	2.99		mg/Kg		90	61 - 121	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 123*
2-Fluorobiphenyl	*100*		*22 - 122*
2-Fluorophenol (Surr)	*87*		*18 - 123*
Nitrobenzene-d5 (Surr)	*91*		*16 - 125*
Phenol-d5 (Surr)	*85*		*23 - 120*
Terphenyl-d14 (Surr)	*106*		*25 - 126*

Lab Sample ID: 460-266802-E-4-A MS
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	0.39	U	3.92	3.30		mg/Kg	☼	84	59 - 120
1,2,4,5-Tetrachlorobenzene	0.39	U	3.92	3.43		mg/Kg	☼	88	60 - 120
1,4-Dioxane	0.039	U	3.92	1.86		mg/Kg	☼	47	21 - 120
2,2'-oxybis[1-chloropropane]	0.39	U	3.92	2.63		mg/Kg	☼	67	49 - 126
2,3,4,6-Tetrachlorophenol	0.39	U	3.92	3.65		mg/Kg	☼	93	54 - 120
2,4,5-Trichlorophenol	0.39	U	3.92	3.45		mg/Kg	☼	88	59 - 120
2,4,6-Trichlorophenol	0.16	U	3.92	3.63		mg/Kg	☼	93	58 - 120
2,4-Dichlorophenol	0.16	U	3.92	3.39		mg/Kg	☼	87	66 - 120
2,4-Dimethylphenol	0.39	U	3.92	3.18		mg/Kg	☼	81	67 - 120
2,4-Dinitrophenol	0.31	U	7.84	4.77		mg/Kg	☼	61	36 - 129
2,4-Dinitrotoluene	0.079	U	3.92	3.93		mg/Kg	☼	100	65 - 124
2,6-Dinitrotoluene	0.079	U	3.92	3.85		mg/Kg	☼	98	67 - 121
2-Chloronaphthalene	0.39	U	3.92	3.36		mg/Kg	☼	86	60 - 120
2-Chlorophenol	0.39	U	3.92	2.98		mg/Kg	☼	76	63 - 120
2-Methylnaphthalene	0.39	U	3.92	2.91		mg/Kg	☼	74	64 - 120
2-Methylphenol	0.39	U	3.92	2.97		mg/Kg	☼	76	63 - 120
2-Nitroaniline	0.39	U	3.92	3.29		mg/Kg	☼	84	48 - 120
2-Nitrophenol	0.39	U	3.92	3.35		mg/Kg	☼	85	64 - 120
3 & 4 Methylphenol	0.39	U	3.92	2.94		mg/Kg	☼	75	61 - 120
3,3'-Dichlorobenzidine	0.16	U	3.92	3.55		mg/Kg	☼	91	13 - 136
3-Nitroaniline	0.39	U	3.92	3.32		mg/Kg	☼	85	39 - 122
4,6-Dinitro-2-methylphenol	0.31	U	7.84	7.22		mg/Kg	☼	92	50 - 136
4-Bromophenyl phenyl ether	0.39	U	3.92	3.34		mg/Kg	☼	85	67 - 120
4-Chloro-3-methylphenol	0.39	U	3.92	3.37		mg/Kg	☼	86	66 - 120
4-Chloroaniline	0.39	U	3.92	2.96		mg/Kg	☼	76	15 - 128
4-Chlorophenyl phenyl ether	0.39	U	3.92	3.54		mg/Kg	☼	90	62 - 120
4-Methylphenol	0.39	U	3.92	2.94		mg/Kg	☼	75	61 - 120
4-Nitroaniline	0.39	U	3.92	3.31		mg/Kg	☼	85	55 - 120
4-Nitrophenol	0.79	U	7.84	5.75		mg/Kg	☼	73	52 - 123
Acenaphthene	0.39	U	3.92	3.37		mg/Kg	☼	86	49 - 120
Acenaphthylene	0.39	U	3.92	3.20		mg/Kg	☼	82	64 - 120
Acetophenone	0.39	U	3.92	2.87		mg/Kg	☼	73	61 - 120
Anthracene	0.39	U	3.92	3.30		mg/Kg	☼	84	67 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266802-E-4-A MS
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	0.16	U *	1.57	2.97	E *	mg/Kg	☼	189	29 - 150
Benzaldehyde	0.39	U	1.57	1.28	E	mg/Kg	☼	82	34 - 150
Benzo[a]anthracene	0.039	U	3.92	3.48		mg/Kg	☼	89	62 - 120
Benzo[a]pyrene	0.039	U	3.92	3.43		mg/Kg	☼	87	73 - 123
Benzo[b]fluoranthene	0.039	U	3.92	3.72		mg/Kg	☼	95	70 - 125
Benzo[g,h,i]perylene	0.39	U	3.92	3.25		mg/Kg	☼	83	66 - 120
Benzo[k]fluoranthene	0.039	U	3.92	3.80		mg/Kg	☼	97	67 - 122
Bis(2-chloroethoxy)methane	0.39	U	3.92	2.87		mg/Kg	☼	73	62 - 120
Bis(2-chloroethyl)ether	0.039	U	3.92	2.69		mg/Kg	☼	68	60 - 120
Bis(2-ethylhexyl) phthalate	0.39	U	3.92	3.61		mg/Kg	☼	92	59 - 125
Butyl benzyl phthalate	0.39	U	3.92	3.60		mg/Kg	☼	92	62 - 127
Caprolactam	0.39	U *	1.57	2.72	E *	mg/Kg	☼	173	36 - 150
Carbazole	0.39	U	3.92	3.27		mg/Kg	☼	83	64 - 120
Chrysene	0.39	U	3.92	3.29		mg/Kg	☼	84	63 - 120
Dibenz(a,h)anthracene	0.039	U	3.92	3.64		mg/Kg	☼	93	66 - 128
Dibenzofuran	0.39	U	3.92	3.51		mg/Kg	☼	90	61 - 120
Diethyl phthalate	0.39	U	3.92	3.56		mg/Kg	☼	91	63 - 120
Dimethyl phthalate	0.39	U	3.92	3.51		mg/Kg	☼	90	65 - 120
Di-n-butyl phthalate	0.39	U	3.92	3.48		mg/Kg	☼	89	66 - 120
Di-n-octyl phthalate	0.39	U	3.92	3.72		mg/Kg	☼	95	65 - 133
Fluoranthene	0.39	U	3.92	3.33		mg/Kg	☼	85	61 - 120
Fluorene	0.39	U	3.92	3.54		mg/Kg	☼	90	60 - 120
Hexachlorobenzene	0.039	U	3.92	3.06		mg/Kg	☼	78	66 - 120
Hexachlorobutadiene	0.079	U	3.92	3.26		mg/Kg	☼	83	62 - 120
Hexachlorocyclopentadiene	0.39	U	3.92	2.91		mg/Kg	☼	74	38 - 120
Hexachloroethane	0.039	U	3.92	2.76		mg/Kg	☼	70	61 - 120
Indeno[1,2,3-cd]pyrene	0.039	U	3.92	3.41		mg/Kg	☼	87	62 - 130
Isophorone	0.16	U	3.92	3.03		mg/Kg	☼	77	67 - 120
Naphthalene	0.39	U	3.92	3.16		mg/Kg	☼	81	63 - 120
Nitrobenzene	0.039	U	3.92	3.07		mg/Kg	☼	78	63 - 120
N-Nitrosodi-n-propylamine	0.039	U	3.92	2.72		mg/Kg	☼	69	61 - 120
N-Nitrosodiphenylamine	0.39	U	3.92	3.28		mg/Kg	☼	84	63 - 120
Pentachlorophenol	0.31	U	7.84	6.17		mg/Kg	☼	79	37 - 126
Phenanthrene	0.39	U	3.92	3.28		mg/Kg	☼	84	66 - 120
Phenol	0.39	U	3.92	2.97		mg/Kg	☼	76	63 - 120
Pyrene	0.39	U	3.92	3.43		mg/Kg	☼	87	61 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*103*		*10 - 123*
2-Fluorobiphenyl	*104*		*22 - 122*
2-Fluorophenol (Surr)	*89*		*18 - 123*
Nitrobenzene-d5 (Surr)	*92*		*16 - 125*
Phenol-d5 (Surr)	*89*		*23 - 120*
Terphenyl-d14 (Surr)	*109*		*25 - 126*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266802-E-4-B MSD
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	0.39	U	3.92	3.30		mg/Kg	☼	84	59 - 120	0	30
1,2,4,5-Tetrachlorobenzene	0.39	U	3.92	3.40		mg/Kg	☼	87	60 - 120	1	30
1,4-Dioxane	0.039	U	3.92	1.89		mg/Kg	☼	48	21 - 120	1	30
2,2'-oxybis[1-chloropropane]	0.39	U	3.92	2.56		mg/Kg	☼	65	49 - 126	3	30
2,3,4,6-Tetrachlorophenol	0.39	U	3.92	3.75		mg/Kg	☼	96	54 - 120	3	30
2,4,5-Trichlorophenol	0.39	U	3.92	3.58		mg/Kg	☼	91	59 - 120	4	30
2,4,6-Trichlorophenol	0.16	U	3.92	3.56		mg/Kg	☼	91	58 - 120	2	30
2,4-Dichlorophenol	0.16	U	3.92	3.47		mg/Kg	☼	88	66 - 120	2	30
2,4-Dimethylphenol	0.39	U	3.92	3.22		mg/Kg	☼	82	67 - 120	1	30
2,4-Dinitrophenol	0.31	U	7.84	5.09		mg/Kg	☼	65	36 - 129	7	30
2,4-Dinitrotoluene	0.079	U	3.92	3.97		mg/Kg	☼	101	65 - 124	1	30
2,6-Dinitrotoluene	0.079	U	3.92	3.83		mg/Kg	☼	98	67 - 121	0	30
2-Chloronaphthalene	0.39	U	3.92	3.36		mg/Kg	☼	86	60 - 120	0	30
2-Chlorophenol	0.39	U	3.92	2.94		mg/Kg	☼	75	63 - 120	1	30
2-Methylnaphthalene	0.39	U	3.92	2.90		mg/Kg	☼	74	64 - 120	0	30
2-Methylphenol	0.39	U	3.92	2.90		mg/Kg	☼	74	63 - 120	2	30
2-Nitroaniline	0.39	U	3.92	3.28		mg/Kg	☼	84	48 - 120	0	30
2-Nitrophenol	0.39	U	3.92	3.36		mg/Kg	☼	86	64 - 120	0	30
3 & 4 Methylphenol	0.39	U	3.92	2.90		mg/Kg	☼	74	61 - 120	1	30
3,3'-Dichlorobenzidine	0.16	U	3.92	3.55		mg/Kg	☼	91	13 - 136	0	30
3-Nitroaniline	0.39	U	3.92	3.35		mg/Kg	☼	85	39 - 122	1	30
4,6-Dinitro-2-methylphenol	0.31	U	7.84	7.85		mg/Kg	☼	100	50 - 136	8	30
4-Bromophenyl phenyl ether	0.39	U	3.92	3.38		mg/Kg	☼	86	67 - 120	1	30
4-Chloro-3-methylphenol	0.39	U	3.92	3.47		mg/Kg	☼	89	66 - 120	3	30
4-Chloroaniline	0.39	U	3.92	3.01		mg/Kg	☼	77	15 - 128	2	30
4-Chlorophenyl phenyl ether	0.39	U	3.92	3.60		mg/Kg	☼	92	62 - 120	2	30
4-Methylphenol	0.39	U	3.92	2.90		mg/Kg	☼	74	61 - 120	1	30
4-Nitroaniline	0.39	U	3.92	3.34		mg/Kg	☼	85	55 - 120	1	30
4-Nitrophenol	0.79	U	7.84	6.09		mg/Kg	☼	78	52 - 123	6	30
Acenaphthene	0.39	U	3.92	3.40		mg/Kg	☼	87	49 - 120	1	30
Acenaphthylene	0.39	U	3.92	3.26		mg/Kg	☼	83	64 - 120	2	30
Acetophenone	0.39	U	3.92	2.78		mg/Kg	☼	71	61 - 120	3	30
Anthracene	0.39	U	3.92	3.41		mg/Kg	☼	87	67 - 120	3	30
Atrazine	0.16	U *	1.57	3.03	E *	mg/Kg	☼	193	29 - 150	2	30
Benzaldehyde	0.39	U	1.57	1.79	E *	mg/Kg	☼	114	34 - 150	33	30
Benzo[a]anthracene	0.039	U	3.92	3.56		mg/Kg	☼	91	62 - 120	2	30
Benzo[a]pyrene	0.039	U	3.92	3.71		mg/Kg	☼	94	73 - 123	8	30
Benzo[b]fluoranthene	0.039	U	3.92	3.85		mg/Kg	☼	98	70 - 125	3	30
Benzo[g,h,i]perylene	0.39	U	3.92	3.41		mg/Kg	☼	87	66 - 120	5	30
Benzo[k]fluoranthene	0.039	U	3.92	3.90		mg/Kg	☼	99	67 - 122	3	30
Bis(2-chloroethoxy)methane	0.39	U	3.92	2.85		mg/Kg	☼	73	62 - 120	1	30
Bis(2-chloroethyl)ether	0.039	U	3.92	2.57		mg/Kg	☼	65	60 - 120	4	30
Bis(2-ethylhexyl) phthalate	0.39	U	3.92	3.74		mg/Kg	☼	95	59 - 125	4	30
Butyl benzyl phthalate	0.39	U	3.92	3.71		mg/Kg	☼	95	62 - 127	3	30
Caprolactam	0.39	U *	1.57	2.87	E *	mg/Kg	☼	183	36 - 150	5	30
Carbazole	0.39	U	3.92	3.33		mg/Kg	☼	85	64 - 120	2	30
Chrysene	0.39	U	3.92	3.36		mg/Kg	☼	86	63 - 120	2	30
Dibenz(a,h)anthracene	0.039	U	3.92	3.84		mg/Kg	☼	98	66 - 128	5	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266802-E-4-B MSD
Matrix: Solid
Analysis Batch: 870313

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870226

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	0.39	U	3.92	3.56		mg/Kg	☼	91	61 - 120	1	30
Diethyl phthalate	0.39	U	3.92	3.64		mg/Kg	☼	93	63 - 120	2	30
Dimethyl phthalate	0.39	U	3.92	3.55		mg/Kg	☼	90	65 - 120	1	30
Di-n-butyl phthalate	0.39	U	3.92	3.60		mg/Kg	☼	92	66 - 120	3	30
Di-n-octyl phthalate	0.39	U	3.92	3.88		mg/Kg	☼	99	65 - 133	4	30
Fluoranthene	0.39	U	3.92	3.42		mg/Kg	☼	87	61 - 120	3	30
Fluorene	0.39	U	3.92	3.59		mg/Kg	☼	92	60 - 120	1	30
Hexachlorobenzene	0.039	U	3.92	3.15		mg/Kg	☼	80	66 - 120	3	30
Hexachlorobutadiene	0.079	U	3.92	3.28		mg/Kg	☼	84	62 - 120	1	30
Hexachlorocyclopentadiene	0.39	U	3.92	2.88		mg/Kg	☼	73	38 - 120	1	30
Hexachloroethane	0.039	U	3.92	2.66		mg/Kg	☼	68	61 - 120	4	30
Indeno[1,2,3-cd]pyrene	0.039	U	3.92	3.54		mg/Kg	☼	90	62 - 130	4	30
Isophorone	0.16	U	3.92	2.99		mg/Kg	☼	76	67 - 120	1	30
Naphthalene	0.39	U	3.92	3.19		mg/Kg	☼	81	63 - 120	1	30
Nitrobenzene	0.039	U	3.92	2.94		mg/Kg	☼	75	63 - 120	4	30
N-Nitrosodi-n-propylamine	0.039	U	3.92	2.67		mg/Kg	☼	68	61 - 120	2	30
N-Nitrosodiphenylamine	0.39	U	3.92	3.32		mg/Kg	☼	85	63 - 120	1	30
Pentachlorophenol	0.31	U	7.84	6.48		mg/Kg	☼	83	37 - 126	5	30
Phenanthrene	0.39	U	3.92	3.36		mg/Kg	☼	86	66 - 120	2	30
Phenol	0.39	U	3.92	2.97		mg/Kg	☼	76	63 - 120	0	30
Pyrene	0.39	U	3.92	3.48		mg/Kg	☼	89	61 - 121	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 123*
2-Fluorobiphenyl	*97*		*22 - 122*
2-Fluorophenol (Surr)	*79*		*18 - 123*
Nitrobenzene-d5 (Surr)	*85*		*16 - 125*
Phenol-d5 (Surr)	*80*		*23 - 120*
Terphenyl-d14 (Surr)	*104*		*25 - 126*

Lab Sample ID: MB 460-870659/1-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
1,2,4,5-Tetrachlorobenzene	0.33	U	0.33	0.010	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
1,4-Dioxane	0.033	U	0.033	0.029	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,2'-oxybis[1-chloropropane]	0.33	U	0.33	0.0060	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,3,4,6-Tetrachlorophenol	0.33	U	0.33	0.022	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4,5-Trichlorophenol	0.33	U	0.33	0.034	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4,6-Trichlorophenol	0.13	U	0.13	0.042	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4-Dichlorophenol	0.13	U	0.13	0.021	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4-Dimethylphenol	0.33	U	0.33	0.039	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4-Dinitrophenol	0.27	U	0.27	0.16	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,4-Dinitrotoluene	0.067	U	0.067	0.036	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2,6-Dinitrotoluene	0.067	U	0.067	0.024	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2-Chloronaphthalene	0.33	U	0.33	0.015	mg/Kg		10/07/22 10:42	10/08/22 00:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870659/1-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2-Methylnaphthalene	0.33	U	0.33	0.0093	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2-Methylphenol	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2-Nitroaniline	0.33	U	0.33	0.025	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
2-Nitrophenol	0.33	U	0.33	0.033	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
3 & 4 Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
3,3'-Dichlorobenzidine	0.13	U	0.13	0.050	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
3-Nitroaniline	0.33	U	0.33	0.079	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4,6-Dinitro-2-methylphenol	0.27	U	0.27	0.14	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Bromophenyl phenyl ether	0.33	U	0.33	0.013	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Chloro-3-methylphenol	0.33	U	0.33	0.019	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Chloroaniline	0.33	U	0.33	0.059	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Chlorophenyl phenyl ether	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Methylphenol	0.33	U	0.33	0.021	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Nitroaniline	0.33	U	0.33	0.038	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
4-Nitrophenol	0.67	U	0.67	0.054	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Acenaphthene	0.33	U	0.33	0.0094	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Acenaphthylene	0.33	U	0.33	0.0095	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Acetophenone	0.33	U	0.33	0.016	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Anthracene	0.33	U	0.33	0.010	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Atrazine	0.13	U	0.13	0.019	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzaldehyde	0.33	U	0.33	0.055	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzo[a]anthracene	0.033	U	0.033	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzo[a]pyrene	0.033	U	0.033	0.0088	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzo[b]fluoranthene	0.033	U	0.033	0.0086	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzo[g,h,i]perylene	0.33	U	0.33	0.0098	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Benzo[k]fluoranthene	0.033	U	0.033	0.0065	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Bis(2-chloroethoxy)methane	0.33	U	0.33	0.026	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Bis(2-chloroethyl)ether	0.033	U	0.033	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Bis(2-ethylhexyl) phthalate	0.33	U	0.33	0.017	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Butyl benzyl phthalate	0.33	U	0.33	0.016	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Caprolactam	0.33	U	0.33	0.051	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Carbazole	0.33	U	0.33	0.013	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Chrysene	0.33	U	0.33	0.0056	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Dibenz(a,h)anthracene	0.033	U	0.033	0.014	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Dibenzofuran	0.33	U	0.33	0.011	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Diethyl phthalate	0.33	U	0.33	0.011	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Dimethyl phthalate	0.33	U	0.33	0.075	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Di-n-butyl phthalate	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Di-n-octyl phthalate	0.33	U	0.33	0.018	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Fluoranthene	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Fluorene	0.33	U	0.33	0.0097	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Hexachlorobenzene	0.033	U	0.033	0.016	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Hexachlorobutadiene	0.067	U	0.067	0.0070	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Hexachlorocyclopentadiene	0.33	U	0.33	0.029	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Hexachloroethane	0.033	U	0.033	0.011	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Indeno[1,2,3-cd]pyrene	0.033	U	0.033	0.013	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Isophorone	0.13	U	0.13	0.096	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Naphthalene	0.33	U	0.33	0.0057	mg/Kg		10/07/22 10:42	10/08/22 00:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870659/1-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.033	U	0.033	0.018	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
N-Nitrosodi-n-propylamine	0.033	U	0.033	0.024	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
N-Nitrosodiphenylamine	0.33	U	0.33	0.027	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Pentachlorophenol	0.27	U	0.27	0.068	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Phenanthrene	0.33	U	0.33	0.0058	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Phenol	0.33	U	0.33	0.012	mg/Kg		10/07/22 10:42	10/08/22 00:27	1
Pyrene	0.33	U	0.33	0.0082	mg/Kg		10/07/22 10:42	10/08/22 00:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*10 - 123*	*10/07/22 10:42*	*10/08/22 00:27*	*1*
2-Fluorobiphenyl	*67*		*22 - 122*	*10/07/22 10:42*	*10/08/22 00:27*	*1*
2-Fluorophenol (Surr)	*63*		*18 - 123*	*10/07/22 10:42*	*10/08/22 00:27*	*1*
Nitrobenzene-d5 (Surr)	*62*		*16 - 125*	*10/07/22 10:42*	*10/08/22 00:27*	*1*
Phenol-d5 (Surr)	*62*		*23 - 120*	*10/07/22 10:42*	*10/08/22 00:27*	*1*
Terphenyl-d14 (Surr)	*75*		*25 - 126*	*10/07/22 10:42*	*10/08/22 00:27*	*1*

Lab Sample ID: LCS 460-870659/2-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	3.33	2.78		mg/Kg		83	59 - 120
1,2,4,5-Tetrachlorobenzene	3.33	2.74		mg/Kg		82	60 - 120
1,4-Dioxane	3.33	1.62		mg/Kg		48	21 - 120
2,2'-oxybis[1-chloropropane]	3.33	2.36		mg/Kg		71	49 - 126
2,3,4,6-Tetrachlorophenol	3.33	3.07		mg/Kg		92	54 - 120
2,4,5-Trichlorophenol	3.33	2.93		mg/Kg		88	59 - 120
2,4,6-Trichlorophenol	3.33	2.98		mg/Kg		89	58 - 120
2,4-Dichlorophenol	3.33	2.84		mg/Kg		85	66 - 120
2,4-Dimethylphenol	3.33	2.52		mg/Kg		76	67 - 120
2,4-Dinitrophenol	6.67	6.91		mg/Kg		104	36 - 129
2,4-Dinitrotoluene	3.33	2.92		mg/Kg		87	65 - 124
2,6-Dinitrotoluene	3.33	3.06		mg/Kg		92	67 - 121
2-Chloronaphthalene	3.33	2.79		mg/Kg		84	60 - 120
2-Chlorophenol	3.33	2.47		mg/Kg		74	63 - 120
2-Methylnaphthalene	3.33	2.32		mg/Kg		70	64 - 120
2-Methylphenol	3.33	2.63		mg/Kg		79	63 - 120
2-Nitroaniline	3.33	2.98		mg/Kg		89	48 - 120
2-Nitrophenol	3.33	2.98		mg/Kg		90	64 - 120
3 & 4 Methylphenol	3.33	2.54		mg/Kg		76	61 - 120
3,3'-Dichlorobenzidine	3.33	2.70		mg/Kg		81	13 - 136
3-Nitroaniline	3.33	2.59		mg/Kg		78	39 - 122
4,6-Dinitro-2-methylphenol	6.67	6.16		mg/Kg		92	50 - 136
4-Bromophenyl phenyl ether	3.33	2.87		mg/Kg		86	67 - 120
4-Chloro-3-methylphenol	3.33	2.72		mg/Kg		82	66 - 120
4-Chloroaniline	3.33	1.75		mg/Kg		52	15 - 128
4-Chlorophenyl phenyl ether	3.33	2.83		mg/Kg		85	62 - 120
4-Methylphenol	3.33	2.54		mg/Kg		76	61 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870659/2-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	3.33	2.69		mg/Kg		81	55 - 120
4-Nitrophenol	6.67	5.56		mg/Kg		83	52 - 123
Acenaphthene	3.33	2.54		mg/Kg		76	49 - 120
Acenaphthylene	3.33	2.62		mg/Kg		79	64 - 120
Acetophenone	3.33	2.34		mg/Kg		70	61 - 120
Anthracene	3.33	2.78		mg/Kg		83	67 - 120
Atrazine	1.33	1.65		mg/Kg		124	29 - 150
Benzaldehyde	1.33	1.24		mg/Kg		93	34 - 150
Benzo[a]anthracene	3.33	2.96		mg/Kg		89	62 - 120
Benzo[a]pyrene	3.33	2.89		mg/Kg		87	73 - 123
Benzo[b]fluoranthene	3.33	3.27		mg/Kg		98	70 - 125
Benzo[g,h,i]perylene	3.33	2.62		mg/Kg		79	66 - 120
Benzo[k]fluoranthene	3.33	3.18		mg/Kg		95	67 - 122
Bis(2-chloroethoxy)methane	3.33	2.58		mg/Kg		77	62 - 120
Bis(2-chloroethyl)ether	3.33	2.42		mg/Kg		73	60 - 120
Bis(2-ethylhexyl) phthalate	3.33	3.18		mg/Kg		95	59 - 125
Butyl benzyl phthalate	3.33	3.23		mg/Kg		97	62 - 127
Caprolactam	1.33	1.40		mg/Kg		105	36 - 150
Carbazole	3.33	2.80		mg/Kg		84	64 - 120
Chrysene	3.33	2.85		mg/Kg		85	63 - 120
Dibenz(a,h)anthracene	3.33	2.68		mg/Kg		80	66 - 128
Dibenzofuran	3.33	2.82		mg/Kg		85	61 - 120
Diethyl phthalate	3.33	2.89		mg/Kg		87	63 - 120
Dimethyl phthalate	3.33	2.84		mg/Kg		85	65 - 120
Di-n-butyl phthalate	3.33	3.04		mg/Kg		91	66 - 120
Di-n-octyl phthalate	3.33	3.40		mg/Kg		102	65 - 133
Fluoranthene	3.33	2.75		mg/Kg		82	61 - 120
Fluorene	3.33	2.83		mg/Kg		85	60 - 120
Hexachlorobenzene	3.33	2.86		mg/Kg		86	66 - 120
Hexachlorobutadiene	3.33	2.59		mg/Kg		78	62 - 120
Hexachlorocyclopentadiene	3.33	2.75		mg/Kg		82	38 - 120
Hexachloroethane	3.33	2.48		mg/Kg		75	61 - 120
Indeno[1,2,3-cd]pyrene	3.33	3.09		mg/Kg		93	62 - 130
Isophorone	3.33	2.58		mg/Kg		77	67 - 120
Naphthalene	3.33	2.56		mg/Kg		77	63 - 120
Nitrobenzene	3.33	2.34		mg/Kg		70	63 - 120
N-Nitrosodi-n-propylamine	3.33	2.55		mg/Kg		76	61 - 120
N-Nitrosodiphenylamine	3.33	2.76		mg/Kg		83	63 - 120
Pentachlorophenol	6.67	5.68		mg/Kg		85	37 - 126
Phenanthrene	3.33	2.80		mg/Kg		84	66 - 120
Phenol	3.33	2.44		mg/Kg		73	63 - 120
Pyrene	3.33	3.07		mg/Kg		92	61 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*117*		*10 - 123*
2-Fluorobiphenyl	*100*		*22 - 122*
2-Fluorophenol (Surr)	*91*		*18 - 123*
Nitrobenzene-d5 (Surr)	*92*		*16 - 125*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870659/2-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870659

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5 (Surr)	93		23 - 120
Terphenyl-d14 (Surr)	112		25 - 126

Lab Sample ID: LCSD 460-870659/3-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870659

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl			3.33	2.86		mg/Kg		86	59 - 120	3	30
1,2,4,5-Tetrachlorobenzene			3.33	2.79		mg/Kg		84	60 - 120	2	30
1,4-Dioxane			3.33	1.68		mg/Kg		50	21 - 120	4	30
2,2'-oxybis[1-chloropropane]			3.33	2.32		mg/Kg		70	49 - 126	2	30
2,3,4,6-Tetrachlorophenol			3.33	3.08		mg/Kg		93	54 - 120	0	30
2,4,5-Trichlorophenol			3.33	2.97		mg/Kg		89	59 - 120	1	30
2,4,6-Trichlorophenol			3.33	2.99		mg/Kg		90	58 - 120	0	30
2,4-Dichlorophenol			3.33	2.84		mg/Kg		85	66 - 120	0	30
2,4-Dimethylphenol			3.33	2.52		mg/Kg		76	67 - 120	0	30
2,4-Dinitrophenol			6.67	6.98		mg/Kg		105	36 - 129	1	30
2,4-Dinitrotoluene			3.33	2.92		mg/Kg		88	65 - 124	0	30
2,6-Dinitrotoluene			3.33	3.07		mg/Kg		92	67 - 121	0	30
2-Chloronaphthalene			3.33	2.85		mg/Kg		85	60 - 120	2	30
2-Chlorophenol			3.33	2.53		mg/Kg		76	63 - 120	2	30
2-Methylnaphthalene			3.33	2.32		mg/Kg		70	64 - 120	0	30
2-Methylphenol			3.33	2.59		mg/Kg		78	63 - 120	1	30
2-Nitroaniline			3.33	2.97		mg/Kg		89	48 - 120	0	30
2-Nitrophenol			3.33	3.01		mg/Kg		90	64 - 120	1	30
3 & 4 Methylphenol			3.33	2.57		mg/Kg		77	61 - 120	1	30
3,3'-Dichlorobenzidine			3.33	2.66		mg/Kg		80	13 - 136	1	30
3-Nitroaniline			3.33	2.63		mg/Kg		79	39 - 122	1	30
4,6-Dinitro-2-methylphenol			6.67	6.18		mg/Kg		93	50 - 136	0	30
4-Bromophenyl phenyl ether			3.33	2.91		mg/Kg		87	67 - 120	1	30
4-Chloro-3-methylphenol			3.33	2.77		mg/Kg		83	66 - 120	1	30
4-Chloroaniline			3.33	1.74		mg/Kg		52	15 - 128	1	30
4-Chlorophenyl phenyl ether			3.33	2.86		mg/Kg		86	62 - 120	1	30
4-Methylphenol			3.33	2.57		mg/Kg		77	61 - 120	1	30
4-Nitroaniline			3.33	2.65		mg/Kg		80	55 - 120	1	30
4-Nitrophenol			6.67	5.55		mg/Kg		83	52 - 123	0	30
Acenaphthene			3.33	2.61		mg/Kg		78	49 - 120	3	30
Acenaphthylene			3.33	2.66		mg/Kg		80	64 - 120	2	30
Acetophenone			3.33	2.34		mg/Kg		70	61 - 120	0	30
Anthracene			3.33	2.81		mg/Kg		84	67 - 120	1	30
Atrazine			1.33	1.66		mg/Kg		124	29 - 150	0	30
Benzaldehyde			1.33	1.21		mg/Kg		91	34 - 150	2	30
Benzo[a]anthracene			3.33	2.98		mg/Kg		89	62 - 120	1	30
Benzo[a]pyrene			3.33	2.87		mg/Kg		86	73 - 123	1	30
Benzo[b]fluoranthene			3.33	3.21		mg/Kg		96	70 - 125	2	30
Benzo[g,h,i]perylene			3.33	2.59		mg/Kg		78	66 - 120	1	30
Benzo[k]fluoranthene			3.33	3.21		mg/Kg		96	67 - 122	1	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870659/3-A
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane	3.33	2.55		mg/Kg		76	62 - 120	1	30
Bis(2-chloroethyl)ether	3.33	2.43		mg/Kg		73	60 - 120	0	30
Bis(2-ethylhexyl) phthalate	3.33	3.19		mg/Kg		96	59 - 125	0	30
Butyl benzyl phthalate	3.33	3.26		mg/Kg		98	62 - 127	1	30
Caprolactam	1.33	1.36		mg/Kg		102	36 - 150	3	30
Carbazole	3.33	2.79		mg/Kg		84	64 - 120	0	30
Chrysene	3.33	2.82		mg/Kg		85	63 - 120	1	30
Dibenz(a,h)anthracene	3.33	2.64		mg/Kg		79	66 - 128	1	30
Dibenzofuran	3.33	2.86		mg/Kg		86	61 - 120	1	30
Diethyl phthalate	3.33	2.87		mg/Kg		86	63 - 120	1	30
Dimethyl phthalate	3.33	2.86		mg/Kg		86	65 - 120	1	30
Di-n-butyl phthalate	3.33	3.01		mg/Kg		90	66 - 120	1	30
Di-n-octyl phthalate	3.33	3.40		mg/Kg		102	65 - 133	0	30
Fluoranthene	3.33	2.73		mg/Kg		82	61 - 120	1	30
Fluorene	3.33	2.88		mg/Kg		86	60 - 120	2	30
Hexachlorobenzene	3.33	2.90		mg/Kg		87	66 - 120	1	30
Hexachlorobutadiene	3.33	2.56		mg/Kg		77	62 - 120	1	30
Hexachlorocyclopentadiene	3.33	2.80		mg/Kg		84	38 - 120	2	30
Hexachloroethane	3.33	2.48		mg/Kg		74	61 - 120	0	30
Indeno[1,2,3-cd]pyrene	3.33	3.03		mg/Kg		91	62 - 130	2	30
Isophorone	3.33	2.60		mg/Kg		78	67 - 120	1	30
Naphthalene	3.33	2.56		mg/Kg		77	63 - 120	0	30
Nitrobenzene	3.33	2.36		mg/Kg		71	63 - 120	1	30
N-Nitrosodi-n-propylamine	3.33	2.57		mg/Kg		77	61 - 120	1	30
N-Nitrosodiphenylamine	3.33	2.80		mg/Kg		84	63 - 120	1	30
Pentachlorophenol	6.67	5.62		mg/Kg		84	37 - 126	1	30
Phenanthrene	3.33	2.79		mg/Kg		84	66 - 120	0	30
Phenol	3.33	2.51		mg/Kg		75	63 - 120	3	30
Pyrene	3.33	3.07		mg/Kg		92	61 - 121	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*119*		*10 - 123*
2-Fluorobiphenyl	*101*		*22 - 122*
2-Fluorophenol (Surr)	*91*		*18 - 123*
Nitrobenzene-d5 (Surr)	*91*		*16 - 125*
Phenol-d5 (Surr)	*94*		*23 - 120*
Terphenyl-d14 (Surr)	*115*		*25 - 126*

Lab Sample ID: 460-266324-F-1-A MS
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	0.37	U	3.75	1.81	*	mg/Kg	☼	48	59 - 120
1,2,4,5-Tetrachlorobenzene	0.37	U	3.75	1.81	*	mg/Kg	☼	48	60 - 120
1,4-Dioxane	0.037	U	3.75	1.10		mg/Kg	☼	29	21 - 120
2,2'-oxybis[1-chloropropane]	0.37	U	3.75	1.66	*	mg/Kg	☼	44	49 - 126
2,3,4,6-Tetrachlorophenol	0.37	U	3.75	1.89	*	mg/Kg	☼	50	54 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266324-F-1-A MS
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	0.37	U	3.75	1.83	*	mg/Kg	☼	49	59 - 120
2,4,6-Trichlorophenol	0.15	U	3.75	1.90	*	mg/Kg	☼	51	58 - 120
2,4-Dichlorophenol	0.15	U	3.75	1.85	*	mg/Kg	☼	49	66 - 120
2,4-Dimethylphenol	0.37	U	3.75	1.69	*	mg/Kg	☼	45	67 - 120
2,4-Dinitrophenol	0.30	U	7.50	1.98	*	mg/Kg	☼	26	36 - 129
2,4-Dinitrotoluene	0.075	U	3.75	1.83	*	mg/Kg	☼	49	65 - 124
2,6-Dinitrotoluene	0.075	U	3.75	1.92	*	mg/Kg	☼	51	67 - 121
2-Chloronaphthalene	0.37	U	3.75	1.79	*	mg/Kg	☼	48	60 - 120
2-Chlorophenol	0.37	U	3.75	1.75	*	mg/Kg	☼	47	63 - 120
2-Methylnaphthalene	0.099	J	3.75	1.66	*	mg/Kg	☼	42	64 - 120
2-Methylphenol	0.37	U	3.75	1.77	*	mg/Kg	☼	47	63 - 120
2-Nitroaniline	0.37	U	3.75	1.88		mg/Kg	☼	50	48 - 120
2-Nitrophenol	0.37	U	3.75	2.02	*	mg/Kg	☼	54	64 - 120
3 & 4 Methylphenol	0.37	U	3.75	1.76	*	mg/Kg	☼	47	61 - 120
3,3'-Dichlorobenzidine	0.15	U	3.75	1.64		mg/Kg	☼	44	13 - 136
3-Nitroaniline	0.37	U	3.75	1.61		mg/Kg	☼	43	39 - 122
4,6-Dinitro-2-methylphenol	0.30	U	7.50	2.71	*	mg/Kg	☼	36	50 - 136
4-Bromophenyl phenyl ether	0.37	U	3.75	1.80	*	mg/Kg	☼	48	67 - 120
4-Chloro-3-methylphenol	0.37	U	3.75	1.78	*	mg/Kg	☼	47	66 - 120
4-Chloroaniline	0.37	U	3.75	1.46		mg/Kg	☼	39	15 - 128
4-Chlorophenyl phenyl ether	0.37	U	3.75	1.82	*	mg/Kg	☼	48	62 - 120
4-Methylphenol	0.37	U	3.75	1.76	*	mg/Kg	☼	47	61 - 120
4-Nitroaniline	0.37	U	3.75	1.55	*	mg/Kg	☼	41	55 - 120
4-Nitrophenol	0.75	U	7.50	3.53	*	mg/Kg	☼	47	52 - 123
Acenaphthene	0.37	U	3.75	1.58	*	mg/Kg	☼	42	49 - 120
Acenaphthylene	0.37	U	3.75	1.67	*	mg/Kg	☼	45	64 - 120
Acetophenone	0.37	U	3.75	1.67	*	mg/Kg	☼	44	61 - 120
Anthracene	0.20	J	3.75	1.98	*	mg/Kg	☼	47	67 - 120
Atrazine	0.15	U	1.50	1.18		mg/Kg	☼	78	29 - 150
Benzaldehyde	0.37	U	1.50	0.973		mg/Kg	☼	65	34 - 150
Benzo[a]anthracene	0.023	J	3.75	1.91	*	mg/Kg	☼	50	62 - 120
Benzo[a]pyrene	0.037	U	3.75	1.84	*	mg/Kg	☼	49	73 - 123
Benzo[b]fluoranthene	0.037	U	3.75	2.07	*	mg/Kg	☼	55	70 - 125
Benzo[g,h,i]perylene	0.37	U	3.75	1.79	*	mg/Kg	☼	48	66 - 120
Benzo[k]fluoranthene	0.037	U	3.75	1.95	*	mg/Kg	☼	52	67 - 122
Bis(2-chloroethoxy)methane	0.37	U	3.75	1.70	*	mg/Kg	☼	45	62 - 120
Bis(2-chloroethyl)ether	0.037	U	3.75	1.72	*	mg/Kg	☼	46	60 - 120
Bis(2-ethylhexyl) phthalate	0.37	U	3.75	2.14	*	mg/Kg	☼	57	59 - 125
Butyl benzyl phthalate	0.37	U	3.75	2.15	*	mg/Kg	☼	57	62 - 127
Caprolactam	0.37	U	1.50	1.06		mg/Kg	☼	70	36 - 150
Carbazole	0.075	J	3.75	1.80	*	mg/Kg	☼	46	64 - 120
Chrysene	0.017	J	3.75	1.83	*	mg/Kg	☼	48	63 - 120
Dibenz(a,h)anthracene	0.037	U	3.75	1.78	*	mg/Kg	☼	48	66 - 128
Dibenzofuran	0.013	J	3.75	1.82	*	mg/Kg	☼	48	61 - 120
Diethyl phthalate	0.37	U	3.75	1.82	*	mg/Kg	☼	49	63 - 120
Dimethyl phthalate	0.37	U	3.75	1.81	*	mg/Kg	☼	48	65 - 120
Di-n-butyl phthalate	0.37	U	3.75	1.88	*	mg/Kg	☼	50	66 - 120
Di-n-octyl phthalate	0.37	U	3.75	2.29	*	mg/Kg	☼	61	65 - 133
Fluoranthene	0.041	J	3.75	1.73	*	mg/Kg	☼	45	61 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266324-F-1-A MS
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	0.031	J	3.75	1.84	*	mg/Kg	☼	48	60 - 120
Hexachlorobenzene	0.037	U	3.75	1.82	*	mg/Kg	☼	48	66 - 120
Hexachlorobutadiene	0.075	U	3.75	1.77	*	mg/Kg	☼	47	62 - 120
Hexachlorocyclopentadiene	0.37	U	3.75	1.66		mg/Kg	☼	44	38 - 120
Hexachloroethane	0.037	U	3.75	1.80	*	mg/Kg	☼	48	61 - 120
Indeno[1,2,3-cd]pyrene	0.037	U	3.75	2.03	*	mg/Kg	☼	54	62 - 130
Isophorone	0.15	U	3.75	1.74	*	mg/Kg	☼	46	67 - 120
Naphthalene	0.096	J	3.75	1.80	*	mg/Kg	☼	46	63 - 120
Nitrobenzene	0.037	U	3.75	1.66	*	mg/Kg	☼	44	63 - 120
N-Nitrosodi-n-propylamine	0.037	U	3.75	1.77	*	mg/Kg	☼	47	61 - 120
N-Nitrosodiphenylamine	0.37	U	3.75	1.78	*	mg/Kg	☼	47	63 - 120
Pentachlorophenol	0.30	U	7.50	3.15		mg/Kg	☼	42	37 - 126
Phenanthrene	0.088	J	3.75	1.80	*	mg/Kg	☼	46	66 - 120
Phenol	0.37	U	3.75	1.72	*	mg/Kg	☼	46	63 - 120
Pyrene	0.042	J	3.75	2.06	*	mg/Kg	☼	54	61 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*64*		*10 - 123*
2-Fluorobiphenyl	*55*		*22 - 122*
2-Fluorophenol (Surr)	*55*		*18 - 123*
Nitrobenzene-d5 (Surr)	*53*		*16 - 125*
Phenol-d5 (Surr)	*55*		*23 - 120*
Terphenyl-d14 (Surr)	*66*		*25 - 126*

Lab Sample ID: 460-266324-F-1-B MSD
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	0.37	U	3.75	2.00	*	mg/Kg	☼	53	59 - 120	10	30
1,2,4,5-Tetrachlorobenzene	0.37	U	3.75	1.97	*	mg/Kg	☼	52	60 - 120	8	30
1,4-Dioxane	0.037	U	3.75	1.15		mg/Kg	☼	31	21 - 120	5	30
2,2'-oxybis[1-chloropropane]	0.37	U	3.75	1.80	*	mg/Kg	☼	48	49 - 126	8	30
2,3,4,6-Tetrachlorophenol	0.37	U	3.75	2.13		mg/Kg	☼	57	54 - 120	12	30
2,4,5-Trichlorophenol	0.37	U	3.75	2.00	*	mg/Kg	☼	53	59 - 120	9	30
2,4,6-Trichlorophenol	0.15	U	3.75	2.08	*	mg/Kg	☼	55	58 - 120	9	30
2,4-Dichlorophenol	0.15	U	3.75	2.02	*	mg/Kg	☼	54	66 - 120	9	30
2,4-Dimethylphenol	0.37	U	3.75	1.81	*	mg/Kg	☼	48	67 - 120	7	30
2,4-Dinitrophenol	0.30	U	7.50	2.58	*	mg/Kg	☼	34	36 - 129	27	30
2,4-Dinitrotoluene	0.075	U	3.75	2.02	*	mg/Kg	☼	54	65 - 124	9	30
2,6-Dinitrotoluene	0.075	U	3.75	2.09	*	mg/Kg	☼	56	67 - 121	8	30
2-Chloronaphthalene	0.37	U	3.75	1.97	*	mg/Kg	☼	53	60 - 120	10	30
2-Chlorophenol	0.37	U	3.75	1.87	*	mg/Kg	☼	50	63 - 120	7	30
2-Methylnaphthalene	0.099	J	3.75	1.82	*	mg/Kg	☼	46	64 - 120	9	30
2-Methylphenol	0.37	U	3.75	1.94	*	mg/Kg	☼	52	63 - 120	9	30
2-Nitroaniline	0.37	U	3.75	2.03		mg/Kg	☼	54	48 - 120	7	30
2-Nitrophenol	0.37	U	3.75	2.13	*	mg/Kg	☼	57	64 - 120	6	30
3 & 4 Methylphenol	0.37	U	3.75	1.89	*	mg/Kg	☼	50	61 - 120	7	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266324-F-1-B MSD
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	0.15	U	3.75	1.67		mg/Kg	☼	45	13 - 136	2	30
3-Nitroaniline	0.37	U	3.75	1.71		mg/Kg	☼	46	39 - 122	6	30
4,6-Dinitro-2-methylphenol	0.30	U	7.50	3.16	*	mg/Kg	☼	42	50 - 136	15	30
4-Bromophenyl phenyl ether	0.37	U	3.75	1.97	*	mg/Kg	☼	53	67 - 120	9	30
4-Chloro-3-methylphenol	0.37	U	3.75	1.89	*	mg/Kg	☼	50	66 - 120	6	30
4-Chloroaniline	0.37	U	3.75	1.50		mg/Kg	☼	40	15 - 128	3	30
4-Chlorophenyl phenyl ether	0.37	U	3.75	2.00	*	mg/Kg	☼	53	62 - 120	10	30
4-Methylphenol	0.37	U	3.75	1.89	*	mg/Kg	☼	50	61 - 120	7	30
4-Nitroaniline	0.37	U	3.75	1.65	*	mg/Kg	☼	44	55 - 120	6	30
4-Nitrophenol	0.75	U	7.50	3.89		mg/Kg	☼	52	52 - 123	10	30
Acenaphthene	0.37	U	3.75	1.75	*	mg/Kg	☼	47	49 - 120	10	30
Acenaphthylene	0.37	U	3.75	1.83	*	mg/Kg	☼	49	64 - 120	9	30
Acetophenone	0.37	U	3.75	1.80	*	mg/Kg	☼	48	61 - 120	8	30
Anthracene	0.20	J	3.75	2.11	*	mg/Kg	☼	51	67 - 120	6	30
Atrazine	0.15	U	1.50	1.27		mg/Kg	☼	85	29 - 150	8	30
Benzaldehyde	0.37	U	1.50	1.07		mg/Kg	☼	72	34 - 150	10	30
Benzo[a]anthracene	0.023	J	3.75	2.01	*	mg/Kg	☼	53	62 - 120	5	30
Benzo[a]pyrene	0.037	U	3.75	1.94	*	mg/Kg	☼	52	73 - 123	6	30
Benzo[b]fluoranthene	0.037	U	3.75	2.23	*	mg/Kg	☼	59	70 - 125	8	30
Benzo[g,h,i]perylene	0.37	U	3.75	1.93	*	mg/Kg	☼	52	66 - 120	8	30
Benzo[k]fluoranthene	0.037	U	3.75	2.10	*	mg/Kg	☼	56	67 - 122	8	30
Bis(2-chloroethoxy)methane	0.37	U	3.75	1.86	*	mg/Kg	☼	50	62 - 120	9	30
Bis(2-chloroethyl)ether	0.037	U	3.75	1.82	*	mg/Kg	☼	49	60 - 120	6	30
Bis(2-ethylhexyl) phthalate	0.37	U	3.75	2.22		mg/Kg	☼	59	59 - 125	4	30
Butyl benzyl phthalate	0.37	U	3.75	2.27	*	mg/Kg	☼	60	62 - 127	5	30
Caprolactam	0.37	U	1.50	1.04		mg/Kg	☼	69	36 - 150	1	30
Carbazole	0.075	J	3.75	1.94	*	mg/Kg	☼	50	64 - 120	7	30
Chrysene	0.017	J	3.75	1.90	*	mg/Kg	☼	50	63 - 120	4	30
Dibenz(a,h)anthracene	0.037	U	3.75	1.95	*	mg/Kg	☼	52	66 - 128	9	30
Dibenzofuran	0.013	J	3.75	2.00	*	mg/Kg	☼	53	61 - 120	9	30
Diethyl phthalate	0.37	U	3.75	1.99	*	mg/Kg	☼	53	63 - 120	9	30
Dimethyl phthalate	0.37	U	3.75	1.95	*	mg/Kg	☼	52	65 - 120	7	30
Di-n-butyl phthalate	0.37	U	3.75	2.01	*	mg/Kg	☼	54	66 - 120	7	30
Di-n-octyl phthalate	0.37	U	3.75	2.42		mg/Kg	☼	65	65 - 133	5	30
Fluoranthene	0.041	J	3.75	1.86	*	mg/Kg	☼	48	61 - 120	7	30
Fluorene	0.031	J	3.75	2.00	*	mg/Kg	☼	52	60 - 120	9	30
Hexachlorobenzene	0.037	U	3.75	1.97	*	mg/Kg	☼	53	66 - 120	8	30
Hexachlorobutadiene	0.075	U	3.75	1.91	*	mg/Kg	☼	51	62 - 120	8	30
Hexachlorocyclopentadiene	0.37	U	3.75	1.90		mg/Kg	☼	51	38 - 120	13	30
Hexachloroethane	0.037	U	3.75	1.91	*	mg/Kg	☼	51	61 - 120	6	30
Indeno[1,2,3-cd]pyrene	0.037	U	3.75	2.19	*	mg/Kg	☼	58	62 - 130	8	30
Isophorone	0.15	U	3.75	1.86	*	mg/Kg	☼	50	67 - 120	7	30
Naphthalene	0.096	J	3.75	1.99	*	mg/Kg	☼	50	63 - 120	10	30
Nitrobenzene	0.037	U	3.75	1.76	*	mg/Kg	☼	47	63 - 120	6	30
N-Nitrosodi-n-propylamine	0.037	U	3.75	1.94	*	mg/Kg	☼	52	61 - 120	9	30
N-Nitrosodiphenylamine	0.37	U	3.75	1.94	*	mg/Kg	☼	52	63 - 120	8	30
Pentachlorophenol	0.30	U	7.50	3.52		mg/Kg	☼	47	37 - 126	11	30
Phenanthrene	0.088	J	3.75	1.98	*	mg/Kg	☼	50	66 - 120	10	30
Phenol	0.37	U	3.75	1.81	*	mg/Kg	☼	48	63 - 120	5	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-266324-F-1-B MSD
Matrix: Solid
Analysis Batch: 870755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene	0.042	J	3.75	2.18	*	mg/Kg	☼	57	61 - 121	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*69*		*10 - 123*
2-Fluorobiphenyl	*60*		*22 - 122*
2-Fluorophenol (Surr)	*59*		*18 - 123*
Nitrobenzene-d5 (Surr)	*57*		*16 - 125*
Phenol-d5 (Surr)	*59*		*23 - 120*
Terphenyl-d14 (Surr)	*70*		*25 - 126*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 460-870105/1-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/04/22 16:51	10/05/22 04:25	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 460-870105/1-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/04/22 16:51	10/05/22 04:25	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/04/22 16:51	10/05/22 04:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*43 - 150*	*10/04/22 16:51*	*10/05/22 04:25*	*1*
DCB Decachlorobiphenyl	*74*		*43 - 150*	*10/04/22 16:51*	*10/05/22 04:25*	*1*
Tetrachloro-m-xylene	*83*		*26 - 137*	*10/04/22 16:51*	*10/05/22 04:25*	*1*
Tetrachloro-m-xylene	*77*		*26 - 137*	*10/04/22 16:51*	*10/05/22 04:25*	*1*

Lab Sample ID: LCS 460-870105/2-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.133	0.112		mg/Kg		84	64 - 132
4,4'-DDD	0.133	0.110		mg/Kg		82	64 - 132
4,4'-DDE	0.133	0.114		mg/Kg		86	71 - 137
4,4'-DDE	0.133	0.112		mg/Kg		84	71 - 137
4,4'-DDT	0.133	0.110		mg/Kg		83	55 - 138
4,4'-DDT	0.133	0.108		mg/Kg		81	55 - 138
Aldrin	0.133	0.123		mg/Kg		92	67 - 130
Aldrin	0.133	0.120		mg/Kg		90	67 - 130
alpha-BHC	0.133	0.123		mg/Kg		93	72 - 132
alpha-BHC	0.133	0.128		mg/Kg		96	72 - 132
beta-BHC	0.133	0.135		mg/Kg		101	71 - 137
beta-BHC	0.133	0.114		mg/Kg		85	71 - 137
cis-Chlordane	0.133	0.114		mg/Kg		85	63 - 136
cis-Chlordane	0.133	0.113		mg/Kg		84	63 - 136
delta-BHC	0.133	0.126		mg/Kg		94	61 - 143
delta-BHC	0.133	0.132		mg/Kg		99	61 - 143
Dieldrin	0.133	0.113		mg/Kg		84	66 - 135
Dieldrin	0.133	0.113		mg/Kg		85	66 - 135
Endosulfan I	0.133	0.113		mg/Kg		85	64 - 135
Endosulfan I	0.133	0.108		mg/Kg		81	64 - 135
Endosulfan II	0.133	0.113		mg/Kg		85	64 - 130
Endosulfan II	0.133	0.110		mg/Kg		83	64 - 130
Endosulfan sulfate	0.133	0.109		mg/Kg		82	61 - 134
Endosulfan sulfate	0.133	0.107		mg/Kg		80	61 - 134
Endrin	0.133	0.113		mg/Kg		84	63 - 136
Endrin	0.133	0.109		mg/Kg		82	63 - 136

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-870105/2-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endrin aldehyde			0.133	0.109		mg/Kg		82	60 - 132		
Endrin aldehyde			0.133	0.101		mg/Kg		76	60 - 132		
Endrin ketone			0.133	0.120		mg/Kg		90	48 - 150		
Endrin ketone			0.133	0.115		mg/Kg		86	48 - 150		
gamma-BHC (Lindane)			0.133	0.130		mg/Kg		97	70 - 134		
gamma-BHC (Lindane)			0.133	0.129		mg/Kg		97	70 - 134		
Heptachlor			0.133	0.119		mg/Kg		89	62 - 134		
Heptachlor			0.133	0.116		mg/Kg		87	62 - 134		
Heptachlor epoxide			0.133	0.114		mg/Kg		86	65 - 127		
Heptachlor epoxide			0.133	0.112		mg/Kg		84	65 - 127		
Methoxychlor			0.133	0.104		mg/Kg		78	49 - 128		
Methoxychlor			0.133	0.0933		mg/Kg		70	49 - 128		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*66*		*43 - 150*
DCB Decachlorobiphenyl	*63*		*43 - 150*
Tetrachloro-m-xylene	*75*		*26 - 137*
Tetrachloro-m-xylene	*70*		*26 - 137*

Lab Sample ID: LCSD 460-870105/3-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.133	0.118		mg/Kg		89	64 - 132	6	30
4,4'-DDD			0.133	0.114		mg/Kg		85	64 - 132	3	30
4,4'-DDE			0.133	0.121		mg/Kg		91	71 - 137	6	30
4,4'-DDE			0.133	0.114		mg/Kg		86	71 - 137	2	30
4,4'-DDT			0.133	0.119		mg/Kg		89	55 - 138	8	30
4,4'-DDT			0.133	0.115		mg/Kg		87	55 - 138	6	30
Aldrin			0.133	0.129		mg/Kg		97	67 - 130	5	30
Aldrin			0.133	0.127		mg/Kg		95	67 - 130	6	30
alpha-BHC			0.133	0.128		mg/Kg		96	72 - 132	4	30
alpha-BHC			0.133	0.135		mg/Kg		101	72 - 132	5	30
beta-BHC			0.133	0.139		mg/Kg		104	71 - 137	3	30
beta-BHC			0.133	0.116		mg/Kg		87	71 - 137	2	30
cis-Chlordane			0.133	0.120		mg/Kg		90	63 - 136	6	30
cis-Chlordane			0.133	0.113		mg/Kg		85	63 - 136	1	30
delta-BHC			0.133	0.133		mg/Kg		100	61 - 143	6	30
delta-BHC			0.133	0.137		mg/Kg		103	61 - 143	3	30
Dieldrin			0.133	0.118		mg/Kg		88	66 - 135	5	30
Dieldrin			0.133	0.116		mg/Kg		87	66 - 135	3	30
Endosulfan I			0.133	0.119		mg/Kg		89	64 - 135	5	30
Endosulfan I			0.133	0.110		mg/Kg		82	64 - 135	2	30
Endosulfan II			0.133	0.119		mg/Kg		89	64 - 130	5	30
Endosulfan II			0.133	0.114		mg/Kg		85	64 - 130	3	30
Endosulfan sulfate			0.133	0.114		mg/Kg		85	61 - 134	4	30
Endosulfan sulfate			0.133	0.111		mg/Kg		83	61 - 134	4	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-870105/3-A
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Endrin			0.133	0.117		mg/Kg		88	63 - 136	4	30
Endrin			0.133	0.112		mg/Kg		84	63 - 136	3	30
Endrin aldehyde			0.133	0.114		mg/Kg		86	60 - 132	5	30
Endrin aldehyde			0.133	0.103		mg/Kg		78	60 - 132	2	30
Endrin ketone			0.133	0.124		mg/Kg		93	48 - 150	3	30
Endrin ketone			0.133	0.118		mg/Kg		88	48 - 150	2	30
gamma-BHC (Lindane)			0.133	0.135		mg/Kg		101	70 - 134	4	30
gamma-BHC (Lindane)			0.133	0.133		mg/Kg		100	70 - 134	3	30
Heptachlor			0.133	0.125		mg/Kg		94	62 - 134	5	30
Heptachlor			0.133	0.122		mg/Kg		92	62 - 134	5	30
Heptachlor epoxide			0.133	0.120		mg/Kg		90	65 - 127	5	30
Heptachlor epoxide			0.133	0.114		mg/Kg		86	65 - 127	2	30
Methoxychlor			0.133	0.110		mg/Kg		83	49 - 128	6	30
Methoxychlor			0.133	0.0999		mg/Kg		75	49 - 128	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*65*		*43 - 150*
DCB Decachlorobiphenyl	*61*		*43 - 150*
Tetrachloro-m-xylene	*77*		*26 - 137*
Tetrachloro-m-xylene	*74*		*26 - 137*

Lab Sample ID: 460-266735-E-8-F MS
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.0068	U	0.136	0.108		mg/Kg	☼	79	64 - 132
4,4'-DDD	0.0068	U	0.136	0.111		mg/Kg	☼	81	64 - 132
4,4'-DDE	0.0068	U	0.136	0.109		mg/Kg	☼	80	71 - 137
4,4'-DDE	0.0068	U	0.136	0.108		mg/Kg	☼	79	71 - 137
4,4'-DDT	0.0021	J	0.136	0.112		mg/Kg	☼	81	55 - 138
4,4'-DDT	0.0024	J	0.136	0.117		mg/Kg	☼	84	55 - 138
Aldrin	0.0068	U	0.136	0.119		mg/Kg	☼	87	67 - 130
Aldrin	0.0068	U	0.136	0.117		mg/Kg	☼	86	67 - 130
alpha-BHC	0.0020	U	0.136	0.120		mg/Kg	☼	88	72 - 132
alpha-BHC	0.0020	U	0.136	0.128		mg/Kg	☼	94	72 - 132
beta-BHC	0.0020	U	0.136	0.128		mg/Kg	☼	94	71 - 137
beta-BHC	0.0020	U	0.136	0.108		mg/Kg	☼	80	71 - 137
cis-Chlordane	0.0068	U	0.136	0.111		mg/Kg	☼	81	63 - 136
cis-Chlordane	0.0068	U	0.136	0.108		mg/Kg	☼	79	63 - 136
delta-BHC	0.0020	U	0.136	0.124		mg/Kg	☼	91	61 - 143
delta-BHC	0.0020	U	0.136	0.129		mg/Kg	☼	95	61 - 143
Dieldrin	0.0020	U	0.136	0.108		mg/Kg	☼	80	66 - 135
Dieldrin	0.0020	U	0.136	0.113		mg/Kg	☼	83	66 - 135
Endosulfan I	0.0068	U	0.136	0.109		mg/Kg	☼	80	64 - 135
Endosulfan I	0.0068	U	0.136	0.107		mg/Kg	☼	78	64 - 135
Endosulfan II	0.0068	U	0.136	0.110		mg/Kg	☼	81	64 - 130
Endosulfan II	0.0068	U	0.136	0.111		mg/Kg	☼	81	64 - 130

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266735-E-8-F MS
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Endosulfan sulfate	0.0068	U	0.136	0.107		mg/Kg	☼	79	61 - 134
Endosulfan sulfate	0.0068	U	0.136	0.109		mg/Kg	☼	80	61 - 134
Endrin	0.0068	U	0.136	0.109		mg/Kg	☼	80	63 - 136
Endrin	0.0068	U	0.136	0.111		mg/Kg	☼	81	63 - 136
Endrin aldehyde	0.0068	U	0.136	0.106		mg/Kg	☼	78	60 - 132
Endrin aldehyde	0.0068	U	0.136	0.0997		mg/Kg	☼	73	60 - 132
Endrin ketone	0.0068	U	0.136	0.118		mg/Kg	☼	86	48 - 150
Endrin ketone	0.0068	U	0.136	0.117		mg/Kg	☼	86	48 - 150
gamma-BHC (Lindane)	0.0020	U	0.136	0.126		mg/Kg	☼	92	70 - 134
gamma-BHC (Lindane)	0.0020	U	0.136	0.126		mg/Kg	☼	93	70 - 134
Heptachlor	0.0068	U	0.136	0.117		mg/Kg	☼	86	62 - 134
Heptachlor	0.0068	U	0.136	0.118		mg/Kg	☼	87	62 - 134
Heptachlor epoxide	0.0068	U	0.136	0.111		mg/Kg	☼	81	65 - 127
Heptachlor epoxide	0.0068	U	0.136	0.109		mg/Kg	☼	80	65 - 127
Methoxychlor	0.0068	U	0.136	0.105		mg/Kg	☼	77	49 - 128
Methoxychlor	0.0068	U	0.136	0.102		mg/Kg	☼	75	49 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*63*		*43 - 150*
DCB Decachlorobiphenyl	*61*		*43 - 150*
Tetrachloro-m-xylene	*72*		*26 - 137*
Tetrachloro-m-xylene	*72*		*26 - 137*

Lab Sample ID: 460-266735-F-8-E MSD
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	0.0068	U	0.135	0.119		mg/Kg	☼	88	64 - 132	10	30
4,4'-DDD	0.0068	U	0.135	0.124		mg/Kg	☼	92	64 - 132	11	30
4,4'-DDE	0.0068	U	0.135	0.119		mg/Kg	☼	88	71 - 137	9	30
4,4'-DDE	0.0068	U	0.135	0.122		mg/Kg	☼	91	71 - 137	12	30
4,4'-DDT	0.0021	J	0.135	0.124		mg/Kg	☼	90	55 - 138	10	30
4,4'-DDT	0.0024	J	0.135	0.130		mg/Kg	☼	94	55 - 138	11	30
Aldrin	0.0068	U	0.135	0.128		mg/Kg	☼	95	67 - 130	8	30
Aldrin	0.0068	U	0.135	0.134		mg/Kg	☼	99	67 - 130	13	30
alpha-BHC	0.0020	U	0.135	0.131		mg/Kg	☼	97	72 - 132	9	30
alpha-BHC	0.0020	U	0.135	0.142		mg/Kg	☼	105	72 - 132	10	30
beta-BHC	0.0020	U	0.135	0.139		mg/Kg	☼	103	71 - 137	9	30
beta-BHC	0.0020	U	0.135	0.122		mg/Kg	☼	90	71 - 137	12	30
cis-Chlordane	0.0068	U	0.135	0.120		mg/Kg	☼	89	63 - 136	8	30
cis-Chlordane	0.0068	U	0.135	0.122		mg/Kg	☼	90	63 - 136	12	30
delta-BHC	0.0020	U	0.135	0.135		mg/Kg	☼	100	61 - 143	8	30
delta-BHC	0.0020	U	0.135	0.146		mg/Kg	☼	109	61 - 143	13	30
Dieldrin	0.0020	U	0.135	0.119		mg/Kg	☼	88	66 - 135	9	30
Dieldrin	0.0020	U	0.135	0.126		mg/Kg	☼	93	66 - 135	11	30
Endosulfan I	0.0068	U	0.135	0.119		mg/Kg	☼	88	64 - 135	9	30
Endosulfan I	0.0068	U	0.135	0.120		mg/Kg	☼	89	64 - 135	12	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266735-F-8-E MSD
Matrix: Solid
Analysis Batch: 870169

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Endosulfan II	0.0068	U	0.135	0.121		mg/Kg	☼	90	64 - 130	9	30
Endosulfan II	0.0068	U	0.135	0.124		mg/Kg	☼	92	64 - 130	11	30
Endosulfan sulfate	0.0068	U	0.135	0.118		mg/Kg	☼	88	61 - 134	10	30
Endosulfan sulfate	0.0068	U	0.135	0.122		mg/Kg	☼	91	61 - 134	11	30
Endrin	0.0068	U	0.135	0.120		mg/Kg	☼	89	63 - 136	10	30
Endrin	0.0068	U	0.135	0.123		mg/Kg	☼	91	63 - 136	11	30
Endrin aldehyde	0.0068	U	0.135	0.116		mg/Kg	☼	86	60 - 132	10	30
Endrin aldehyde	0.0068	U	0.135	0.111		mg/Kg	☼	83	60 - 132	11	30
Endrin ketone	0.0068	U	0.135	0.130		mg/Kg	☼	97	48 - 150	10	30
Endrin ketone	0.0068	U	0.135	0.131		mg/Kg	☼	97	48 - 150	12	30
gamma-BHC (Lindane)	0.0020	U	0.135	0.137		mg/Kg	☼	101	70 - 134	8	30
gamma-BHC (Lindane)	0.0020	U	0.135	0.142		mg/Kg	☼	105	70 - 134	12	30
Heptachlor	0.0068	U	0.135	0.127		mg/Kg	☼	94	62 - 134	8	30
Heptachlor	0.0068	U	0.135	0.134		mg/Kg	☼	99	62 - 134	12	30
Heptachlor epoxide	0.0068	U	0.135	0.121		mg/Kg	☼	90	65 - 127	9	30
Heptachlor epoxide	0.0068	U	0.135	0.122		mg/Kg	☼	90	65 - 127	12	30
Methoxychlor	0.0068	U	0.135	0.116		mg/Kg	☼	86	49 - 128	10	30
Methoxychlor	0.0068	U	0.135	0.113		mg/Kg	☼	84	49 - 128	11	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*70*		*43 - 150*
DCB Decachlorobiphenyl	*71*		*43 - 150*
Tetrachloro-m-xylene	*79*		*26 - 137*
Tetrachloro-m-xylene	*80*		*26 - 137*

Lab Sample ID: MB 460-870258/1-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/05/22 12:37	10/06/22 04:16	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 460-870258/1-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/05/22 12:37	10/06/22 04:16	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/05/22 12:37	10/06/22 04:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*43 - 150*	*10/05/22 12:37*	*10/06/22 04:16*	*1*
DCB Decachlorobiphenyl	*72*		*43 - 150*	*10/05/22 12:37*	*10/06/22 04:16*	*1*
Tetrachloro-m-xylene	*85*		*26 - 137*	*10/05/22 12:37*	*10/06/22 04:16*	*1*
Tetrachloro-m-xylene	*77*		*26 - 137*	*10/05/22 12:37*	*10/06/22 04:16*	*1*

Lab Sample ID: LCS 460-870258/2-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.133	0.125		mg/Kg		94	64 - 132
4,4'-DDD	0.133	0.118		mg/Kg		89	64 - 132
4,4'-DDE	0.133	0.126		mg/Kg		95	71 - 137
4,4'-DDE	0.133	0.121		mg/Kg		91	71 - 137
4,4'-DDT	0.133	0.123		mg/Kg		92	55 - 138
4,4'-DDT	0.133	0.117		mg/Kg		88	55 - 138
Aldrin	0.133	0.133		mg/Kg		100	67 - 130
Aldrin	0.133	0.131		mg/Kg		98	67 - 130
alpha-BHC	0.133	0.130		mg/Kg		98	72 - 132
alpha-BHC	0.133	0.136		mg/Kg		102	72 - 132
beta-BHC	0.133	0.143		mg/Kg		107	71 - 137
beta-BHC	0.133	0.122		mg/Kg		91	71 - 137

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-870258/2-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870258

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
cis-Chlordane			0.133	0.126		mg/Kg		94	63 - 136		
cis-Chlordane			0.133	0.121		mg/Kg		90	63 - 136		
delta-BHC			0.133	0.136		mg/Kg		102	61 - 143		
delta-BHC			0.133	0.141		mg/Kg		106	61 - 143		
Dieldrin			0.133	0.124		mg/Kg		93	66 - 135		
Dieldrin			0.133	0.122		mg/Kg		91	66 - 135		
Endosulfan I			0.133	0.125		mg/Kg		93	64 - 135		
Endosulfan I			0.133	0.117		mg/Kg		88	64 - 135		
Endosulfan II			0.133	0.126		mg/Kg		95	64 - 130		
Endosulfan II			0.133	0.119		mg/Kg		89	64 - 130		
Endosulfan sulfate			0.133	0.121		mg/Kg		91	61 - 134		
Endosulfan sulfate			0.133	0.118		mg/Kg		88	61 - 134		
Endrin			0.133	0.124		mg/Kg		93	63 - 136		
Endrin			0.133	0.118		mg/Kg		88	63 - 136		
Endrin aldehyde			0.133	0.121		mg/Kg		91	60 - 132		
Endrin aldehyde			0.133	0.108		mg/Kg		81	60 - 132		
Endrin ketone			0.133	0.134		mg/Kg		100	48 - 150		
Endrin ketone			0.133	0.127		mg/Kg		95	48 - 150		
gamma-BHC (Lindane)			0.133	0.138		mg/Kg		103	70 - 134		
gamma-BHC (Lindane)			0.133	0.137		mg/Kg		103	70 - 134		
Heptachlor			0.133	0.128		mg/Kg		96	62 - 134		
Heptachlor			0.133	0.127		mg/Kg		96	62 - 134		
Heptachlor epoxide			0.133	0.125		mg/Kg		94	65 - 127		
Heptachlor epoxide			0.133	0.120		mg/Kg		90	65 - 127		
Methoxychlor			0.133	0.116		mg/Kg		87	49 - 128		
Methoxychlor			0.133	0.103		mg/Kg		77	49 - 128		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*72*		*43 - 150*
DCB Decachlorobiphenyl	*70*		*43 - 150*
Tetrachloro-m-xylene	*79*		*26 - 137*
Tetrachloro-m-xylene	*75*		*26 - 137*

Lab Sample ID: LCSD 460-870258/3-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870258

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.133	0.128		mg/Kg		96	64 - 132	2	30
4,4'-DDD			0.133	0.120		mg/Kg		90	64 - 132	1	30
4,4'-DDE			0.133	0.129		mg/Kg		96	71 - 137	2	30
4,4'-DDE			0.133	0.122		mg/Kg		92	71 - 137	1	30
4,4'-DDT			0.133	0.126		mg/Kg		94	55 - 138	2	30
4,4'-DDT			0.133	0.118		mg/Kg		88	55 - 138	1	30
Aldrin			0.133	0.136		mg/Kg		102	67 - 130	2	30
Aldrin			0.133	0.129		mg/Kg		97	67 - 130	1	30
alpha-BHC			0.133	0.132		mg/Kg		99	72 - 132	1	30
alpha-BHC			0.133	0.137		mg/Kg		103	72 - 132	1	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-870258/3-A
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870258

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
beta-BHC			0.133	0.145		mg/Kg		109	71 - 137	1	30
beta-BHC			0.133	0.122		mg/Kg		91	71 - 137	0	30
cis-Chlordane			0.133	0.128		mg/Kg		96	63 - 136	2	30
cis-Chlordane			0.133	0.121		mg/Kg		91	63 - 136	0	30
delta-BHC			0.133	0.138		mg/Kg		104	61 - 143	2	30
delta-BHC			0.133	0.140		mg/Kg		105	61 - 143	1	30
Dieldrin			0.133	0.126		mg/Kg		94	66 - 135	1	30
Dieldrin			0.133	0.123		mg/Kg		92	66 - 135	1	30
Endosulfan I			0.133	0.127		mg/Kg		95	64 - 135	2	30
Endosulfan I			0.133	0.118		mg/Kg		88	64 - 135	0	30
Endosulfan II			0.133	0.128		mg/Kg		96	64 - 130	2	30
Endosulfan II			0.133	0.120		mg/Kg		90	64 - 130	1	30
Endosulfan sulfate			0.133	0.123		mg/Kg		93	61 - 134	2	30
Endosulfan sulfate			0.133	0.118		mg/Kg		88	61 - 134	0	30
Endrin			0.133	0.126		mg/Kg		95	63 - 136	2	30
Endrin			0.133	0.119		mg/Kg		89	63 - 136	1	30
Endrin aldehyde			0.133	0.123		mg/Kg		92	60 - 132	2	30
Endrin aldehyde			0.133	0.110		mg/Kg		82	60 - 132	1	30
Endrin ketone			0.133	0.136		mg/Kg		102	48 - 150	2	30
Endrin ketone			0.133	0.126		mg/Kg		94	48 - 150	1	30
gamma-BHC (Lindane)			0.133	0.140		mg/Kg		105	70 - 134	1	30
gamma-BHC (Lindane)			0.133	0.138		mg/Kg		104	70 - 134	0	30
Heptachlor			0.133	0.130		mg/Kg		98	62 - 134	1	30
Heptachlor			0.133	0.127		mg/Kg		95	62 - 134	1	30
Heptachlor epoxide			0.133	0.128		mg/Kg		96	65 - 127	2	30
Heptachlor epoxide			0.133	0.121		mg/Kg		91	65 - 127	1	30
Methoxychlor			0.133	0.118		mg/Kg		88	49 - 128	1	30
Methoxychlor			0.133	0.102		mg/Kg		76	49 - 128	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*74*		*43 - 150*
DCB Decachlorobiphenyl	*70*		*43 - 150*
Tetrachloro-m-xylene	*81*		*26 - 137*
Tetrachloro-m-xylene	*78*		*26 - 137*

Lab Sample ID: 460-266794-E-1-L MS
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.024		0.142	0.149		mg/Kg	☼	88	64 - 132
4,4'-DDD	0.024		0.142	0.143		mg/Kg	☼	84	64 - 132
4,4'-DDE	0.015		0.142	0.142		mg/Kg	☼	89	71 - 137
4,4'-DDE	0.017		0.142	0.138		mg/Kg	☼	85	71 - 137
4,4'-DDT	0.059		0.142	0.185		mg/Kg	☼	89	55 - 138
4,4'-DDT	0.062		0.142	0.191		mg/Kg	☼	90	55 - 138
Aldrin	0.0072	U	0.142	0.136		mg/Kg	☼	95	67 - 130
Aldrin	0.0072	U	0.142	0.139		mg/Kg	☼	97	67 - 130

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266794-E-1-L MS
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.0021	U	0.142	0.131		mg/Kg	☼	92	72 - 132
alpha-BHC	0.0021	U	0.142	0.144		mg/Kg	☼	101	72 - 132
beta-BHC	0.0021	U	0.142	0.135		mg/Kg	☼	95	71 - 137
beta-BHC	0.0021	U	0.142	0.114		mg/Kg	☼	80	71 - 137
cis-Chlordane	0.0088		0.142	0.138		mg/Kg	☼	90	63 - 136
cis-Chlordane	0.0088		0.142	0.127		mg/Kg	☼	83	63 - 136
delta-BHC	0.0021	U	0.142	0.140		mg/Kg	☼	98	61 - 143
delta-BHC	0.0021	U	0.142	0.147		mg/Kg	☼	103	61 - 143
Dieldrin	0.0037		0.142	0.137		mg/Kg	☼	94	66 - 135
Dieldrin	0.0037		0.142	0.134		mg/Kg	☼	91	66 - 135
Endosulfan I	0.0072	U	0.142	0.125		mg/Kg	☼	88	64 - 135
Endosulfan I	0.0072	U	0.142	0.124		mg/Kg	☼	87	64 - 135
Endosulfan II	0.0072	U	0.142	0.132		mg/Kg	☼	92	64 - 130
Endosulfan II	0.0072	U	0.142	0.126		mg/Kg	☼	88	64 - 130
Endosulfan sulfate	0.0072	U	0.142	0.121		mg/Kg	☼	85	61 - 134
Endosulfan sulfate	0.0072	U	0.142	0.113		mg/Kg	☼	80	61 - 134
Endrin	0.0072	U	0.142	0.128		mg/Kg	☼	90	63 - 136
Endrin	0.0072	U	0.142	0.131		mg/Kg	☼	92	63 - 136
Endrin aldehyde	0.0072	U	0.142	0.111		mg/Kg	☼	78	60 - 132
Endrin aldehyde	0.0072	U	0.142	0.0981		mg/Kg	☼	69	60 - 132
Endrin ketone	0.0072	U	0.142	0.139		mg/Kg	☼	98	48 - 150
Endrin ketone	0.0072	U	0.142	0.144		mg/Kg	☼	101	48 - 150
gamma-BHC (Lindane)	0.0021	U	0.142	0.144		mg/Kg	☼	101	70 - 134
gamma-BHC (Lindane)	0.0021	U	0.142	0.147		mg/Kg	☼	103	70 - 134
Heptachlor	0.0072	U	0.142	0.135		mg/Kg	☼	95	62 - 134
Heptachlor	0.0072	U	0.142	0.141		mg/Kg	☼	99	62 - 134
Heptachlor epoxide	0.0072	U	0.142	0.130		mg/Kg	☼	91	65 - 127
Heptachlor epoxide	0.0072	U	0.142	0.126		mg/Kg	☼	89	65 - 127
Methoxychlor	0.0072	U	0.142	0.116		mg/Kg	☼	82	49 - 128
Methoxychlor	0.0072	U	0.142	0.120		mg/Kg	☼	84	49 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*58*		*43 - 150*
DCB Decachlorobiphenyl	*100*		*43 - 150*
Tetrachloro-m-xylene	*68*		*26 - 137*
Tetrachloro-m-xylene	*62*		*26 - 137*

Lab Sample ID: 460-266794-E-1-M MSD
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	0.024		0.142	0.121		mg/Kg	☼	68	64 - 132	21	30
4,4'-DDD	0.024		0.142	0.117		mg/Kg	☼	65	64 - 132	20	30
4,4'-DDE	0.015		0.142	0.114	*	mg/Kg	☼	70	71 - 137	22	30
4,4'-DDE	0.017		0.142	0.112	*	mg/Kg	☼	67	71 - 137	21	30
4,4'-DDT	0.059		0.142	0.157		mg/Kg	☼	69	55 - 138	17	30
4,4'-DDT	0.062		0.142	0.158		mg/Kg	☼	68	55 - 138	19	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266794-E-1-M MSD
Matrix: Solid
Analysis Batch: 870367

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	0.0072	U	0.142	0.112		mg/Kg	☼	78	67 - 130	20	30
Aldrin	0.0072	U	0.142	0.112		mg/Kg	☼	79	67 - 130	21	30
alpha-BHC	0.0021	U	0.142	0.106		mg/Kg	☼	75	72 - 132	21	30
alpha-BHC	0.0021	U	0.142	0.114		mg/Kg	☼	80	72 - 132	23	30
beta-BHC	0.0021	U	0.142	0.110		mg/Kg	☼	77	71 - 137	21	30
beta-BHC	0.0021	U	0.142	0.0961	*	mg/Kg	☼	68	71 - 137	17	30
cis-Chlordane	0.0088		0.142	0.112		mg/Kg	☼	72	63 - 136	21	30
cis-Chlordane	0.0088		0.142	0.106		mg/Kg	☼	68	63 - 136	19	30
delta-BHC	0.0021	U	0.142	0.115		mg/Kg	☼	81	61 - 143	19	30
delta-BHC	0.0021	U	0.142	0.119		mg/Kg	☼	83	61 - 143	21	30
Dieldrin	0.0037		0.142	0.112		mg/Kg	☼	76	66 - 135	21	30
Dieldrin	0.0037		0.142	0.109		mg/Kg	☼	74	66 - 135	20	30
Endosulfan I	0.0072	U	0.142	0.102		mg/Kg	☼	72	64 - 135	20	30
Endosulfan I	0.0072	U	0.142	0.101		mg/Kg	☼	71	64 - 135	20	30
Endosulfan II	0.0072	U	0.142	0.107		mg/Kg	☼	75	64 - 130	21	30
Endosulfan II	0.0072	U	0.142	0.102		mg/Kg	☼	72	64 - 130	21	30
Endosulfan sulfate	0.0072	U	0.142	0.0997		mg/Kg	☼	70	61 - 134	20	30
Endosulfan sulfate	0.0072	U	0.142	0.0919		mg/Kg	☼	65	61 - 134	21	30
Endrin	0.0072	U	0.142	0.104		mg/Kg	☼	73	63 - 136	20	30
Endrin	0.0072	U	0.142	0.106		mg/Kg	☼	74	63 - 136	21	30
Endrin aldehyde	0.0072	U	0.142	0.0904		mg/Kg	☼	64	60 - 132	21	30
Endrin aldehyde	0.0072	U	0.142	0.0794	*	mg/Kg	☼	56	60 - 132	21	30
Endrin ketone	0.0072	U	0.142	0.112		mg/Kg	☼	78	48 - 150	22	30
Endrin ketone	0.0072	U	0.142	0.111		mg/Kg	☼	78	48 - 150	25	30
gamma-BHC (Lindane)	0.0021	U	0.142	0.114		mg/Kg	☼	80	70 - 134	23	30
gamma-BHC (Lindane)	0.0021	U	0.142	0.115		mg/Kg	☼	81	70 - 134	24	30
Heptachlor	0.0072	U	0.142	0.110		mg/Kg	☼	77	62 - 134	20	30
Heptachlor	0.0072	U	0.142	0.114		mg/Kg	☼	80	62 - 134	22	30
Heptachlor epoxide	0.0072	U	0.142	0.106		mg/Kg	☼	74	65 - 127	20	30
Heptachlor epoxide	0.0072	U	0.142	0.104		mg/Kg	☼	73	65 - 127	19	30
Methoxychlor	0.0072	U	0.142	0.0963		mg/Kg	☼	68	49 - 128	19	30
Methoxychlor	0.0072	U	0.142	0.0972		mg/Kg	☼	68	49 - 128	21	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*54*		*43 - 150*
DCB Decachlorobiphenyl	*60*		*43 - 150*
Tetrachloro-m-xylene	*57*		*26 - 137*
Tetrachloro-m-xylene	*50*		*26 - 137*

Lab Sample ID: MB 460-870672/1-A
Matrix: Solid
Analysis Batch: 871004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
4,4'-DDD	0.0067	U	0.0067	0.0011	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
4,4'-DDE	0.0067	U	0.0067	0.00079	mg/Kg		10/07/22 11:51	10/10/22 08:00	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 460-870672/1-A
Matrix: Solid
Analysis Batch: 871004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
4,4'-DDT	0.0067	U	0.0067	0.0012	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Aldrin	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
alpha-BHC	0.0020	U	0.0020	0.00068	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
beta-BHC	0.0020	U	0.0020	0.00075	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Chlordane (technical)	0.067	U	0.067	0.016	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
cis-Chlordane	0.0067	U	0.0067	0.0011	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
delta-BHC	0.0020	U	0.0020	0.00041	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Dieldrin	0.0020	U	0.0020	0.00087	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan I	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan II	0.0067	U	0.0067	0.0017	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endosulfan sulfate	0.0067	U	0.0067	0.00084	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin	0.0067	U	0.0067	0.00096	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin aldehyde	0.0067	U	0.0067	0.0016	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Endrin ketone	0.0067	U	0.0067	0.0013	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
gamma-BHC (Lindane)	0.0020	U	0.0020	0.00062	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Heptachlor	0.0067	U	0.0067	0.00079	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Heptachlor epoxide	0.0067	U	0.0067	0.0010	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Methoxychlor	0.0067	U	0.0067	0.0015	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/07/22 11:51	10/10/22 08:00	1
Toxaphene	0.067	U	0.067	0.024	mg/Kg		10/07/22 11:51	10/10/22 08:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*43 - 150*	*10/07/22 11:51*	*10/10/22 08:00*	*1*
DCB Decachlorobiphenyl	*80*		*43 - 150*	*10/07/22 11:51*	*10/10/22 08:00*	*1*
Tetrachloro-m-xylene	*92*		*26 - 137*	*10/07/22 11:51*	*10/10/22 08:00*	*1*
Tetrachloro-m-xylene	*41*		*26 - 137*	*10/07/22 11:51*	*10/10/22 08:00*	*1*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-870672/2-A
Matrix: Solid
Analysis Batch: 871004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.133	0.158		mg/Kg		118	64 - 132
4,4'-DDD	0.133	0.152		mg/Kg		114	64 - 132
4,4'-DDE	0.133	0.158		mg/Kg		119	71 - 137
4,4'-DDE	0.133	0.151		mg/Kg		114	71 - 137
4,4'-DDT	0.133	0.152		mg/Kg		114	55 - 138
4,4'-DDT	0.133	0.145		mg/Kg		109	55 - 138
Aldrin	0.133	0.167		mg/Kg		125	67 - 130
Aldrin	0.133	0.167		mg/Kg		125	67 - 130
alpha-BHC	0.133	0.162		mg/Kg		121	72 - 132
alpha-BHC	0.133	0.174		mg/Kg		130	72 - 132
beta-BHC	0.133	0.173		mg/Kg		130	71 - 137
beta-BHC	0.133	0.151		mg/Kg		113	71 - 137
cis-Chlordane	0.133	0.155		mg/Kg		116	63 - 136
cis-Chlordane	0.133	0.149		mg/Kg		112	63 - 136
delta-BHC	0.133	0.168		mg/Kg		126	61 - 143
delta-BHC	0.133	0.176		mg/Kg		132	61 - 143
Dieldrin	0.133	0.155		mg/Kg		116	66 - 135
Dieldrin	0.133	0.155		mg/Kg		116	66 - 135
Endosulfan I	0.133	0.153		mg/Kg		115	64 - 135
Endosulfan I	0.133	0.147		mg/Kg		111	64 - 135
Endosulfan II	0.133	0.158		mg/Kg		119	64 - 130
Endosulfan II	0.133	0.150		mg/Kg		112	64 - 130
Endosulfan sulfate	0.133	0.148		mg/Kg		111	61 - 134
Endosulfan sulfate	0.133	0.145		mg/Kg		109	61 - 134
Endrin	0.133	0.156		mg/Kg		117	63 - 136
Endrin	0.133	0.149		mg/Kg		112	63 - 136
Endrin aldehyde	0.133	0.153		mg/Kg		115	60 - 132
Endrin aldehyde	0.133	0.137		mg/Kg		103	60 - 132
Endrin ketone	0.133	0.161		mg/Kg		121	48 - 150
Endrin ketone	0.133	0.157		mg/Kg		118	48 - 150
gamma-BHC (Lindane)	0.133	0.169		mg/Kg		126	70 - 134
gamma-BHC (Lindane)	0.133	0.174		mg/Kg		130	70 - 134
Heptachlor	0.133	0.161		mg/Kg		121	62 - 134
Heptachlor	0.133	0.162		mg/Kg		122	62 - 134
Heptachlor epoxide	0.133	0.157		mg/Kg		118	65 - 127
Heptachlor epoxide	0.133	0.152		mg/Kg		114	65 - 127
Methoxychlor	0.133	0.145		mg/Kg		109	49 - 128
Methoxychlor	0.133	0.130		mg/Kg		97	49 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*91*		*43 - 150*
DCB Decachlorobiphenyl	*88*		*43 - 150*
Tetrachloro-m-xylene	*98*		*26 - 137*
Tetrachloro-m-xylene	*95*		*26 - 137*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-870672/3-A
Matrix: Solid
Analysis Batch: 871004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870672

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.133	0.155		mg/Kg		116	64 - 132	2	30
4,4'-DDD			0.133	0.148		mg/Kg		111	64 - 132	3	30
4,4'-DDE			0.133	0.156		mg/Kg		117	71 - 137	2	30
4,4'-DDE			0.133	0.147		mg/Kg		110	71 - 137	3	30
4,4'-DDT			0.133	0.147		mg/Kg		110	55 - 138	3	30
4,4'-DDT			0.133	0.141		mg/Kg		106	55 - 138	2	30
Aldrin			0.133	0.163		mg/Kg		122	67 - 130	2	30
Aldrin			0.133	0.162		mg/Kg		122	67 - 130	3	30
alpha-BHC			0.133	0.163		mg/Kg		122	72 - 132	1	30
alpha-BHC			0.133	0.168		mg/Kg		126	72 - 132	3	30
beta-BHC			0.133	0.173		mg/Kg		130	71 - 137	0	30
beta-BHC			0.133	0.148		mg/Kg		111	71 - 137	2	30
cis-Chlordane			0.133	0.154		mg/Kg		115	63 - 136	1	30
cis-Chlordane			0.133	0.146		mg/Kg		109	63 - 136	3	30
delta-BHC			0.133	0.167		mg/Kg		125	61 - 143	0	30
delta-BHC			0.133	0.174		mg/Kg		130	61 - 143	2	30
Dieldrin			0.133	0.153		mg/Kg		115	66 - 135	1	30
Dieldrin			0.133	0.151		mg/Kg		113	66 - 135	3	30
Endosulfan I			0.133	0.153		mg/Kg		115	64 - 135	0	30
Endosulfan I			0.133	0.143		mg/Kg		107	64 - 135	3	30
Endosulfan II			0.133	0.155		mg/Kg		117	64 - 130	2	30
Endosulfan II			0.133	0.147		mg/Kg		110	64 - 130	2	30
Endosulfan sulfate			0.133	0.144		mg/Kg		108	61 - 134	3	30
Endosulfan sulfate			0.133	0.141		mg/Kg		106	61 - 134	3	30
Endrin			0.133	0.153		mg/Kg		115	63 - 136	2	30
Endrin			0.133	0.146		mg/Kg		109	63 - 136	2	30
Endrin aldehyde			0.133	0.149		mg/Kg		112	60 - 132	3	30
Endrin aldehyde			0.133	0.134		mg/Kg		100	60 - 132	3	30
Endrin ketone			0.133	0.157		mg/Kg		118	48 - 150	3	30
Endrin ketone			0.133	0.152		mg/Kg		114	48 - 150	3	30
gamma-BHC (Lindane)			0.133	0.169		mg/Kg		127	70 - 134	3	30
gamma-BHC (Lindane)			0.133	0.169		mg/Kg		127	70 - 134	0	30
Heptachlor			0.133	0.160		mg/Kg		120	62 - 134	2	30
Heptachlor			0.133	0.159		mg/Kg		120	62 - 134	1	30
Heptachlor epoxide			0.133	0.155		mg/Kg		116	65 - 127	2	30
Heptachlor epoxide			0.133	0.147		mg/Kg		110	65 - 127	3	30
Methoxychlor			0.133	0.140		mg/Kg		105	49 - 128	4	30
Methoxychlor			0.133	0.125		mg/Kg		93	49 - 128	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*43 - 150*
DCB Decachlorobiphenyl	*84*		*43 - 150*
Tetrachloro-m-xylene	*98*		*26 - 137*
Tetrachloro-m-xylene	*93*		*26 - 137*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-870100/1-A
Matrix: Solid
Analysis Batch: 870183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/04/22 16:32	10/05/22 07:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*10 - 150*	*10/04/22 16:32*	*10/05/22 07:01*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 150*	*10/04/22 16:32*	*10/05/22 07:01*	*1*
Tetrachloro-m-xylene	*97*		*42 - 150*	*10/04/22 16:32*	*10/05/22 07:01*	*1*
Tetrachloro-m-xylene	*92*		*42 - 150*	*10/04/22 16:32*	*10/05/22 07:01*	*1*

Lab Sample ID: LCS 460-870100/2-A
Matrix: Solid
Analysis Batch: 870183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	0.333	0.386		mg/Kg		116	65 - 133
Aroclor 1016	0.333	0.318		mg/Kg		95	65 - 133
Aroclor 1260	0.333	0.388		mg/Kg		116	67 - 150
Aroclor 1260	0.333	0.336		mg/Kg		101	67 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*126*		*10 - 150*
DCB Decachlorobiphenyl	*117*		*10 - 150*
Tetrachloro-m-xylene	*119*		*42 - 150*
Tetrachloro-m-xylene	*95*		*42 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 460-870100/3-A
Matrix: Solid
Analysis Batch: 870183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016			0.333	0.325		mg/Kg		97	65 - 133	2	30
Aroclor 1016			0.333	0.325		mg/Kg		98	65 - 133	17	30
Aroclor 1260			0.333	0.317		mg/Kg		95	67 - 150	20	30
Aroclor 1260			0.333	0.308		mg/Kg		92	67 - 150	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*106*		*10 - 150*
DCB Decachlorobiphenyl	*109*		*10 - 150*
Tetrachloro-m-xylene	*102*		*42 - 150*
Tetrachloro-m-xylene	*99*		*42 - 150*

Lab Sample ID: 460-266735-E-8-D MS
Matrix: Solid
Analysis Batch: 870183

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	0.068	U	0.340	0.308		mg/Kg	☼	91	65 - 133
Aroclor 1016	0.068	U	0.340	0.304		mg/Kg	☼	89	65 - 133
Aroclor 1260	0.068	U	0.340	0.303		mg/Kg	☼	89	67 - 150
Aroclor 1260	0.068	U	0.340	0.293		mg/Kg	☼	86	67 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*96*		*10 - 150*
DCB Decachlorobiphenyl	*101*		*10 - 150*
Tetrachloro-m-xylene	*93*		*42 - 150*
Tetrachloro-m-xylene	*94*		*42 - 150*

Lab Sample ID: 460-266735-F-8-D MSD
Matrix: Solid
Analysis Batch: 870183

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016	0.068	U	0.337	0.324		mg/Kg	☼	96	65 - 133	5	30
Aroclor 1016	0.068	U	0.337	0.312		mg/Kg	☼	93	65 - 133	3	30
Aroclor 1260	0.068	U	0.337	0.320		mg/Kg	☼	95	67 - 150	5	30
Aroclor 1260	0.068	U	0.337	0.301		mg/Kg	☼	89	67 - 150	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*104*		*10 - 150*
DCB Decachlorobiphenyl	*104*		*10 - 150*
Tetrachloro-m-xylene	*99*		*42 - 150*
Tetrachloro-m-xylene	*96*		*42 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-870255/1-A
Matrix: Solid
Analysis Batch: 870434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/05/22 12:32	10/06/22 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*10 - 150*	*10/05/22 12:32*	*10/06/22 10:59*	*1*
DCB Decachlorobiphenyl	*103*		*10 - 150*	*10/05/22 12:32*	*10/06/22 10:59*	*1*
Tetrachloro-m-xylene	*87*		*42 - 150*	*10/05/22 12:32*	*10/06/22 10:59*	*1*
Tetrachloro-m-xylene	*97*		*42 - 150*	*10/05/22 12:32*	*10/06/22 10:59*	*1*

Lab Sample ID: LCS 460-870255/2-A
Matrix: Solid
Analysis Batch: 870434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	0.333	0.340		mg/Kg		102	65 - 133
Aroclor 1016	0.333	0.321		mg/Kg		96	65 - 133
Aroclor 1260	0.333	0.355		mg/Kg		107	67 - 150
Aroclor 1260	0.333	0.337		mg/Kg		101	67 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*96*		*10 - 150*
DCB Decachlorobiphenyl	*90*		*10 - 150*
Tetrachloro-m-xylene	*99*		*42 - 150*
Tetrachloro-m-xylene	*92*		*42 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 460-870255/3-A
Matrix: Solid
Analysis Batch: 870434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870255

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016			0.333	0.340		mg/Kg		102	65 - 133	6	30
Aroclor 1016			0.333	0.349		mg/Kg		105	65 - 133	3	30
Aroclor 1260			0.333	0.349		mg/Kg		105	67 - 150	2	30
Aroclor 1260			0.333	0.338		mg/Kg		102	67 - 150	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*99*		*10 - 150*
DCB Decachlorobiphenyl	*95*		*10 - 150*
Tetrachloro-m-xylene	*81*		*42 - 150*
Tetrachloro-m-xylene	*93*		*42 - 150*

Lab Sample ID: 460-266794-E-1-I MS
Matrix: Solid
Analysis Batch: 870434

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	0.072	U	0.356	0.395		mg/Kg	☼	111	65 - 133
Aroclor 1016	0.072	U	0.356	0.390		mg/Kg	☼	110	65 - 133
Aroclor 1260	0.072	U	0.356	0.445		mg/Kg	☼	125	67 - 150
Aroclor 1260	0.072	U	0.356	0.403		mg/Kg	☼	113	67 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*113*		*10 - 150*
DCB Decachlorobiphenyl	*111*		*10 - 150*
Tetrachloro-m-xylene	*90*		*42 - 150*
Tetrachloro-m-xylene	*94*		*42 - 150*

Lab Sample ID: 460-266794-E-1-J MSD
Matrix: Solid
Analysis Batch: 870434

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016	0.072	U	0.356	0.412		mg/Kg	☼	116	65 - 133	4	30
Aroclor 1016	0.072	U	0.356	0.408		mg/Kg	☼	115	65 - 133	5	30
Aroclor 1260	0.072	U	0.356	0.436		mg/Kg	☼	122	67 - 150	2	30
Aroclor 1260	0.072	U	0.356	0.404		mg/Kg	☼	114	67 - 150	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*107*		*10 - 150*
DCB Decachlorobiphenyl	*110*		*10 - 150*
Tetrachloro-m-xylene	*88*		*42 - 150*
Tetrachloro-m-xylene	*92*		*42 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-870673/1-A
Matrix: Solid
Analysis Batch: 871035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1016	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1221	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1232	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1242	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1248	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1254	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1260	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor-1262	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Aroclor 1268	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1
Polychlorinated biphenyls, Total	0.067	U	0.067	0.018	mg/Kg		10/07/22 11:56	10/10/22 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*10 - 150*	*10/07/22 11:56*	*10/10/22 10:52*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 150*	*10/07/22 11:56*	*10/10/22 10:52*	*1*
Tetrachloro-m-xylene	*90*		*42 - 150*	*10/07/22 11:56*	*10/10/22 10:52*	*1*
Tetrachloro-m-xylene	*89*		*42 - 150*	*10/07/22 11:56*	*10/10/22 10:52*	*1*

Lab Sample ID: LCS 460-870673/2-A
Matrix: Solid
Analysis Batch: 871035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	0.333	0.390		mg/Kg		117	65 - 133
Aroclor 1016	0.333	0.369		mg/Kg		111	65 - 133
Aroclor 1260	0.333	0.407		mg/Kg		122	67 - 150
Aroclor 1260	0.333	0.349		mg/Kg		105	67 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*69*		*10 - 150*
DCB Decachlorobiphenyl	*75*		*10 - 150*
Tetrachloro-m-xylene	*72*		*42 - 150*
Tetrachloro-m-xylene	*72*		*42 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 460-870673/3-A
Matrix: Solid
Analysis Batch: 871035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016			0.333	0.413		mg/Kg		124	65 - 133	6	30
Aroclor 1016			0.333	0.394		mg/Kg		118	65 - 133	7	30
Aroclor 1260			0.333	0.450		mg/Kg		135	67 - 150	10	30
Aroclor 1260			0.333	0.433		mg/Kg		130	67 - 150	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*10 - 150*
DCB Decachlorobiphenyl	*85*		*10 - 150*
Tetrachloro-m-xylene	*78*		*42 - 150*
Tetrachloro-m-xylene	*79*		*42 - 150*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-870217/1-A
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U	20.0	5.5	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Antimony	1.0	U	1.0	0.15	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Arsenic	1.0	U	1.0	0.10	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Barium	2.0	U	2.0	0.15	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Beryllium	0.40	U	0.40	0.057	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Cadmium	1.0	U	1.0	0.11	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Calcium	100	U	100	17.7	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Chromium	2.0	U	2.0	0.91	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Cobalt	2.0	U	2.0	0.15	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Copper	2.0	U	2.0	0.37	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Iron	60.0	U	60.0	20.2	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Lead	0.60	U	0.60	0.20	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Magnesium	100	U	100	10.2	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Manganese	4.0	U	4.0	0.40	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Nickel	2.0	U	2.0	0.47	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Potassium	100	U	100	16.2	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Selenium	1.3	U	1.3	0.13	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Silver	0.40	U	0.40	0.089	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Sodium	100	U	100	45.7	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Thallium	0.40	U	0.40	0.041	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Vanadium	2.0	U	2.0	0.21	mg/Kg		10/05/22 09:10	10/05/22 18:06	1
Zinc	8.0	U	8.0	3.1	mg/Kg		10/05/22 09:10	10/05/22 18:06	1

Lab Sample ID: LCSSRM 460-870217/2-A ^20
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870217

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum			7690	6293		mg/Kg		81.8	45.3 - 154.7		

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSSRM 460-870217/2-A ^20
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870217

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	111	59.91		mg/Kg		54.0	0.7 - 205.4
Arsenic	112	104.6		mg/Kg		93.4	82.0 - 118.8
Barium	154	135.7		mg/Kg		88.1	81.8 - 118.2
Beryllium	121	113.8		mg/Kg		94.0	82.2 - 118.2
Cadmium	196	178.7		mg/Kg		91.2	82.1 - 118.4
Calcium	4590	3921		mg/Kg		85.4	81.0 - 119.2
Chromium	103	93.51		mg/Kg		90.8	80.8 - 118.4
Cobalt	46.4	42.43		mg/Kg		91.4	83.2 - 116.6
Copper	70.4	68.17		mg/Kg		96.8	83.4 - 116.6
Iron	13400	11290		mg/Kg		84.2	58.2 - 141.8
Lead	73.2	66.40		mg/Kg		90.7	82.8 - 117.3
Magnesium	2240	1961	J	mg/Kg		87.5	75.4 - 125.0
Manganese	373	336.0		mg/Kg		90.1	81.5 - 118.5
Nickel	249	234.5		mg/Kg		94.2	81.9 - 118.1
Potassium	1940	1651	J	mg/Kg		85.1	68.0 - 131.4
Selenium	215	203.0		mg/Kg		94.4	78.1 - 121.9
Silver	78.5	70.48		mg/Kg		89.8	78.9 - 121.1
Sodium	132	2000	U	mg/Kg		95.1	71.4 - 129.5
Thallium	67.7	64.92		mg/Kg		95.9	80.1 - 120.1
Vanadium	177	161.4		mg/Kg		91.2	78.0 - 122.0
Zinc	360	324.5		mg/Kg		90.1	79.7 - 120.3

Lab Sample ID: 460-266735-E-8-K MS
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2820		512	3699	4	mg/Kg	☼	172	75 - 125
Antimony	1.0	U	5.12	3.21	N	mg/Kg	☼	63	75 - 125
Arsenic	1.1		10.2	10.73		mg/Kg	☼	94	75 - 125
Barium	14.6		10.2	24.56		mg/Kg	☼	97	75 - 125
Beryllium	0.20	J	5.12	5.25		mg/Kg	☼	99	75 - 125
Cadmium	1.0	U	5.12	4.89		mg/Kg	☼	95	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266735-E-8-K MS
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	606		512	1059		mg/Kg	☼	88	75 - 125
Chromium	7.9		10.2	18.58		mg/Kg	☼	105	75 - 125
Cobalt	2.6		5.12	7.75		mg/Kg	☼	101	75 - 125
Copper	7.5		10.2	19.06		mg/Kg	☼	113	75 - 125
Iron	9880		512	10270	4	mg/Kg	☼	76	75 - 125
Lead	1.9		5.12	6.99		mg/Kg	☼	99	75 - 125
Magnesium	1240		512	1797		mg/Kg	☼	108	75 - 125
Manganese	304		51.2	240.1	4	mg/Kg	☼	-125	75 - 125
Nickel	6.1		10.2	17.22		mg/Kg	☼	109	75 - 125
Potassium	376		512	1048	N	mg/Kg	☼	131	75 - 125
Selenium	1.3	U	10.2	9.78		mg/Kg	☼	96	75 - 125
Silver	0.41	U	5.12	4.77		mg/Kg	☼	93	75 - 125
Sodium	62.5	J	512	546.8		mg/Kg	☼	95	75 - 125
Thallium	0.044	J	4.10	3.88		mg/Kg	☼	94	75 - 125
Vanadium	9.9		10.2	20.76		mg/Kg	☼	106	75 - 125
Zinc	12.1		51.2	58.84		mg/Kg	☼	91	75 - 125

Lab Sample ID: 460-266735-E-8-L MSD
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870217

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	2820		507	3561	4	mg/Kg	☼	147	75 - 125	4	20
Antimony	1.0	U	5.07	3.26	N	mg/Kg	☼	64	75 - 125	1	20
Arsenic	1.1		10.1	10.98		mg/Kg	☼	97	75 - 125	2	20
Barium	14.6		10.1	23.31		mg/Kg	☼	86	75 - 125	5	20
Beryllium	0.20	J	5.07	5.36		mg/Kg	☼	102	75 - 125	2	20
Cadmium	1.0	U	5.07	4.97		mg/Kg	☼	98	75 - 125	2	20
Calcium	606		507	1111		mg/Kg	☼	100	75 - 125	5	20
Chromium	7.9		10.1	17.53		mg/Kg	☼	95	75 - 125	6	20
Cobalt	2.6		5.07	7.95		mg/Kg	☼	106	75 - 125	3	20
Copper	7.5		10.1	17.47		mg/Kg	☼	99	75 - 125	9	20
Iron	9880		507	12000	4	mg/Kg	☼	419	75 - 125	16	20
Lead	1.9		5.07	7.17		mg/Kg	☼	104	75 - 125	3	20
Magnesium	1240		507	2071	N	mg/Kg	☼	163	75 - 125	14	20
Manganese	304		50.7	271.1	4	mg/Kg	☼	-66	75 - 125	12	20
Nickel	6.1		10.1	18.24		mg/Kg	☼	120	75 - 125	6	20
Potassium	376		507	899.2		mg/Kg	☼	103	75 - 125	15	20
Selenium	1.3	U	10.1	9.70		mg/Kg	☼	96	75 - 125	1	20
Silver	0.41	U	5.07	4.86		mg/Kg	☼	96	75 - 125	2	20
Sodium	62.5	J	507	547.9		mg/Kg	☼	96	75 - 125	0	20
Thallium	0.044	J	4.05	3.93		mg/Kg	☼	96	75 - 125	1	20
Vanadium	9.9		10.1	21.79		mg/Kg	☼	117	75 - 125	5	20
Zinc	12.1		50.7	59.24		mg/Kg	☼	93	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266735-E-8-J DU
Matrix: Solid
Analysis Batch: 870271

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870217

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	2820			2823		mg/Kg	☼			0.2	20
Antimony	1.0	U		1.0	U	mg/Kg	☼			NC	20
Arsenic	1.1			1.12		mg/Kg	☼			2	20
Barium	14.6			14.65		mg/Kg	☼			0.3	20
Beryllium	0.20	J		0.200	J	mg/Kg	☼			2	20
Cadmium	1.0	U		1.0	U	mg/Kg	☼			NC	20
Calcium	606			605.7		mg/Kg	☼			0.06	20
Chromium	7.9			7.96		mg/Kg	☼			1	20
Cobalt	2.6			2.57		mg/Kg	☼			0.5	20
Copper	7.5			7.50		mg/Kg	☼			0.6	20
Iron	9880			9862		mg/Kg	☼			0.2	20
Lead	1.9			1.90		mg/Kg	☼			0.5	20
Magnesium	1240			1246		mg/Kg	☼			0.1	20
Manganese	304			305.7		mg/Kg	☼			0.5	20
Nickel	6.1			6.10		mg/Kg	☼			0.2	20
Potassium	376			379.8		mg/Kg	☼			0.9	20
Selenium	1.3	U		1.3	U	mg/Kg	☼			NC	20
Silver	0.41	U		0.41	U	mg/Kg	☼			NC	20
Sodium	62.5	J		68.86	J	mg/Kg	☼			10	20
Thallium	0.044	J		0.0445	J	mg/Kg	☼			2	20
Vanadium	9.9			10.02		mg/Kg	☼			1	20
Zinc	12.1			12.19		mg/Kg	☼			0.6	20

Lab Sample ID: MB 460-870218/1-A
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U	20.0	5.5	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Antimony	1.0	U	1.0	0.15	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Arsenic	1.0	U	1.0	0.10	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Barium	2.0	U	2.0	0.15	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Beryllium	0.40	U	0.40	0.057	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Cadmium	1.0	U	1.0	0.11	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Calcium	100	U	100	17.7	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Chromium	2.0	U	2.0	0.91	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Cobalt	2.0	U	2.0	0.15	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Copper	2.0	U	2.0	0.37	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Iron	60.0	U	60.0	20.2	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Lead	0.60	U	0.60	0.20	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Magnesium	100	U	100	10.2	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Manganese	4.0	U	4.0	0.40	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Nickel	2.0	U	2.0	0.47	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Potassium	100	U	100	16.2	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Selenium	1.3	U	1.3	0.13	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Silver	0.40	U	0.40	0.089	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Sodium	100	U	100	45.7	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Thallium	0.40	U	0.40	0.041	mg/Kg		10/05/22 09:17	10/07/22 01:00	1
Vanadium	2.0	U	2.0	0.21	mg/Kg		10/05/22 09:17	10/07/22 01:00	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-870218/1-A
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	8.0	U	8.0	3.1	mg/Kg		10/05/22 09:17	10/07/22 01:00	1

Lab Sample ID: LCSSRM 460-870218/2-A ^10
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870218

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7690	7249		mg/Kg		94.3	45.3 - 154.7
Antimony	111	72.84		mg/Kg		65.6	0.7 - 205.4
Arsenic	112	120.1		mg/Kg		107.2	82.0 - 118.8
Barium	154	152.3		mg/Kg		98.9	81.8 - 118.2
Beryllium	121	120.4		mg/Kg		99.5	82.2 - 118.2
Cadmium	196	205.4		mg/Kg		104.8	82.1 - 118.4
Calcium	4590	4523		mg/Kg		98.5	81.0 - 119.2
Chromium	103	108.0		mg/Kg		104.8	80.8 - 118.4
Cobalt	46.4	48.79		mg/Kg		105.1	83.2 - 116.6
Copper	70.4	75.46		mg/Kg		107.2	83.4 - 116.6
Iron	13400	13230		mg/Kg		98.8	58.2 - 141.8
Lead	73.2	79.59		mg/Kg		108.7	82.8 - 117.3
Magnesium	2240	2267		mg/Kg		101.2	75.4 - 125.0
Manganese	373	417.0		mg/Kg		111.8	81.5 - 118.5
Nickel	249	272.3		mg/Kg		109.4	81.9 - 118.1
Potassium	1940	1888		mg/Kg		97.3	68.0 - 131.4
Selenium	215	233.8		mg/Kg		108.8	78.1 - 121.9
Silver	78.5	81.38		mg/Kg		103.7	78.9 - 121.1
Sodium	132	1000	U	mg/Kg		108.4	71.4 - 129.5
Thallium	67.7	71.46		mg/Kg		105.5	80.1 - 120.1
Vanadium	177	183.4		mg/Kg		103.6	78.0 - 122.0
Zinc	360	388.6		mg/Kg		108.0	79.7 - 120.3

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266794-E-1-D MS ^5
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870218

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7300		534	9425	4	mg/Kg	☼	398	75 - 125
Antimony	5.3	U	5.34	2.64	J N	mg/Kg	☼	49	75 - 125
Arsenic	4.6	J	10.7	17.38		mg/Kg	☼	119	75 - 125
Barium	136		10.7	238.8	4	mg/Kg	☼	963	75 - 125
Beryllium	0.48	J	5.34	5.61		mg/Kg	☼	96	75 - 125
Cadmium	5.3	U	5.34	6.03		mg/Kg	☼	113	75 - 125
Calcium	4930		534	12480	4	mg/Kg	☼	1414	75 - 125
Chromium	17.2		10.7	30.92	N	mg/Kg	☼	129	75 - 125
Cobalt	6.8	J	5.34	12.50		mg/Kg	☼	107	75 - 125
Copper	54.9		10.7	70.64	4	mg/Kg	☼	148	75 - 125
Iron	63000		534	89570	4	mg/Kg	☼	4982	75 - 125
Lead	179		5.34	316.2	4	mg/Kg	☼	2558	75 - 125
Magnesium	1750		534	2835	N	mg/Kg	☼	203	75 - 125
Manganese	1170		53.4	1340	4	mg/Kg	☼	321	75 - 125
Nickel	13.3		10.7	28.95	N	mg/Kg	☼	146	75 - 125
Potassium	470	J	534	1184	N	mg/Kg	☼	133	75 - 125
Selenium	6.7	U	10.7	10.50		mg/Kg	☼	98	75 - 125
Silver	2.1	U	5.34	5.17		mg/Kg	☼	97	75 - 125
Sodium	534	U	534	642.8		mg/Kg	☼	120	75 - 125
Thallium	2.1	U	4.27	4.28		mg/Kg	☼	100	75 - 125
Vanadium	30.8		10.7	44.60	N	mg/Kg	☼	129	75 - 125
Zinc	184		53.4	286.2	N	mg/Kg	☼	191	75 - 125

Lab Sample ID: 460-266794-E-1-E MSD ^5
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870218

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	7300		534	8198	4	mg/Kg	☼	168	75 - 125	14	20
Antimony	5.3	U	5.34	2.58	J N	mg/Kg	☼	48	75 - 125	2	20
Arsenic	4.6	J	10.7	15.65		mg/Kg	☼	103	75 - 125	10	20
Barium	136		10.7	209.2	4	mg/Kg	☼	685	75 - 125	13	20
Beryllium	0.48	J	5.34	5.58		mg/Kg	☼	96	75 - 125	0	20
Cadmium	5.3	U	5.34	5.88		mg/Kg	☼	110	75 - 125	3	20
Calcium	4930		534	5574	4 N	mg/Kg	☼	121	75 - 125	77	20
Chromium	17.2		10.7	26.32		mg/Kg	☼	85	75 - 125	16	20
Cobalt	6.8	J	5.34	11.22		mg/Kg	☼	83	75 - 125	11	20
Copper	54.9		10.7	65.88	4	mg/Kg	☼	103	75 - 125	7	20
Iron	63000		534	98060	4	mg/Kg	☼	6572	75 - 125	9	20
Lead	179		5.34	233.3	4 N	mg/Kg	☼	1007	75 - 125	30	20
Magnesium	1750		534	2575	N	mg/Kg	☼	154	75 - 125	10	20
Manganese	1170		53.4	1642	4	mg/Kg	☼	886	75 - 125	20	20
Nickel	13.3		10.7	23.16	N	mg/Kg	☼	92	75 - 125	22	20
Potassium	470	J	534	1185	N	mg/Kg	☼	134	75 - 125	0	20
Selenium	6.7	U	10.7	10.23		mg/Kg	☼	96	75 - 125	3	20
Silver	2.1	U	5.34	5.20		mg/Kg	☼	97	75 - 125	1	20
Sodium	534	U	534	601.3		mg/Kg	☼	113	75 - 125	7	20
Thallium	2.1	U	4.27	4.28		mg/Kg	☼	100	75 - 125	0	20
Vanadium	30.8		10.7	35.79	N	mg/Kg	☼	47	75 - 125	22	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266794-E-1-E MSD ^5
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870218

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	184		53.4	267.3	N	mg/Kg	☼	156	75 - 125	7	20

Lab Sample ID: 460-266794-E-1-C DU ^5
Matrix: Solid
Analysis Batch: 870468

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870218

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	7300		6920		mg/Kg	☼	5	20
Antimony	5.3	U	5.3	U	mg/Kg	☼	NC	20
Arsenic	4.6	J	4.78	J	mg/Kg	☼	3	20
Barium	136		188.1	*	mg/Kg	☼	32	20
Beryllium	0.48	J	0.670	J	mg/Kg	☼	34	20
Cadmium	5.3	U	5.3	U	mg/Kg	☼	NC	20
Calcium	4930		4820		mg/Kg	☼	2	20
Chromium	17.2		14.71		mg/Kg	☼	16	20
Cobalt	6.8	J	6.15	J	mg/Kg	☼	10	20
Copper	54.9		40.01	*	mg/Kg	☼	31	20
Iron	63000		144100	*	mg/Kg	☼	78	20
Lead	179		177.2		mg/Kg	☼	1	20
Magnesium	1750		2033		mg/Kg	☼	15	20
Manganese	1170		2373	*	mg/Kg	☼	68	20
Nickel	13.3		11.92		mg/Kg	☼	11	20
Potassium	470	J	545.9		mg/Kg	☼	15	20
Selenium	6.7	U	6.7	U	mg/Kg	☼	NC	20
Silver	2.1	U	2.1	U	mg/Kg	☼	NC	20
Sodium	534	U	534	U	mg/Kg	☼	NC	20
Thallium	2.1	U	2.1	U	mg/Kg	☼	NC	20
Vanadium	30.8		28.72		mg/Kg	☼	7	20
Zinc	184		179.3		mg/Kg	☼	3	20

Lab Sample ID: MB 460-870410/1-A
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U	20.0	5.5	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Antimony	1.0	U	1.0	0.15	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Arsenic	1.0	U	1.0	0.10	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Barium	2.0	U	2.0	0.15	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Beryllium	0.40	U	0.40	0.057	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Cadmium	1.0	U	1.0	0.11	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Calcium	100	U	100	17.7	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Chromium	2.0	U	2.0	0.91	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Cobalt	2.0	U	2.0	0.15	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Copper	2.0	U	2.0	0.37	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Iron	60.0	U	60.0	20.2	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Lead	0.60	U	0.60	0.20	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Magnesium	100	U	100	10.2	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Manganese	4.0	U	4.0	0.40	mg/Kg		10/06/22 08:43	10/07/22 21:08	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-870410/1-A
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	2.0	U	2.0	0.47	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Potassium	100	U	100	16.2	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Selenium	1.3	U	1.3	0.13	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Silver	0.40	U	0.40	0.089	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Sodium	100	U	100	45.7	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Thallium	0.40	U	0.40	0.041	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Vanadium	2.0	U	2.0	0.21	mg/Kg		10/06/22 08:43	10/07/22 21:08	1
Zinc	8.0	U	8.0	3.1	mg/Kg		10/06/22 08:43	10/07/22 21:08	1

Lab Sample ID: LCSSRM 460-870410/2-A ^10
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870410

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7690	7194		mg/Kg		93.5	45.3 - 154.7
Antimony	111	74.97		mg/Kg		67.5	0.7 - 205.4
Arsenic	112	115.7		mg/Kg		103.3	82.0 - 118.8
Barium	154	149.6		mg/Kg		97.2	81.8 - 118.2
Beryllium	121	118.4		mg/Kg		97.9	82.2 - 118.2
Cadmium	196	189.3		mg/Kg		96.6	82.1 - 118.4
Calcium	4590	4257		mg/Kg		92.7	81.0 - 119.2
Chromium	103	98.72		mg/Kg		95.8	80.8 - 118.4
Cobalt	46.4	44.74		mg/Kg		96.4	83.2 - 116.6
Copper	70.4	74.00		mg/Kg		105.1	83.4 - 116.6
Iron	13400	13350		mg/Kg		99.6	58.2 - 141.8
Lead	73.2	73.10		mg/Kg		99.9	82.8 - 117.3
Magnesium	2240	2160		mg/Kg		96.4	75.4 - 125.0
Manganese	373	362.0		mg/Kg		97.1	81.5 - 118.5
Nickel	249	250.4		mg/Kg		100.6	81.9 - 118.1
Potassium	1940	1878		mg/Kg		96.8	68.0 - 131.4
Selenium	215	219.2		mg/Kg		102.0	78.1 - 121.9
Silver	78.5	78.47		mg/Kg		100	78.9 - 121.1
Sodium	132	1000	U	mg/Kg		94.8	71.4 - 129.5
Thallium	67.7	69.51		mg/Kg		102.7	80.1 - 120.1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSSRM 460-870410/2-A ^10
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870410

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Vanadium			177	171.8		mg/Kg		97.1	78.0 - 122.0		
Zinc			360	349.1		mg/Kg		97.0	79.7 - 120.3		

Lab Sample ID: 460-266826-2 MS
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: SB-05_29-31_20221004
Prep Type: Total/NA
Prep Batch: 870410

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum	3380		518	4270	4	mg/Kg	☼	172	75 - 125		
Antimony	1.0	U	5.18	3.02	N	mg/Kg	☼	58	75 - 125		
Arsenic	0.72	J	10.4	10.52		mg/Kg	☼	95	75 - 125		
Barium	22.4		10.4	35.13		mg/Kg	☼	123	75 - 125		
Beryllium	0.19	J	5.18	5.31		mg/Kg	☼	99	75 - 125		
Cadmium	1.0	U	5.18	4.76		mg/Kg	☼	92	75 - 125		
Calcium	18100		518	14400	4	mg/Kg	☼	-705	75 - 125		
Chromium	9.7		10.4	21.99		mg/Kg	☼	119	75 - 125		
Cobalt	3.0		5.18	7.89		mg/Kg	☼	94	75 - 125		
Copper	8.9		10.4	20.49		mg/Kg	☼	112	75 - 125		
Iron	6800		518	11850	4	mg/Kg	☼	975	75 - 125		
Lead	4.8		5.18	9.07		mg/Kg	☼	81	75 - 125		
Magnesium	9550		518	8577	4	mg/Kg	☼	-187	75 - 125		
Manganese	190		51.8	270.7	N	mg/Kg	☼	156	75 - 125		
Nickel	6.7		10.4	16.74		mg/Kg	☼	97	75 - 125		
Potassium	694		518	1210		mg/Kg	☼	99	75 - 125		
Selenium	1.3	U	10.4	9.34		mg/Kg	☼	90	75 - 125		
Silver	0.41	U	5.18	4.54		mg/Kg	☼	88	75 - 125		
Sodium	175		518	672.2		mg/Kg	☼	96	75 - 125		
Thallium	0.41	U	4.15	3.90		mg/Kg	☼	94	75 - 125		
Vanadium	12.5		10.4	23.88		mg/Kg	☼	110	75 - 125		
Zinc	16.4		51.8	64.25		mg/Kg	☼	92	75 - 125		

Lab Sample ID: 460-266826-2 DU
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: SB-05_29-31_20221004
Prep Type: Total/NA
Prep Batch: 870410

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	3380			3502		mg/Kg	☼			4	20
Antimony	1.0	U		1.0	U	mg/Kg	☼			NC	20
Arsenic	0.72	J		0.847	J	mg/Kg	☼			16	20
Barium	22.4			30.00	*	mg/Kg	☼			29	20
Beryllium	0.19	J		0.200	J	mg/Kg	☼			5	20
Cadmium	1.0	U		1.0	U	mg/Kg	☼			NC	20
Calcium	18100			17040		mg/Kg	☼			6	20
Chromium	9.7			10.79		mg/Kg	☼			11	20
Cobalt	3.0			3.53		mg/Kg	☼			16	20
Copper	8.9			11.29	*	mg/Kg	☼			23	20
Iron	6800			7007		mg/Kg	☼			3	20
Lead	4.8			4.36		mg/Kg	☼			11	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266826-2 DU
Matrix: Solid
Analysis Batch: 870666

Client Sample ID: SB-05_29-31_20221004
Prep Type: Total/NA
Prep Batch: 870410

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Magnesium	9550		8465		mg/Kg	☼	12	20
Manganese	190		268.3	*	mg/Kg	☼	34	20
Nickel	6.7		8.13		mg/Kg	☼	19	20
Potassium	694		666.8		mg/Kg	☼	4	20
Selenium	1.3	U	1.3	U	mg/Kg	☼	NC	20
Silver	0.41	U	0.41	U	mg/Kg	☼	NC	20
Sodium	175		211.8		mg/Kg	☼	19	20
Thallium	0.41	U	0.0530	J	mg/Kg	☼	NC	20
Vanadium	12.5		11.77		mg/Kg	☼	6	20
Zinc	16.4		17.75		mg/Kg	☼	8	20

Lab Sample ID: MB 460-870740/1-A
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U	20.0	5.5	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Antimony	1.0	U	1.0	0.15	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Arsenic	1.0	U	1.0	0.10	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Barium	2.0	U	2.0	0.15	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Beryllium	0.40	U	0.40	0.057	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Cadmium	1.0	U	1.0	0.11	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Calcium	100	U	100	17.7	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Chromium	2.0	U	2.0	0.91	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Cobalt	2.0	U	2.0	0.15	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Copper	2.0	U	2.0	0.37	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Iron	60.0	U	60.0	20.2	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Lead	0.60	U	0.60	0.20	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Magnesium	100	U	100	10.2	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Manganese	4.0	U	4.0	0.40	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Nickel	2.0	U	2.0	0.47	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Potassium	100	U	100	16.2	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Selenium	1.3	U	1.3	0.13	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Silver	0.40	U	0.40	0.089	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Sodium	100	U	100	45.7	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Thallium	0.40	U	0.40	0.041	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Vanadium	2.0	U	2.0	0.21	mg/Kg		10/07/22 19:45	10/10/22 13:35	1
Zinc	8.0	U	8.0	3.1	mg/Kg		10/07/22 19:45	10/10/22 13:35	1

Lab Sample ID: LCSSRM 460-870740/2-A ^10
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	7690	7405		mg/Kg		96.3	45.3 - 154.7
Antimony	111	65.88		mg/Kg		59.4	0.7 - 205.4
Arsenic	112	114.6		mg/Kg		102.3	82.0 - 118.8

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSSRM 460-870740/2-A ^10
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Barium	154	154.5		mg/Kg		100.3	81.8 - 118.2
Beryllium	121	115.5		mg/Kg		95.4	82.2 - 118.2
Cadmium	196	191.0		mg/Kg		97.5	82.1 - 118.4
Calcium	4590	4444		mg/Kg		96.8	81.0 - 119.2
Chromium	103	100.0		mg/Kg		97.1	80.8 - 118.4
Cobalt	46.4	45.01		mg/Kg		97.0	83.2 - 116.6
Copper	70.4	71.20		mg/Kg		101.1	83.4 - 116.6
Iron	13400	13230		mg/Kg		98.7	58.2 - 141.8
Lead	73.2	75.01		mg/Kg		102.5	82.8 - 117.3
Magnesium	2240	2261		mg/Kg		100.9	75.4 - 125.0
Manganese	373	372.4		mg/Kg		99.8	81.5 - 118.5
Nickel	249	245.2		mg/Kg		98.5	81.9 - 118.1
Potassium	1940	1897		mg/Kg		97.8	68.0 - 131.4
Selenium	215	209.1		mg/Kg		97.3	78.1 - 121.9
Silver	78.5	79.77		mg/Kg		101.6	78.9 - 121.1
Sodium	132	952	U	mg/Kg		106.4	71.4 - 129.5
Thallium	67.7	68.21		mg/Kg		100.8	80.1 - 120.1
Vanadium	177	174.5		mg/Kg		98.6	78.0 - 122.0
Zinc	360	356.4		mg/Kg		99.0	79.7 - 120.3

Lab Sample ID: 460-266993-F-2-G MS
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8340		453	8604	4	mg/Kg	☼	57	75 - 125
Antimony	0.91	U	4.53	4.68		mg/Kg	☼	103	75 - 125
Arsenic	3.5		9.06	11.95		mg/Kg	☼	93	75 - 125
Barium	43.0		9.06	50.40	4	mg/Kg	☼	82	75 - 125
Beryllium	0.58		4.53	4.92		mg/Kg	☼	96	75 - 125
Cadmium	0.91	U	4.53	4.35		mg/Kg	☼	96	75 - 125
Calcium	1110		453	1781	N	mg/Kg	☼	148	75 - 125
Chromium	52.0		9.06	60.14	4	mg/Kg	☼	90	75 - 125
Cobalt	5.8		4.53	9.70		mg/Kg	☼	86	75 - 125
Copper	166		9.06	156.2	4	mg/Kg	☼	-107	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266993-F-2-G MS
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	27700		453	32910	4	mg/Kg	☼	1158	75 - 125
Lead	48.4		4.53	55.10	4	mg/Kg	☼	148	75 - 125
Magnesium	3450		453	3523	4	mg/Kg	☼	17	75 - 125
Manganese	340		45.3	339.9	4	mg/Kg	☼	-1	75 - 125
Nickel	17.1		9.06	23.96		mg/Kg	☼	76	75 - 125
Potassium	1870		453	2042	4	mg/Kg	☼	38	75 - 125
Selenium	0.15	J	9.06	8.24		mg/Kg	☼	89	75 - 125
Silver	0.36	U	4.53	4.16		mg/Kg	☼	92	75 - 125
Sodium	230		453	662.9		mg/Kg	☼	95	75 - 125
Thallium	0.12	J	3.62	3.72		mg/Kg	☼	99	75 - 125
Vanadium	43.5		9.06	65.77	4	mg/Kg	☼	246	75 - 125
Zinc	36.8		45.3	76.19		mg/Kg	☼	87	75 - 125

Lab Sample ID: 460-266993-F-2-H MSD
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	8340		432	9199	4	mg/Kg	☼	198	75 - 125	7	20
Antimony	0.91	U	4.32	4.63		mg/Kg	☼	107	75 - 125	1	20
Arsenic	3.5		8.65	15.51	N	mg/Kg	☼	139	75 - 125	26	20
Barium	43.0		8.65	57.57	4	mg/Kg	☼	169	75 - 125	13	20
Beryllium	0.58		4.32	5.08		mg/Kg	☼	104	75 - 125	3	20
Cadmium	0.91	U	4.32	4.37		mg/Kg	☼	101	75 - 125	0	20
Calcium	1110		432	1838	N	mg/Kg	☼	168	75 - 125	3	20
Chromium	52.0		8.65	67.94	4	mg/Kg	☼	185	75 - 125	12	20
Cobalt	5.8		4.32	11.37	N	mg/Kg	☼	129	75 - 125	16	20
Copper	166		8.65	241.7	4 N	mg/Kg	☼	877	75 - 125	43	20
Iron	27700		432	42250	4 N	mg/Kg	☼	3375	75 - 125	25	20
Lead	48.4		4.32	63.92	4	mg/Kg	☼	359	75 - 125	15	20
Magnesium	3450		432	3890	4	mg/Kg	☼	103	75 - 125	10	20
Nickel	17.1		8.65	26.72		mg/Kg	☼	112	75 - 125	11	20
Potassium	1870		432	2130	4	mg/Kg	☼	61	75 - 125	4	20
Selenium	0.15	J	8.65	7.83		mg/Kg	☼	89	75 - 125	5	20
Silver	0.36	U	4.32	4.07		mg/Kg	☼	94	75 - 125	2	20
Sodium	230		432	649.8		mg/Kg	☼	97	75 - 125	2	20
Thallium	0.12	J	3.46	3.67		mg/Kg	☼	103	75 - 125	1	20
Vanadium	43.5		8.65	67.17	4	mg/Kg	☼	274	75 - 125	2	20
Zinc	36.8		43.2	85.18		mg/Kg	☼	112	75 - 125	11	20

Lab Sample ID: 460-266993-F-2-H MSD ^2
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	340		43.2	945.5	4 N	mg/Kg	☼	1400	75 - 125	94	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266993-E-2-B DU
Matrix: Solid
Analysis Batch: 871052

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870740

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	8340		8350		mg/Kg	☼	0.07	20
Antimony	0.91	U	0.86	U	mg/Kg	☼	NC	20
Arsenic	3.5		3.55		mg/Kg	☼	2	20
Barium	43.0		42.99		mg/Kg	☼	0.07	20
Beryllium	0.58		0.575		mg/Kg	☼	0.3	20
Cadmium	0.91	U	0.86	U	mg/Kg	☼	NC	20
Calcium	1110		1087		mg/Kg	☼	2	20
Chromium	52.0		51.09		mg/Kg	☼	2	20
Cobalt	5.8		5.95		mg/Kg	☼	3	20
Copper	166		170.0		mg/Kg	☼	2	20
Iron	27700		28100		mg/Kg	☼	2	20
Lead	48.4		47.62		mg/Kg	☼	2	20
Magnesium	3450		3561		mg/Kg	☼	3	20
Manganese	340		345.3		mg/Kg	☼	1	20
Nickel	17.1		17.06		mg/Kg	☼	0.1	20
Potassium	1870		1874		mg/Kg	☼	0.3	20
Selenium	0.15	J	0.180	J	mg/Kg	☼	21	20
Silver	0.36	U	0.35	U	mg/Kg	☼	NC	20
Sodium	230		225.4		mg/Kg	☼	2	20
Thallium	0.12	J	0.130	J	mg/Kg	☼	4	20
Vanadium	43.5		44.47		mg/Kg	☼	2	20
Zinc	36.8		37.34		mg/Kg	☼	1	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 460-870160/10-A
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.0080	mg/Kg		10/05/22 00:06	10/05/22 03:55	1

Lab Sample ID: LCSSRM 460-870160/11-A ^40
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870160

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	13.2	15.66		mg/Kg		118.7	58.0 - 142.4

Lab Sample ID: 460-266735-E-8-H MS
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.026		0.0800	0.113		mg/Kg	☼	109	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 460-266735-F-8-G MSD
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.026		0.0792	0.112		mg/Kg	☼	109	80 - 120	1	20

Lab Sample ID: 460-266735-A-8-G DU
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870160

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.026		0.0276		mg/Kg	☼	8	20

Lab Sample ID: MB 460-870161/1-A
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.0080	mg/Kg		10/05/22 00:21	10/05/22 04:49	1

Lab Sample ID: LCSSRM 460-870161/2-A ^40
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870161

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	13.2	15.79		mg/Kg		119.6	58.0 - 142.4

Lab Sample ID: 460-266794-E-1-A MSD
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.11		0.0848	0.207		mg/Kg	☼	114	80 - 120	0	20

Lab Sample ID: 460-266794-F-1-B MS
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870161

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.11		0.0848	0.206		mg/Kg	☼	114	80 - 120

Lab Sample ID: 460-266794-A-1-A DU
Matrix: Solid
Analysis Batch: 870198

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870161

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.11		0.114		mg/Kg	☼	4	20

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 460-870359/10-A
Matrix: Solid
Analysis Batch: 870402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.0080	mg/Kg		10/06/22 00:22	10/06/22 03:54	1

Lab Sample ID: LCSSRM 460-870359/11-A ^40
Matrix: Solid
Analysis Batch: 870402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870359

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	13.2	15.54		mg/Kg		117.7	58.0 - 142.4

Lab Sample ID: 460-266826-2 MS
Matrix: Solid
Analysis Batch: 870402

Client Sample ID: SB-05_29-31_20221004
Prep Type: Total/NA
Prep Batch: 870359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.017	U	0.0850	0.0942		mg/Kg	☼	111	80 - 120

Lab Sample ID: 460-266826-2 DU
Matrix: Solid
Analysis Batch: 870402

Client Sample ID: SB-05_29-31_20221004
Prep Type: Total/NA
Prep Batch: 870359

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.017	U	0.00917	J	mg/Kg	☼	NC	20

Lab Sample ID: MB 460-870977/10-A
Matrix: Solid
Analysis Batch: 871013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.0080	mg/Kg		10/10/22 00:23	10/10/22 03:43	1

Lab Sample ID: LCSSRM 460-870977/11-A ^40
Matrix: Solid
Analysis Batch: 871013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870977

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	13.2	16.74		mg/Kg		126.8	58.0 - 142.4

Lab Sample ID: 460-266877-1 MS
Matrix: Solid
Analysis Batch: 871013

Client Sample ID: SB-01_0-2_20221005
Prep Type: Total/NA
Prep Batch: 870977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.018		0.0852	0.111		mg/Kg	☼	108	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 460-266877-1 DU
Matrix: Solid
Analysis Batch: 871013

Client Sample ID: SB-01_0-2_20221005
Prep Type: Total/NA
Prep Batch: 870977

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.018		0.0214		mg/Kg	☼	15	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 460-871018/1-A
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.0	U	2.0	0.85	mg/Kg		10/10/22 08:35	10/10/22 11:45	1

Lab Sample ID: LCSI 460-871018/3-A
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871018

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	708	759.9		mg/Kg		107	80 - 120

Lab Sample ID: LCSSRM 460-871018/2-A
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871018

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	15.9	15.40		mg/Kg		97.0	84.1 - 114.4

Lab Sample ID: 460-266877-2 MSI
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: SB-01_31-33_20221005
Prep Type: Total/NA
Prep Batch: 871018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.0	U	725	788.6		mg/Kg	☼	109	75 - 125

Lab Sample ID: 460-266877-2 MSS
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: SB-01_31-33_20221005
Prep Type: Total/NA
Prep Batch: 871018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.0	U	41.0	35.71		mg/Kg	☼	87	75 - 125

Lab Sample ID: 460-266877-2 DU
Matrix: Solid
Analysis Batch: 871076

Client Sample ID: SB-01_31-33_20221005
Prep Type: Total/NA
Prep Batch: 871018

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	2.0	U	2.0	U	mg/Kg	☼	NC	20

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: MB 460-871024/1-A
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871024

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.0	U	2.0	0.85	mg/Kg		10/10/22 08:32	10/10/22 12:10	1

Lab Sample ID: LCSI 460-871024/3-A
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871024

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	708	666.3		mg/Kg		94	80 - 120

Lab Sample ID: LCSSRM 460-871024/2-A
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871024

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	15.9	16.33		mg/Kg		102.8	84.1 - 114.4

Lab Sample ID: 460-266794-F-1-H MSS
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 871024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.1	U	42.7	37.56		mg/Kg	☼	88	75 - 125

Lab Sample ID: 460-266794-F-1-I MSI
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 871024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.1	U	756	759.2		mg/Kg	☼	100	75 - 125

Lab Sample ID: 460-266794-F-1-G DU
Matrix: Solid
Analysis Batch: 871102

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 871024

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	2.1	U	2.1	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 460-871123/1-A
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.0	U	2.0	0.85	mg/Kg		10/10/22 17:57	10/11/22 09:15	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSI 460-871123/3-A
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871123

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	708	666.9		mg/Kg		94	80 - 120

Lab Sample ID: LCSSRM 460-871123/2-A
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871123

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	15.9	15.22		mg/Kg		95.8	84.1 - 114.4

Lab Sample ID: 460-266802-E-4-Q MSS
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 871123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.4	U	47.1	41.65		mg/Kg	☼	88	75 - 125

Lab Sample ID: 460-266802-E-4-R MSI
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 871123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	2.4	U	833	825.7		mg/Kg	☼	99	75 - 125

Lab Sample ID: 460-266802-E-4-P DU
Matrix: Solid
Analysis Batch: 871259

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 871123

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	2.4	U	2.4	U	mg/Kg	☼	NC	20

Method: Moisture - Percent Moisture

Lab Sample ID: 460-266739-E-2 DU
Matrix: Solid
Analysis Batch: 870220

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	8.2		7.7		%		7	20
Percent Solids	91.8		92.3		%		0.6	20

Lab Sample ID: 460-266740-C-2 DU
Matrix: Solid
Analysis Batch: 870340

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.7		9.7		%		0.1	20
Percent Solids	90.3		90.3		%		0	20

Method: Moisture - Percent Moisture (Continued)

Lab Sample ID: 460-266846-A-2 DU
Matrix: Solid
Analysis Batch: 870340

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	17.9			19.8		%				10	20
Percent Solids	82.1			80.2		%				2	20

Lab Sample ID: 460-266974-A-7 DU
Matrix: Solid
Analysis Batch: 871138

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	10.0			10.8		%				8	20
Percent Solids	90.0			89.2		%				0.9	20

GC/MS VOA

Prep Batch: 870066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	5035	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	5035	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	5035	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	5035	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	5035	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	5035	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	5035	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	5035	
LB3 460-870066/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 870087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 460-870066/1-A	Method Blank	Total/NA	Solid	8260D	870066
MB 460-870087/7	Method Blank	Total/NA	Solid	8260D	
LCS 460-870087/3	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870087/4	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 870199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	8260D	870066
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	8260D	870066
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	8260D	870066
MB 460-870199/8	Method Blank	Total/NA	Solid	8260D	
LCS 460-870199/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870199/6	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 870277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	8260D	870066
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	8260D	870066
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	8260D	870066
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	8260D	870066
MB 460-870277/8	Method Blank	Total/NA	Solid	8260D	
LCS 460-870277/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870277/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

Prep Batch: 870338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	5035	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	5035	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	5035	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	5035	
LB3 460-870338/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 870378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 460-870338/1-A	Method Blank	Total/NA	Solid	8260D	870338
MB 460-870378/9	Method Blank	Total/NA	Solid	8260D	
LCS 460-870378/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870378/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

GC/MS VOA

Analysis Batch: 870379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	8260D	870066
MB 460-870379/7	Method Blank	Total/NA	Solid	8260D	
LCS 460-870379/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870379/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 870501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	8260D	870338
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	8260D	870338
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	8260D	870338
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	8260D	870338
MB 460-870501/8	Method Blank	Total/NA	Solid	8260D	
LCS 460-870501/3	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870501/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

Prep Batch: 870524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	5035	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	5035	
LB3 460-870524/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 870690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	8260D	870524
LB3 460-870524/1-A	Method Blank	Total/NA	Solid	8260D	870524
MB 460-870690/9	Method Blank	Total/NA	Solid	8260D	
LCS 460-870690/5	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870690/6	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 870776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	8260D	870524
MB 460-870776/8	Method Blank	Total/NA	Solid	8260D	
LCS 460-870776/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 460-870776/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

GC/MS Semi VOA

Prep Batch: 870137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	3546	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	3546	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	3546	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	3546	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	3546	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	3546	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	3546	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	3546	
MB 460-870137/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870137/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870137/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 870137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266779-B-1-B MS	Matrix Spike	Total/NA	Solid	3546	
460-266779-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 870154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	8270E	870137
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	8270E	870137
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	8270E	870137
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	8270E	870137
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	8270E	870137
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	8270E	870137
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	8270E	870137
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	8270E	870137
MB 460-870137/1-A	Method Blank	Total/NA	Solid	8270E	870137
LCS 460-870137/2-A	Lab Control Sample	Total/NA	Solid	8270E	870137
LCSD 460-870137/3-A	Lab Control Sample Dup	Total/NA	Solid	8270E	870137
460-266779-B-1-B MS	Matrix Spike	Total/NA	Solid	8270E	870137
460-266779-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270E	870137

Prep Batch: 870226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	3546	
460-266826-1 - DL	SB-05_0-2_20221004	Total/NA	Solid	3546	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	3546	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	3546	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	3546	
MB 460-870226/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870226/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870226/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266802-E-4-A MS	Matrix Spike	Total/NA	Solid	3546	
460-266802-E-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 870313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	8270E	870226
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	8270E	870226
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	8270E	870226
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	8270E	870226
MB 460-870226/1-A	Method Blank	Total/NA	Solid	8270E	870226
LCS 460-870226/2-A	Lab Control Sample	Total/NA	Solid	8270E	870226
LCSD 460-870226/3-A	Lab Control Sample Dup	Total/NA	Solid	8270E	870226
460-266802-E-4-A MS	Matrix Spike	Total/NA	Solid	8270E	870226
460-266802-E-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270E	870226

Analysis Batch: 870349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1 - DL	SB-05_0-2_20221004	Total/NA	Solid	8270E	870226

Prep Batch: 870659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 870659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1 - DL	SB-01_0-2_20221005	Total/NA	Solid	3546	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	3546	
MB 460-870659/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870659/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870659/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266324-F-1-A MS	Matrix Spike	Total/NA	Solid	3546	
460-266324-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 870755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	8270E	870659
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	8270E	870659
MB 460-870659/1-A	Method Blank	Total/NA	Solid	8270E	870659
LCS 460-870659/2-A	Lab Control Sample	Total/NA	Solid	8270E	870659
LCSD 460-870659/3-A	Lab Control Sample Dup	Total/NA	Solid	8270E	870659
460-266324-F-1-A MS	Matrix Spike	Total/NA	Solid	8270E	870659
460-266324-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270E	870659

Analysis Batch: 870853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1 - DL	SB-01_0-2_20221005	Total/NA	Solid	8270E	870659

GC Semi VOA

Prep Batch: 870100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	3546	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	3546	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	3546	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	3546	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	3546	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	3546	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	3546	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	3546	
MB 460-870100/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870100/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870100/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266735-E-8-D MS	Matrix Spike	Total/NA	Solid	3546	
460-266735-F-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 870105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	3546	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	3546	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	3546	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	3546	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	3546	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	3546	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	3546	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	3546	
MB 460-870105/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 870105 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-870105/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870105/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266735-E-8-F MS	Matrix Spike	Total/NA	Solid	3546	
460-266735-F-8-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 870169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	8081B	870105
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	8081B	870105
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	8081B	870105
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	8081B	870105
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	8081B	870105
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	8081B	870105
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	8081B	870105
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	8081B	870105
MB 460-870105/1-A	Method Blank	Total/NA	Solid	8081B	870105
LCS 460-870105/2-A	Lab Control Sample	Total/NA	Solid	8081B	870105
LCSD 460-870105/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	870105
460-266735-E-8-F MS	Matrix Spike	Total/NA	Solid	8081B	870105
460-266735-F-8-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8081B	870105

Analysis Batch: 870183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	8082A	870100
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	8082A	870100
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	8082A	870100
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	8082A	870100
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	8082A	870100
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	8082A	870100
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	8082A	870100
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	8082A	870100
MB 460-870100/1-A	Method Blank	Total/NA	Solid	8082A	870100
LCS 460-870100/2-A	Lab Control Sample	Total/NA	Solid	8082A	870100
LCSD 460-870100/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	870100
460-266735-E-8-D MS	Matrix Spike	Total/NA	Solid	8082A	870100
460-266735-F-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8082A	870100

Prep Batch: 870255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	3546	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	3546	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	3546	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	3546	
MB 460-870255/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870255/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870255/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266794-E-1-I MS	Matrix Spike	Total/NA	Solid	3546	
460-266794-E-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 870258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	3546	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	3546	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	3546	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	3546	
MB 460-870258/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870258/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870258/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
460-266794-E-1-L MS	Matrix Spike	Total/NA	Solid	3546	
460-266794-E-1-M MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 870367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	8081B	870258
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	8081B	870258
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	8081B	870258
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	8081B	870258
MB 460-870258/1-A	Method Blank	Total/NA	Solid	8081B	870258
LCS 460-870258/2-A	Lab Control Sample	Total/NA	Solid	8081B	870258
LCSD 460-870258/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	870258
460-266794-E-1-L MS	Matrix Spike	Total/NA	Solid	8081B	870258
460-266794-E-1-M MSD	Matrix Spike Duplicate	Total/NA	Solid	8081B	870258

Analysis Batch: 870434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	8082A	870255
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	8082A	870255
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	8082A	870255
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	8082A	870255
MB 460-870255/1-A	Method Blank	Total/NA	Solid	8082A	870255
LCS 460-870255/2-A	Lab Control Sample	Total/NA	Solid	8082A	870255
LCSD 460-870255/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	870255
460-266794-E-1-I MS	Matrix Spike	Total/NA	Solid	8082A	870255
460-266794-E-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8082A	870255

Prep Batch: 870672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	3546	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	3546	
MB 460-870672/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870672/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870672/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Prep Batch: 870673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	3546	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	3546	
MB 460-870673/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-870673/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 460-870673/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

QC Association Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

GC Semi VOA

Analysis Batch: 871004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	8081B	870672
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	8081B	870672
MB 460-870672/1-A	Method Blank	Total/NA	Solid	8081B	870672
LCS 460-870672/2-A	Lab Control Sample	Total/NA	Solid	8081B	870672
LCSD 460-870672/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	870672

Analysis Batch: 871035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	8082A	870673
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	8082A	870673
MB 460-870673/1-A	Method Blank	Total/NA	Solid	8082A	870673
LCS 460-870673/2-A	Lab Control Sample	Total/NA	Solid	8082A	870673
LCSD 460-870673/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	870673

Metals

Prep Batch: 870160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	7471B	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	7471B	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	7471B	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	7471B	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	7471B	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	7471B	
MB 460-870160/10-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-870160/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	
460-266735-E-8-H MS	Matrix Spike	Total/NA	Solid	7471B	
460-266735-F-8-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
460-266735-A-8-G DU	Duplicate	Total/NA	Solid	7471B	

Prep Batch: 870161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	7471B	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	7471B	
MB 460-870161/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-870161/2-A ^4	Lab Control Sample	Total/NA	Solid	7471B	
460-266794-E-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
460-266794-F-1-B MS	Matrix Spike	Total/NA	Solid	7471B	
460-266794-A-1-A DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 870198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	7471B	870160
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	7471B	870160
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	7471B	870160
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	7471B	870160
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	7471B	870160
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	7471B	870160
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	7471B	870161
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	7471B	870161
MB 460-870160/10-A	Method Blank	Total/NA	Solid	7471B	870160

Metals (Continued)

Analysis Batch: 870198 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-870161/1-A	Method Blank	Total/NA	Solid	7471B	870161
LCSSRM 460-870160/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	870160
LCSSRM 460-870161/2-A ^4	Lab Control Sample	Total/NA	Solid	7471B	870161
460-266735-E-8-H MS	Matrix Spike	Total/NA	Solid	7471B	870160
460-266735-F-8-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	870160
460-266794-E-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	870161
460-266794-F-1-B MS	Matrix Spike	Total/NA	Solid	7471B	870161
460-266735-A-8-G DU	Duplicate	Total/NA	Solid	7471B	870160
460-266794-A-1-A DU	Duplicate	Total/NA	Solid	7471B	870161

Prep Batch: 870217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	3050B	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	3050B	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	3050B	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	3050B	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	3050B	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	3050B	
MB 460-870217/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-870217/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
460-266735-E-8-K MS	Matrix Spike	Total/NA	Solid	3050B	
460-266735-E-8-L MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-266735-E-8-J DU	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 870218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	3050B	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	3050B	
MB 460-870218/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-870218/2-A ^1	Lab Control Sample	Total/NA	Solid	3050B	
460-266794-E-1-D MS ^5	Matrix Spike	Total/NA	Solid	3050B	
460-266794-E-1-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-266794-E-1-C DU ^5	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 870271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	6020B	870217
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	6020B	870217
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	6020B	870217
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	6020B	870217
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	6020B	870217
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	6020B	870217
MB 460-870217/1-A	Method Blank	Total/NA	Solid	6020B	870217
LCSSRM 460-870217/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	870217
460-266735-E-8-K MS	Matrix Spike	Total/NA	Solid	6020B	870217
460-266735-E-8-L MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	870217
460-266735-E-8-J DU	Duplicate	Total/NA	Solid	6020B	870217

Prep Batch: 870359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 870359 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	7471B	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	7471B	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	7471B	
MB 460-870359/10-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-870359/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	
460-266826-2 MS	SB-05_29-31_20221004	Total/NA	Solid	7471B	
460-266826-2 DU	SB-05_29-31_20221004	Total/NA	Solid	7471B	

Analysis Batch: 870402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	7471B	870359
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	7471B	870359
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	7471B	870359
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	7471B	870359
MB 460-870359/10-A	Method Blank	Total/NA	Solid	7471B	870359
LCSSRM 460-870359/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	870359
460-266826-2 MS	SB-05_29-31_20221004	Total/NA	Solid	7471B	870359
460-266826-2 DU	SB-05_29-31_20221004	Total/NA	Solid	7471B	870359

Prep Batch: 870410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	3050B	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	3050B	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	3050B	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	3050B	
MB 460-870410/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-870410/2-A ^1	Lab Control Sample	Total/NA	Solid	3050B	
460-266826-2 MS	SB-05_29-31_20221004	Total/NA	Solid	3050B	
460-266826-2 DU	SB-05_29-31_20221004	Total/NA	Solid	3050B	

Analysis Batch: 870468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	6020B	870218
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	6020B	870218
MB 460-870218/1-A	Method Blank	Total/NA	Solid	6020B	870218
LCSSRM 460-870218/2-A ^1	Lab Control Sample	Total/NA	Solid	6020B	870218
460-266794-E-1-D MS ^5	Matrix Spike	Total/NA	Solid	6020B	870218
460-266794-E-1-E MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6020B	870218
460-266794-E-1-C DU ^5	Duplicate	Total/NA	Solid	6020B	870218

Analysis Batch: 870666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	6020B	870410
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	6020B	870410
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	6020B	870410
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	6020B	870410
MB 460-870410/1-A	Method Blank	Total/NA	Solid	6020B	870410
LCSSRM 460-870410/2-A ^1	Lab Control Sample	Total/NA	Solid	6020B	870410
460-266826-2 MS	SB-05_29-31_20221004	Total/NA	Solid	6020B	870410
460-266826-2 DU	SB-05_29-31_20221004	Total/NA	Solid	6020B	870410

QC Association Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Metals

Prep Batch: 870740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	3050B	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	3050B	
MB 460-870740/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-870740/2-A ^1	Lab Control Sample	Total/NA	Solid	3050B	
460-266993-F-2-G MS	Matrix Spike	Total/NA	Solid	3050B	
460-266993-F-2-H MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-266993-F-2-H MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-266993-E-2-B DU	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 870977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	7471B	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	7471B	
MB 460-870977/10-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-870977/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	
460-266877-1 MS	SB-01_0-2_20221005	Total/NA	Solid	7471B	
460-266877-1 DU	SB-01_0-2_20221005	Total/NA	Solid	7471B	

Analysis Batch: 871013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	7471B	870977
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	7471B	870977
MB 460-870977/10-A	Method Blank	Total/NA	Solid	7471B	870977
LCSSRM 460-870977/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	870977
460-266877-1 MS	SB-01_0-2_20221005	Total/NA	Solid	7471B	870977
460-266877-1 DU	SB-01_0-2_20221005	Total/NA	Solid	7471B	870977

Analysis Batch: 871052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	6020B	870740
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	6020B	870740
MB 460-870740/1-A	Method Blank	Total/NA	Solid	6020B	870740
LCSSRM 460-870740/2-A ^1	Lab Control Sample	Total/NA	Solid	6020B	870740
460-266993-F-2-G MS	Matrix Spike	Total/NA	Solid	6020B	870740
460-266993-F-2-H MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	870740
460-266993-F-2-H MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	870740
460-266993-E-2-B DU	Duplicate	Total/NA	Solid	6020B	870740

General Chemistry

Analysis Batch: 870220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	Moisture	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	Moisture	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	Moisture	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	Moisture	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	Moisture	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	Moisture	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	Moisture	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	Moisture	
460-266739-E-2 DU	Duplicate	Total/NA	Solid	Moisture	

General Chemistry

Analysis Batch: 870340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	Moisture	
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	Moisture	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	Moisture	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	Moisture	
460-266740-C-2 DU	Duplicate	Total/NA	Solid	Moisture	
460-266846-A-2 DU	Duplicate	Total/NA	Solid	Moisture	

Prep Batch: 871018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	3060A	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	3060A	
MB 460-871018/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 460-871018/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSSRM 460-871018/2-A	Lab Control Sample	Total/NA	Solid	3060A	
460-266877-2 MSI	SB-01_31-33_20221005	Total/NA	Solid	3060A	
460-266877-2 MSS	SB-01_31-33_20221005	Total/NA	Solid	3060A	
460-266877-2 DU	SB-01_31-33_20221005	Total/NA	Solid	3060A	

Prep Batch: 871024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	3060A	
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	3060A	
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	3060A	
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	3060A	
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	3060A	
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	3060A	
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	3060A	
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	3060A	
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	3060A	
MB 460-871024/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 460-871024/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSSRM 460-871024/2-A	Lab Control Sample	Total/NA	Solid	3060A	
460-266794-F-1-H MSS	Matrix Spike	Total/NA	Solid	3060A	
460-266794-F-1-I MSI	Matrix Spike	Total/NA	Solid	3060A	
460-266794-F-1-G DU	Duplicate	Total/NA	Solid	3060A	

Analysis Batch: 871076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	7196A	871018
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	7196A	871018
MB 460-871018/1-A	Method Blank	Total/NA	Solid	7196A	871018
LCSI 460-871018/3-A	Lab Control Sample	Total/NA	Solid	7196A	871018
LCSSRM 460-871018/2-A	Lab Control Sample	Total/NA	Solid	7196A	871018
460-266877-2 MSI	SB-01_31-33_20221005	Total/NA	Solid	7196A	871018
460-266877-2 MSS	SB-01_31-33_20221005	Total/NA	Solid	7196A	871018
460-266877-2 DU	SB-01_31-33_20221005	Total/NA	Solid	7196A	871018

Analysis Batch: 871102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-1	SB-02_0-2_20221003	Total/NA	Solid	7196A	871024
460-266752-2	SB-02_31-33_20221003	Total/NA	Solid	7196A	871024

General Chemistry (Continued)

Analysis Batch: 871102 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-3	SB-03_0-2_20221003	Total/NA	Solid	7196A	871024
460-266752-4	SB-03_31-33_20221003	Total/NA	Solid	7196A	871024
460-266752-5	SB-04_0-2_20221003	Total/NA	Solid	7196A	871024
460-266752-6	SB-04_32-34_20221003	Total/NA	Solid	7196A	871024
460-266752-7	SB-07_0-2_20221003	Total/NA	Solid	7196A	871024
460-266752-8	SB-07_32-34_20221003	Total/NA	Solid	7196A	871024
460-266826-1	SB-05_0-2_20221004	Total/NA	Solid	7196A	871024
MB 460-871024/1-A	Method Blank	Total/NA	Solid	7196A	871024
LCSI 460-871024/3-A	Lab Control Sample	Total/NA	Solid	7196A	871024
LCSSRM 460-871024/2-A	Lab Control Sample	Total/NA	Solid	7196A	871024
460-266794-F-1-H MSS	Matrix Spike	Total/NA	Solid	7196A	871024
460-266794-F-1-I MSI	Matrix Spike	Total/NA	Solid	7196A	871024
460-266794-F-1-G DU	Duplicate	Total/NA	Solid	7196A	871024

Prep Batch: 871123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	3060A	
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	3060A	
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	3060A	
MB 460-871123/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 460-871123/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSSRM 460-871123/2-A	Lab Control Sample	Total/NA	Solid	3060A	
460-266802-E-4-Q MSS	Matrix Spike	Total/NA	Solid	3060A	
460-266802-E-4-R MSI	Matrix Spike	Total/NA	Solid	3060A	
460-266802-E-4-P DU	Duplicate	Total/NA	Solid	3060A	

Analysis Batch: 871138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-1	SB-01_0-2_20221005	Total/NA	Solid	Moisture	
460-266877-2	SB-01_31-33_20221005	Total/NA	Solid	Moisture	
460-266974-A-7 DU	Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 871259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-2	SB-05_29-31_20221004	Total/NA	Solid	7196A	871123
460-266826-3	SB-06_0-2_20221004	Total/NA	Solid	7196A	871123
460-266826-4	SB-06_29-31_20221004	Total/NA	Solid	7196A	871123
MB 460-871123/1-A	Method Blank	Total/NA	Solid	7196A	871123
LCSI 460-871123/3-A	Lab Control Sample	Total/NA	Solid	7196A	871123
LCSSRM 460-871123/2-A	Lab Control Sample	Total/NA	Solid	7196A	871123
460-266802-E-4-Q MSS	Matrix Spike	Total/NA	Solid	7196A	871123
460-266802-E-4-R MSI	Matrix Spike	Total/NA	Solid	7196A	871123
460-266802-E-4-P DU	Duplicate	Total/NA	Solid	7196A	871123

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-02_0-2_20221003
Lab Sample ID: 460-266752-1
Date Collected: 10/03/22 09:10
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-02_0-2_20221003
Lab Sample ID: 460-266752-1
Date Collected: 10/03/22 09:10
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:27
Total/NA	Analysis	8260D		1	870199	MZS	EET EDI	10/05/22 17:15
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 06:08
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 07:18
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 10:55
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:13
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:38
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 13:40

Client Sample ID: SB-02_31-33_20221003
Lab Sample ID: 460-266752-2
Date Collected: 10/03/22 09:15
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-02_31-33_20221003
Lab Sample ID: 460-266752-2
Date Collected: 10/03/22 09:15
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:28
Total/NA	Analysis	8260D		1	870199	MZS	EET EDI	10/05/22 17:39
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 06:31
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 07:30
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 11:12
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:16

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-02_31-33_20221003
Lab Sample ID: 460-266752-2
Date Collected: 10/03/22 09:15
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:40
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-03_0-2_20221003
Lab Sample ID: 460-266752-3
Date Collected: 10/03/22 15:00
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-03_0-2_20221003
Lab Sample ID: 460-266752-3
Date Collected: 10/03/22 15:00
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:28
Total/NA	Analysis	8260D		1	870199	MZS	EET EDI	10/05/22 18:05
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 06:54
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 07:43
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 11:29
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:18
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:42
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-03_31-33_20221003
Lab Sample ID: 460-266752-4
Date Collected: 10/03/22 15:05
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-03_31-33_20221003
Lab Sample ID: 460-266752-4
Date Collected: 10/03/22 15:05
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:29
Total/NA	Analysis	8260D		1	870277	AAT	EET EDI	10/06/22 01:11

Lab Chronicle

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Client Sample ID: SB-03_31-33_20221003
Lab Sample ID: 460-266752-4
Date Collected: 10/03/22 15:05
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 05:22
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 07:55
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 11:45
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:21
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:44
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-04_0-2_20221003
Lab Sample ID: 460-266752-5
Date Collected: 10/03/22 13:00
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-04_0-2_20221003
Lab Sample ID: 460-266752-5
Date Collected: 10/03/22 13:00
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:29
Total/NA	Analysis	8260D		1	870277	AAT	EET EDI	10/06/22 01:35
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 07:17
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 08:07
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 12:02
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:23
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:46
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-04_32-34_20221003
Lab Sample ID: 460-266752-6
Date Collected: 10/03/22 13:05
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-04_32-34_20221003
Lab Sample ID: 460-266752-6
Date Collected: 10/03/22 13:05
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:30
Total/NA	Analysis	8260D		1	870277	AAT	EET EDI	10/06/22 01:59
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 07:40
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 08:19
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 12:19
Total/NA	Prep	3050B			870217	FBT	EET EDI	10/05/22 09:10
Total/NA	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 19:25
Total/NA	Prep	7471B			870160	TJS	EET EDI	10/05/22 00:06
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 04:47
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-07_0-2_20221003
Lab Sample ID: 460-266752-7
Date Collected: 10/03/22 10:40
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-07_0-2_20221003
Lab Sample ID: 460-266752-7
Date Collected: 10/03/22 10:40
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:30
Total/NA	Analysis	8260D		1	870277	AAT	EET EDI	10/06/22 02:24
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 08:03
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 08:32
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 12:36
Total/NA	Prep	3050B			870218	FBT	EET EDI	10/05/22 09:17
Total/NA	Analysis	6020B		1	870468	MDC	EET EDI	10/07/22 01:21

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-07_0-2_20221003

Lab Sample ID: 460-266752-7
Date Collected: 10/03/22 10:40
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			870161	TJS	EET EDI	10/05/22 00:21
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 05:06
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-07_32-34_20221003

Lab Sample ID: 460-266752-8
Date Collected: 10/03/22 10:45
Matrix: Solid
Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870220	RLL	EET EDI	10/05/22 09:25

Client Sample ID: SB-07_32-34_20221003

Lab Sample ID: 460-266752-8
Date Collected: 10/03/22 10:45
Matrix: Solid
Date Received: 10/03/22 19:00
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870066	EMM	EET EDI	10/04/22 13:31
Total/NA	Analysis	8260D		1	870379	AAT	EET EDI	10/06/22 16:35
Total/NA	Prep	3546			870137	ARA	EET EDI	10/04/22 18:31
Total/NA	Analysis	8270E		1	870154	MME	EET EDI	10/05/22 05:45
Total/NA	Prep	3546			870105	ARA	EET EDI	10/04/22 16:51
Total/NA	Analysis	8081B		1	870169	FAM	EET EDI	10/05/22 08:44
Total/NA	Prep	3546			870100	ARA	EET EDI	10/04/22 16:32
Total/NA	Analysis	8082A		1	870183	JHP	EET EDI	10/05/22 12:52
Total/NA	Prep	3050B			870218	FBT	EET EDI	10/05/22 09:17
Total/NA	Analysis	6020B		1	870468	MDC	EET EDI	10/07/22 01:29
Total/NA	Prep	7471B			870161	TJS	EET EDI	10/05/22 00:21
Total/NA	Analysis	7471B		1	870198	TJS	EET EDI	10/05/22 05:07
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-05_0-2_20221004

Lab Sample ID: 460-266826-1
Date Collected: 10/04/22 10:30
Matrix: Solid
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870340	CJC	EET EDI	10/05/22 21:11

Client Sample ID: SB-05_0-2_20221004

Lab Sample ID: 460-266826-1
Date Collected: 10/04/22 10:30
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870338	JJC	EET EDI	10/05/22 20:07
Total/NA	Analysis	8260D		1	870501	AAT	EET EDI	10/07/22 01:54

Lab Chronicle

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Client Sample ID: SB-05_0-2_20221004
Lab Sample ID: 460-266826-1
Date Collected: 10/04/22 10:30
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			870226	OTS	EET EDI	10/05/22 10:12
Total/NA	Analysis	8270E		1	870313	MME	EET EDI	10/06/22 04:21
Total/NA	Prep	3546	DL		870226	OTS	EET EDI	10/05/22 10:12
Total/NA	Analysis	8270E	DL	10	870349	MME	EET EDI	10/06/22 08:50
Total/NA	Prep	3546			870258	FHW	EET EDI	10/05/22 12:37
Total/NA	Analysis	8081B		1	870367	FAM	EET EDI	10/06/22 07:09
Total/NA	Prep	3546			870255	FHW	EET EDI	10/05/22 12:32
Total/NA	Analysis	8082A		1	870434	JHP	EET EDI	10/06/22 11:18
Total/NA	Prep	3050B			870410	FBT	EET EDI	10/06/22 08:43
Total/NA	Analysis	6020B		1	870666	MDC	EET EDI	10/07/22 21:47
Total/NA	Prep	7471B			870359	TJS	EET EDI	10/06/22 00:22
Total/NA	Analysis	7471B		1	870402	TJS	EET EDI	10/06/22 04:21
Total/NA	Prep	3060A			871024	RAK	EET EDI	10/10/22 08:32 - 10/10/22 11:00 [1]
Total/NA	Analysis	7196A		1	871102	RAK	EET EDI	10/10/22 14:40

Client Sample ID: SB-05_29-31_20221004
Lab Sample ID: 460-266826-2
Date Collected: 10/04/22 10:35
Matrix: Solid
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870340	CJC	EET EDI	10/05/22 21:11

Client Sample ID: SB-05_29-31_20221004
Lab Sample ID: 460-266826-2
Date Collected: 10/04/22 10:35
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870338	JJC	EET EDI	10/05/22 20:09
Total/NA	Analysis	8260D		1	870501	AAT	EET EDI	10/07/22 02:19
Total/NA	Prep	3546			870226	OTS	EET EDI	10/05/22 10:12
Total/NA	Analysis	8270E		1	870313	MME	EET EDI	10/06/22 04:38
Total/NA	Prep	3546			870258	FHW	EET EDI	10/05/22 12:37
Total/NA	Analysis	8081B		1	870367	FAM	EET EDI	10/06/22 07:21
Total/NA	Prep	3546			870255	FHW	EET EDI	10/05/22 12:32
Total/NA	Analysis	8082A		1	870434	JHP	EET EDI	10/06/22 11:38
Total/NA	Prep	3050B			870410	FBT	EET EDI	10/06/22 08:43
Total/NA	Analysis	6020B		1	870666	MDC	EET EDI	10/07/22 21:21
Total/NA	Prep	7471B			870359	TJS	EET EDI	10/06/22 00:22
Total/NA	Analysis	7471B		1	870402	TJS	EET EDI	10/06/22 03:57
Total/NA	Prep	3060A			871123	VBG	EET EDI	10/10/22 17:57 - 10/10/22 20:10 [1]
Total/NA	Analysis	7196A		1	871259	GSM	EET EDI	10/11/22 10:10

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-06_0-2_20221004
Lab Sample ID: 460-266826-3
Date Collected: 10/04/22 14:00
Matrix: Solid
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870340	CJC	EET EDI	10/05/22 21:11

Client Sample ID: SB-06_0-2_20221004
Lab Sample ID: 460-266826-3
Date Collected: 10/04/22 14:00
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870338	JJC	EET EDI	10/05/22 20:10
Total/NA	Analysis	8260D		1	870501	AAT	EET EDI	10/07/22 02:43
Total/NA	Prep	3546			870226	OTS	EET EDI	10/05/22 10:12
Total/NA	Analysis	8270E		1	870313	MME	EET EDI	10/06/22 03:47
Total/NA	Prep	3546			870258	FHW	EET EDI	10/05/22 12:37
Total/NA	Analysis	8081B		1	870367	FAM	EET EDI	10/06/22 07:34
Total/NA	Prep	3546			870255	FHW	EET EDI	10/05/22 12:32
Total/NA	Analysis	8082A		1	870434	JHP	EET EDI	10/06/22 11:57
Total/NA	Prep	3050B			870410	FBT	EET EDI	10/06/22 08:43
Total/NA	Analysis	6020B		1	870666	MDC	EET EDI	10/07/22 21:50
Total/NA	Prep	7471B			870359	TJS	EET EDI	10/06/22 00:22
Total/NA	Analysis	7471B		1	870402	TJS	EET EDI	10/06/22 04:23
Total/NA	Prep	3060A			871123	VBG	EET EDI	10/10/22 17:57 - 10/10/22 20:10 [1]
Total/NA	Analysis	7196A		1	871259	GSM	EET EDI	10/11/22 10:10

Client Sample ID: SB-06_29-31_20221004
Lab Sample ID: 460-266826-4
Date Collected: 10/04/22 14:05
Matrix: Solid
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	870340	CJC	EET EDI	10/05/22 21:11

Client Sample ID: SB-06_29-31_20221004
Lab Sample ID: 460-266826-4
Date Collected: 10/04/22 14:05
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870338	JJC	EET EDI	10/05/22 20:12
Total/NA	Analysis	8260D		1	870501	AAT	EET EDI	10/07/22 03:08
Total/NA	Prep	3546			870226	OTS	EET EDI	10/05/22 10:12
Total/NA	Analysis	8270E		1	870313	MME	EET EDI	10/06/22 04:04
Total/NA	Prep	3546			870258	FHW	EET EDI	10/05/22 12:37
Total/NA	Analysis	8081B		1	870367	FAM	EET EDI	10/06/22 07:46
Total/NA	Prep	3546			870255	FHW	EET EDI	10/05/22 12:32
Total/NA	Analysis	8082A		1	870434	JHP	EET EDI	10/06/22 12:17
Total/NA	Prep	3050B			870410	FBT	EET EDI	10/06/22 08:43
Total/NA	Analysis	6020B		1	870666	MDC	EET EDI	10/07/22 21:52

Lab Chronicle

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Client Sample ID: SB-06_29-31_20221004
Lab Sample ID: 460-266826-4
Date Collected: 10/04/22 14:05
Matrix: Solid
Date Received: 10/04/22 18:30
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			870359	TJS	EET EDI	10/06/22 00:22
Total/NA	Analysis	7471B		1	870402	TJS	EET EDI	10/06/22 04:25
Total/NA	Prep	3060A			871123	VBG	EET EDI	10/10/22 17:57 - 10/10/22 20:10 [1]
Total/NA	Analysis	7196A		1	871259	GSM	EET EDI	10/11/22 10:10

Client Sample ID: SB-01_0-2_20221005
Lab Sample ID: 460-266877-1
Date Collected: 10/05/22 08:10
Matrix: Solid
Date Received: 10/05/22 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	871138	CJC	EET EDI	10/10/22 19:01

Client Sample ID: SB-01_0-2_20221005
Lab Sample ID: 460-266877-1
Date Collected: 10/05/22 08:10
Matrix: Solid
Date Received: 10/05/22 18:00
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870524	JJC	EET EDI	10/06/22 16:35
Total/NA	Analysis	8260D		1	870690	AAT	EET EDI	10/08/22 02:26
Total/NA	Prep	3546			870659	NAR	EET EDI	10/07/22 10:42
Total/NA	Analysis	8270E		1	870755	YAH	EET EDI	10/08/22 08:36
Total/NA	Prep	3546	DL		870659	NAR	EET EDI	10/07/22 10:42
Total/NA	Analysis	8270E	DL	5	870853	YAH	EET EDI	10/09/22 05:30
Total/NA	Prep	3546			870672	FHW	EET EDI	10/07/22 11:51
Total/NA	Analysis	8081B		1	871004	SAK	EET EDI	10/10/22 09:14
Total/NA	Prep	3546			870673	FHW	EET EDI	10/07/22 11:56
Total/NA	Analysis	8082A		1	871035	JHP	EET EDI	10/10/22 11:08
Total/NA	Prep	3050B			870740	GAE	EET EDI	10/07/22 19:45
Total/NA	Analysis	6020B		1	871052	MDC	EET EDI	10/10/22 14:19
Total/NA	Prep	7471B			870977	TJS	EET EDI	10/10/22 00:23
Total/NA	Analysis	7471B		1	871013	TJS	EET EDI	10/10/22 03:47
Total/NA	Prep	3060A			871018	GSM	EET EDI	10/10/22 08:35 - 10/10/22 09:35 [1]
Total/NA	Analysis	7196A		1	871076	GSM	EET EDI	10/10/22 11:45

Client Sample ID: SB-01_31-33_20221005
Lab Sample ID: 460-266877-2
Date Collected: 10/05/22 08:15
Matrix: Solid
Date Received: 10/05/22 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	871138	CJC	EET EDI	10/10/22 19:01

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Client Sample ID: SB-01_31-33_20221005
Date Collected: 10/05/22 08:15
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-2
Matrix: Solid
Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			870524	JJC	EET EDI	10/06/22 16:37
Total/NA	Analysis	8260D		1	870776	AAT	EET EDI	10/08/22 11:50
Total/NA	Prep	3546			870659	NAR	EET EDI	10/07/22 10:42
Total/NA	Analysis	8270E		1	870755	YAH	EET EDI	10/08/22 06:45
Total/NA	Prep	3546			870672	FHW	EET EDI	10/07/22 11:51
Total/NA	Analysis	8081B		1	871004	SAK	EET EDI	10/10/22 09:26
Total/NA	Prep	3546			870673	FHW	EET EDI	10/07/22 11:56
Total/NA	Analysis	8082A		1	871035	JHP	EET EDI	10/10/22 11:25
Total/NA	Prep	3050B			870740	GAE	EET EDI	10/07/22 19:45
Total/NA	Analysis	6020B		1	871052	MDC	EET EDI	10/10/22 14:21
Total/NA	Prep	7471B			870977	TJS	EET EDI	10/10/22 00:23
Total/NA	Analysis	7471B		1	871013	TJS	EET EDI	10/10/22 03:54
Total/NA	Prep	3060A			871018	GSM	EET EDI	10/10/22 08:35 - 10/10/22 09:35 [1]
Total/NA	Analysis	7196A		1	871076	GSM	EET EDI	10/10/22 11:45

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: AKRF Inc
Job ID: 460-266752-1
Project/Site: Ikos Senior Living

Laboratory: Eurofins Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270E	3546	Solid	3 & 4 Methylphenol
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET EDI
8081B	Organochlorine Pesticides (GC)	SW846	EET EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
7471B	Mercury (CVAA)	SW846	EET EDI
7196A	Chromium, Hexavalent	SW846	EET EDI
Moisture	Percent Moisture	EPA	EET EDI
3050B	Preparation, Metals	SW846	EET EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET EDI
3546	Microwave Extraction	SW846	EET EDI
5035	Closed System Purge and Trap	SW846	EET EDI
7471B	Preparation, Mercury	SW846	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-266752-1	SB-02_0-2_20221003	Solid	10/03/22 09:10	10/03/22 19:00
460-266752-2	SB-02_31-33_20221003	Solid	10/03/22 09:15	10/03/22 19:00
460-266752-3	SB-03_0-2_20221003	Solid	10/03/22 15:00	10/03/22 19:00
460-266752-4	SB-03_31-33_20221003	Solid	10/03/22 15:05	10/03/22 19:00
460-266752-5	SB-04_0-2_20221003	Solid	10/03/22 13:00	10/03/22 19:00
460-266752-6	SB-04_32-34_20221003	Solid	10/03/22 13:05	10/03/22 19:00
460-266752-7	SB-07_0-2_20221003	Solid	10/03/22 10:40	10/03/22 19:00
460-266752-8	SB-07_32-34_20221003	Solid	10/03/22 10:45	10/03/22 19:00
460-266826-1	SB-05_0-2_20221004	Solid	10/04/22 10:30	10/04/22 18:30
460-266826-2	SB-05_29-31_20221004	Solid	10/04/22 10:35	10/04/22 18:30
460-266826-3	SB-06_0-2_20221004	Solid	10/04/22 14:00	10/04/22 18:30
460-266826-4	SB-06_29-31_20221004	Solid	10/04/22 14:05	10/04/22 18:30
460-266877-1	SB-01_0-2_20221005	Solid	10/05/22 08:10	10/05/22 18:00
460-266877-2	SB-01_31-33_20221005	Solid	10/05/22 08:15	10/05/22 18:00

Chain of Custody Record

611419

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

266877

TAL-8210

Client Contact	Project Manager: Alyssa Brzychkowski	Site Contact: T. Gordon	Date: 10/5/2022	COC No: 1 of 2 COCs
Company Name: AKRF, Inc.	Tel/Email: abrzychkowski@akrf.com	Lab Contact: M. Thea	Carrier:	Sampler:
Address: 440 Park Avenue South 7th Fl	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: New York, NY 10016	☐ CALENDAR DAYS ☒ WORKING DAYS			Walk-in Client:
Phone: 646 388 9533	TAT if different from Below Standard			Lab Sampling:
Fax:	☐ 2 weeks			Job / SDG No.:
Project Name: IHOP	☒ 1 week			
Site: Astoria Queens, NY	☐ 2 days			
PO # 210134	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260-TCL/Add 2 VOCs	8082A - PCBs	8270B - mercury	6010B - TAL metals	8081B - TCL/Add 2 pest	8270E - TCL/Add 2 SVOCs	1,4-Dioxane	7196A - Hex Chrom 3196	Sample Specific Notes:
SB-01_0-2_20221005	10/5/22	0810	G	S	6	N	N	X	X	X	X	X	X	X	X	1
SB-01_31-33_20221005	↓	0815	G	S	6	N	N	X	X	X	X	X	X	X	X	2

SHORT HOLD

2 2 2 2

460-266877 Chain of Custody

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Category A Deliverable - EQuIS EDD

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
1	Tom Gordon	AKRF, Inc	10/5/2022		FedEx	10/6/22 1145
2	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
		FedEx	10/6/1600		FedEx	10/7/22 1200
3	Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			10/7/22 1800		TAL	10/7/22 1800

10/11/2022

26284 EG 232

Chain of Custody Record

611418

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

266817

TAL-8210

Client Contact	Project Manager: Asya Rychkov	Site Contact: T. Gordon	Date: 10/5/2022	COC No: 8 of 2 COCs
Company Name: AKRF Inc.	Tel/Email: arychkov@akrf.com	Lab Contact: M-Hall	Carrier:	Sampler:
Address: 440 Park Avenue South 7th Fl	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: New York, NY 10016	☐ CALENDAR DAYS ☒ WORKING DAYS			Walk-in Client:
Phone: 646-388-9533	TAT if different from Below: Standard			Lab Sampling:
Fax:	☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day			Job / SDG No.:
Project Name: Ikea				
Site: Astoria, Queens, NY				
P O # 210124				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8081B - TCL/Nat 375 Pest	8260B - TCL/Nat 375 ONLY	8270C - TCL/Nat 375 ONLY + 1,4-Dioxane	6010B - TAL Metals	7470A - Mercury	6020B - Dissolved TAL EE	7470A - Dissolved mercury EE	8082A - TCL/Nat 375 Vig	Sample Specific Notes:
TW-01_GW22Low	10/5/22	1030	G	GW	11	Y	N	X	X	X	X	X	X	X	X	3

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Category A Deliverables / EQUIS EDD

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
1	Tom Gordon	AKRF Inc	10/5/22			
2			1945/22			10/6/22 1045
3			1052, 1800	Received in Laboratory by:	Company:	Date/Time: 10/6/22 1800

26 2RQ 26 2209

10/11/2022

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Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 266877

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
3				<2											

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: _____ Date: 10/5/22

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-1

Login Number: 266752
List Number: 1
Creator: Narinkhum, Nudjarin 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-1

Login Number: 266826
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-1

Login Number: 266877
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-266752-2
Client Project/Site: Ikos Senior Living

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, New York 10016

Attn: Ms. Adrianna Bosco

Melissa Haas

Authorized for release by:
10/14/2022 12:42:30 PM

Melissa Haas, Senior Project Manager
(203)308-0880
Melissa.Haas@et.eurofinsus.com

LINKS

Review your project results through my EOL

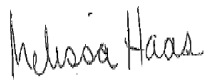
Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Melissa Haas
Senior Project Manager
10/14/2022 12:42:30 PM

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Definitions/Glossary

Client: AKRF Inc
Job ID: 460-266752-2
Project/Site: Ikos Senior Living

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Indicates an estimated value.
U	Analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Indicates an estimated value.
U	Analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*	Surrogate is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
U	Analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Sample result is greater than the MDL but below the CRDL
N	Spiked sample recovery is not within control limits.
U	Indicates analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-266752-2

Laboratory: Eurofins Edison

Narrative

CASE NARRATIVE

Client: AKRF Inc

Project: Ikos Senior Living

Report Number: 460-266752-2

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/3/2022 7:00 PM, 10/4/2022 6:30 PM and 10/5/2022 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.3º C, 2.6º C, 2.6º C and 3.3º C.

Receipt Exceptions

COC requests FF dissolved metals. We received two containers with nitric acid, but it is not specified on the labels which is dissolved. I labeled one that seems to be dissolved compared to the other one.

The client requested that the soils and ground waters collected for this project be split into 2 separate COCs.

The lab did not received filtered volume for field-filtered metals for the following sample: TW-01_20221005 (460-266877-3). Neither of the two metals bottles received were marked as dissolved metals. The client instructed the lab to randomly choose one bottle to filtered for dissolved metals.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6), TW-02_20221003 (460-266752-9) and TB_20221003 (460-266752-10) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260D. The samples were analyzed on 10/07/2022 and 10/10/2022.

The continuing calibration verification (CCV) analyzed in batch 460-870628 was outside the method criteria for the following analyte(s): Bromomethane (biased high); 1,2-Dichloropropane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Dichlorodifluoromethane and Methyl acetate (biased low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Job ID: 460-266752-2 (Continued)

Laboratory: Eurofins Edison (Continued)

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-870628 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870989 was outside the method criteria for the following analyte(s): Dichlorodifluoromethane and 1,1,2-Trichloro-1,2,2-trifluoroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No other difficulties were encountered during the Volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Methods 8270E. The samples were prepared on 10/05/2022, 10/06/2022 and 10/07/2022 and analyzed on 10/06/2022, 10/07/2022 and 10/08/2022.

The continuing calibration verification (CCV) analyzed in batch 460-870337 was outside the method criteria for the following analyte(s): 1,4-Dioxane, 2,2'-oxybis[1-chloropropane], 2,4-Dinitrotoluene, Atrazine, Benzaldehyde, Caprolactam and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-870235 and analytical batch 460-870337 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870558 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 2,2'-oxybis[1-chloropropane], 3,3'-Dichlorobenzidine, Benzaldehyde, Dibenz(a,h)anthracene, Hexachlorocyclopentadiene and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-870445 and analytical batch 460-870558 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 460-870554 was outside the method criteria for the following analyte(s): 2,2'-oxybis[1-chloropropane], 2,3,4,6-Tetrachlorophenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2-Nitroaniline, 4-Nitrophenol, Benzaldehyde, Benzo[g,h,i]perylene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-870657 and analytical batch 460-870554 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and

Job ID: 460-266752-2 (Continued)

Laboratory: Eurofins Edison (Continued)

TW-02_20221003 (460-266752-9) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 10/05/2022 and 10/07/2022 and analyzed on 10/06/2022 and 10/10/2022.

The DCB Decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits (high biased) on the confirmation column due to matrix interference: TW-03_20221004 (460-266826-5), (LCS 460-870354/2-A), (LCSD 460-870354/3-A) and (MB 460-870354/1-A). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-870354 and analytical batch 460-870370 recovered outside control limits for the following analytes: Endrin ketone n the secondary column. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The DCB Decachlorobiphenyl surrogate recovery for the CCV was outside acceptance limits (high biased) on the confirmation column : The recovery is within acceptance limits on the other column, therefore the data have been reported.(CCVIS 460-870370/3).

The Decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary column due to matrix interference: TW-01_20221005 (460-266877-3). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

The continuing calibration verification (CCV) associated with batch 460-871010 recovered outside acceptance criteria, low biased, for Endrin on the secondary column but within control limits on the primary column. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No other difficulties were encountered during the pesticides analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 10/05/2022 and 10/07/2022 and analyzed on 10/06/2022 and 10/10/2022.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

METALS - DISSOLVED)(ICP/MS)

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for Metals - Dissolved)(ICP/MS) in accordance with EPA SW-846 Method 6020B - Dissolved. The samples were prepared on 10/05/2022 and 10/10/2022 and analyzed on 10/05/2022, 10/06/2022, 10/10/2022 and 10/11/2022.

Sodium failed the recovery criteria low for the MS of sample 460-266466-1 in batch 460-871758. Calcium, Magnesium, Potassium and Sodium failed the recovery criteria high.

Sodium failed the recovery criteria low for the MS of sample TW-02_20221003MS (460-266752-9) in batch 460-870271. Calcium failed the recovery criteria high.
No other difficulties were encountered during the metals, diss. analysis.

All other quality control parameters were within the acceptance limits.

METALS - TOTAL (ICP/MS)

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for Metals - Total (ICP/MS) in accordance with EPA SW-846 Method 6020B - Total. The samples were prepared on 10/06/2022 and analyzed on 10/09/2022.

Job ID: 460-266752-2 (Continued)

Laboratory: Eurofins Edison (Continued)

Sample TW-01_20221005 (460-266877-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

MERCURY - DISSOLVED

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for mercury - Dissolved in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 10/07/2022 and 10/11/2022.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY

Samples TW-01_20221005 (460-266877-3), TW-03_20221004 (460-266826-5), TW-04_20221004 (460-266826-6) and TW-02_20221003 (460-266752-9) were analyzed for mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 10/05/2022, 10/07/2022 and 10/11/2022.

The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: TW-01_20221005 (460-266877-3). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion. The sample was preserved on 10/10/22 at 10:00 AM with concentrated nitric acid.

No other difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-02_20221003 — Lab Sample ID: 460-266752-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.4		1.0	0.33	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	6.7		1.0	0.22	ug/L	1		8260D	Total/NA
Tetrachloroethene	19		1.0	0.25	ug/L	1		8260D	Total/NA
Caprolactam - DL	98		50	11	ug/L	5		8270E	Total/NA
Aluminum	21.1	J	40.0	19.5	ug/L	1		6020B	Total/NA
Barium	103		4.0	0.91	ug/L	1		6020B	Total/NA
Calcium	88000		500	53.6	ug/L	1		6020B	Total/NA
Cobalt	1.7	J	4.0	0.71	ug/L	1		6020B	Total/NA
Magnesium	33700		200	46.9	ug/L	1		6020B	Total/NA
Manganese	439		8.0	1.5	ug/L	1		6020B	Total/NA
Nickel	4.3		4.0	0.91	ug/L	1		6020B	Total/NA
Potassium	3480		200	112	ug/L	1		6020B	Total/NA
Selenium	3.1		2.5	0.59	ug/L	1		6020B	Total/NA
Sodium	140000		500	163	ug/L	1		6020B	Total/NA
Barium	107		4.0	0.91	ug/L	1		6020B	Dissolved
Calcium	88300		500	53.6	ug/L	1		6020B	Dissolved
Cobalt	1.7	J	4.0	0.71	ug/L	1		6020B	Dissolved
Magnesium	34500		200	46.9	ug/L	1		6020B	Dissolved
Manganese	450		8.0	1.5	ug/L	1		6020B	Dissolved
Nickel	3.9	J	4.0	0.91	ug/L	1		6020B	Dissolved
Potassium	3590		200	112	ug/L	1		6020B	Dissolved
Selenium	2.9		2.5	0.59	ug/L	1		6020B	Dissolved
Sodium	141000		500	163	ug/L	1		6020B	Dissolved

Client Sample ID: TB_20221003 — Lab Sample ID: 460-266752-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.32	J	1.0	0.32	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	0.47	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: TW-03_20221004 — Lab Sample ID: 460-266826-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.7		1.0	0.33	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.41	J	1.0	0.22	ug/L	1		8260D	Total/NA
Tetrachloroethene	100		1.0	0.25	ug/L	1		8260D	Total/NA
Trichloroethene	0.69	J	1.0	0.31	ug/L	1		8260D	Total/NA
Aluminum	771		40.0	19.5	ug/L	1		6020B	Total/NA
Barium	140		4.0	0.91	ug/L	1		6020B	Total/NA
Calcium	116000		500	53.6	ug/L	1		6020B	Total/NA
Chromium	5.5		4.0	2.5	ug/L	1		6020B	Total/NA
Cobalt	1.6	J	4.0	0.71	ug/L	1		6020B	Total/NA
Copper	3.7	J	4.0	2.5	ug/L	1		6020B	Total/NA
Iron	1660		120	58.2	ug/L	1		6020B	Total/NA
Lead	2.7		1.2	0.84	ug/L	1		6020B	Total/NA
Magnesium	47500		200	46.9	ug/L	1		6020B	Total/NA
Manganese	261		8.0	1.5	ug/L	1		6020B	Total/NA
Nickel	4.3		4.0	0.91	ug/L	1		6020B	Total/NA
Potassium	5380		200	112	ug/L	1		6020B	Total/NA
Selenium	2.8		2.5	0.59	ug/L	1		6020B	Total/NA
Sodium	128000		500	163	ug/L	1		6020B	Total/NA
Vanadium	3.2	J	4.0	0.68	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-03_20221004 (Continued)

Lab Sample ID: 460-266826-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	6.7	J	16.0	6.5	ug/L	1		6020B	Total/NA
Aluminum	233		40.0	19.5	ug/L	1		6020B	Dissolved
Barium	125		4.0	0.91	ug/L	1		6020B	Dissolved
Calcium	106000		500	53.6	ug/L	1		6020B	Dissolved
Cobalt	1.1	J	4.0	0.71	ug/L	1		6020B	Dissolved
Copper	2.5	J	4.0	2.5	ug/L	1		6020B	Dissolved
Iron	492		120	58.2	ug/L	1		6020B	Dissolved
Lead	3.8		1.2	0.84	ug/L	1		6020B	Dissolved
Magnesium	45900		200	46.9	ug/L	1		6020B	Dissolved
Manganese	216		8.0	1.5	ug/L	1		6020B	Dissolved
Nickel	2.4	J	4.0	0.91	ug/L	1		6020B	Dissolved
Potassium	4950		200	112	ug/L	1		6020B	Dissolved
Selenium	2.2	J	2.5	0.59	ug/L	1		6020B	Dissolved
Sodium	127000		500	163	ug/L	1		6020B	Dissolved
Vanadium	2.0	J	4.0	0.68	ug/L	1		6020B	Dissolved

Client Sample ID: TW-04_20221004

Lab Sample ID: 460-266826-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	9.2		1.0	0.33	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.22	ug/L	1		8260D	Total/NA
Dichlorobromomethane	0.50	J	1.0	0.34	ug/L	1		8260D	Total/NA
Tetrachloroethene	330		1.0	0.25	ug/L	1		8260D	Total/NA
Trichloroethene	1.9		1.0	0.31	ug/L	1		8260D	Total/NA
Aluminum	2320		40.0	19.5	ug/L	1		6020B	Total/NA
Barium	171		4.0	0.91	ug/L	1		6020B	Total/NA
Beryllium	0.16	J	0.80	0.13	ug/L	1		6020B	Total/NA
Calcium	88700		500	53.6	ug/L	1		6020B	Total/NA
Chromium	14.6		4.0	2.5	ug/L	1		6020B	Total/NA
Cobalt	3.3	J	4.0	0.71	ug/L	1		6020B	Total/NA
Copper	8.6		4.0	2.5	ug/L	1		6020B	Total/NA
Iron	4430		120	58.2	ug/L	1		6020B	Total/NA
Lead	1.6		1.2	0.84	ug/L	1		6020B	Total/NA
Magnesium	33100		200	46.9	ug/L	1		6020B	Total/NA
Manganese	1090		8.0	1.5	ug/L	1		6020B	Total/NA
Nickel	11.7		4.0	0.91	ug/L	1		6020B	Total/NA
Potassium	8380		200	112	ug/L	1		6020B	Total/NA
Selenium	0.78	J	2.5	0.59	ug/L	1		6020B	Total/NA
Sodium	109000		500	163	ug/L	1		6020B	Total/NA
Vanadium	7.1		4.0	0.68	ug/L	1		6020B	Total/NA
Zinc	11.9	J	16.0	6.5	ug/L	1		6020B	Total/NA
Aluminum	797		40.0	19.5	ug/L	1		6020B	Dissolved
Barium	147		4.0	0.91	ug/L	1		6020B	Dissolved
Calcium	82600		500	53.6	ug/L	1		6020B	Dissolved
Chromium	3.9	J	4.0	2.5	ug/L	1		6020B	Dissolved
Cobalt	2.5	J	4.0	0.71	ug/L	1		6020B	Dissolved
Copper	4.9		4.0	2.5	ug/L	1		6020B	Dissolved
Iron	1630		120	58.2	ug/L	1		6020B	Dissolved
Lead	1.1	J	1.2	0.84	ug/L	1		6020B	Dissolved
Magnesium	30400		200	46.9	ug/L	1		6020B	Dissolved
Manganese	1020		8.0	1.5	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-04_20221004 (Continued)

Lab Sample ID: 460-266826-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	4.9		4.0	0.91	ug/L	1		6020B	Dissolved
Potassium	7610		200	112	ug/L	1		6020B	Dissolved
Selenium	0.85	J	2.5	0.59	ug/L	1		6020B	Dissolved
Sodium	107000		500	163	ug/L	1		6020B	Dissolved
Vanadium	2.8	J	4.0	0.68	ug/L	1		6020B	Dissolved

Client Sample ID: TW-01_20221005

Lab Sample ID: 460-266877-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	9.4		5.0	1.9	ug/L	1		8260D	Total/NA
Acetone	50		5.0	4.4	ug/L	1		8260D	Total/NA
Benzene	0.30	J	1.0	0.20	ug/L	1		8260D	Total/NA
Chloroform	1.6		1.0	0.33	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.22	ug/L	1		8260D	Total/NA
Tetrachloroethene	100		1.0	0.25	ug/L	1		8260D	Total/NA
Trichloroethene	2.1		1.0	0.31	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	2.1		1.0	0.59	ug/L	1		8270E	Total/NA
Benzo[a]pyrene	1.6		1.0	0.41	ug/L	1		8270E	Total/NA
Benzo[b]fluoranthene	2.2		2.0	0.68	ug/L	1		8270E	Total/NA
Benzo[g,h,i]perylene	1.7	J	10	0.70	ug/L	1		8270E	Total/NA
Bis(2-ethylhexyl) phthalate	6.2		2.0	0.80	ug/L	1		8270E	Total/NA
Chrysene	2.0		2.0	0.91	ug/L	1		8270E	Total/NA
Fluoranthene	4.0	J	10	0.84	ug/L	1		8270E	Total/NA
Indeno[1,2,3-cd]pyrene	1.6	J	2.0	0.94	ug/L	1		8270E	Total/NA
Phenanthrene	2.6	J	10	1.3	ug/L	1		8270E	Total/NA
Pyrene	3.4	J	10	1.6	ug/L	1		8270E	Total/NA
Aluminum	294000		200	97.5	ug/L	5		6020B	Total/NA
Antimony	1.9	J	2.0	0.76	ug/L	1		6020B	Total/NA
Arsenic	63.9		2.0	0.89	ug/L	1		6020B	Total/NA
Barium	3540		4.0	0.91	ug/L	1		6020B	Total/NA
Beryllium	14.2		0.80	0.13	ug/L	1		6020B	Total/NA
Cadmium	5.0		2.0	0.39	ug/L	1		6020B	Total/NA
Calcium	913000		2500	268	ug/L	5		6020B	Total/NA
Chromium	3390		4.0	2.5	ug/L	1		6020B	Total/NA
Cobalt	325		4.0	0.71	ug/L	1		6020B	Total/NA
Copper	1340		4.0	2.5	ug/L	1		6020B	Total/NA
Iron	971000		600	291	ug/L	5		6020B	Total/NA
Lead	857		1.2	0.84	ug/L	1		6020B	Total/NA
Magnesium	355000		200	46.9	ug/L	1		6020B	Total/NA
Manganese	24600		40.0	7.4	ug/L	5		6020B	Total/NA
Nickel	922		4.0	0.91	ug/L	1		6020B	Total/NA
Potassium	66400		200	112	ug/L	1		6020B	Total/NA
Selenium	1.5	J	2.5	0.59	ug/L	1		6020B	Total/NA
Silver	2.5		2.0	0.29	ug/L	1		6020B	Total/NA
Sodium	74600		500	163	ug/L	1		6020B	Total/NA
Thallium	5.1		0.80	0.21	ug/L	1		6020B	Total/NA
Vanadium	707		4.0	0.68	ug/L	1		6020B	Total/NA
Zinc	2640		16.0	6.5	ug/L	1		6020B	Total/NA
Antimony	1.9	J	2.0	0.76	ug/L	1		6020B	Dissolved
Barium	16.3		4.0	0.91	ug/L	1		6020B	Dissolved
Calcium	19500		500	53.6	ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-01_20221005 (Continued)

Lab Sample ID: 460-266877-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.91	J	4.0	0.71	ug/L	1		6020B	Dissolved
Magnesium	4050		200	46.9	ug/L	1		6020B	Dissolved
Manganese	185		8.0	1.5	ug/L	1		6020B	Dissolved
Nickel	9.9		4.0	0.91	ug/L	1		6020B	Dissolved
Potassium	4310		200	112	ug/L	1		6020B	Dissolved
Sodium	35300		500	163	ug/L	1		6020B	Dissolved
Mercury	1.7		0.20	0.091	ug/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-02_20221003
Date Collected: 10/03/22 11:30
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/07/22 15:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/07/22 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/07/22 15:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/07/22 15:12	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/07/22 15:12	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/07/22 15:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:12	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/07/22 15:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/07/22 15:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/07/22 15:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/07/22 15:12	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:12	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/07/22 15:12	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/07/22 15:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/07/22 15:12	1
Acetone	5.0	U	5.0	4.4	ug/L			10/07/22 15:12	1
Benzene	1.0	U	1.0	0.20	ug/L			10/07/22 15:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/07/22 15:12	1
Bromomethane	1.0	U *	1.0	0.55	ug/L			10/07/22 15:12	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/07/22 15:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/07/22 15:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/07/22 15:12	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/07/22 15:12	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/07/22 15:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
Chloroform	2.4		1.0	0.33	ug/L			10/07/22 15:12	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/07/22 15:12	1
cis-1,2-Dichloroethene	6.7		1.0	0.22	ug/L			10/07/22 15:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:12	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/07/22 15:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:12	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/07/22 15:12	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/07/22 15:12	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:12	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/07/22 15:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/07/22 15:12	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/07/22 15:12	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/07/22 15:12	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/07/22 15:12	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:12	1
Styrene	1.0	U	1.0	0.42	ug/L			10/07/22 15:12	1

Client Sample ID: TW-02_20221003
Date Collected: 10/03/22 11:30
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Lab Sample ID: 460-266752-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:12	1
Tetrachloroethene	19		1.0	0.25	ug/L			10/07/22 15:12	1
Toluene	1.0	U	1.0	0.38	ug/L			10/07/22 15:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/07/22 15:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:12	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/07/22 15:12	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/07/22 15:12	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/07/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*10/07/22 15:12*	*1*
4-Bromofluorobenzene	*114*		*76 - 120*		*10/07/22 15:12*	*1*
Dibromofluoromethane (Surr)	*113*		*77 - 124*		*10/07/22 15:12*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/07/22 15:12*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/05/22 10:48	10/06/22 05:09	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/05/22 10:48	10/06/22 05:09	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/05/22 10:48	10/06/22 05:09	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Methylphenol	10	U	10	0.67	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/05/22 10:48	10/06/22 05:09	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/05/22 10:48	10/06/22 05:09	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/05/22 10:48	10/06/22 05:09	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/05/22 10:48	10/06/22 05:09	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/05/22 10:48	10/06/22 05:09	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Methylphenol	10	U	10	0.65	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/05/22 10:48	10/06/22 05:09	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/05/22 10:48	10/06/22 05:09	1
Acenaphthene	10	U	10	1.1	ug/L		10/05/22 10:48	10/06/22 05:09	1
Acenaphthylene	10	U	10	0.82	ug/L		10/05/22 10:48	10/06/22 05:09	1
Acetophenone	10	U	10	2.3	ug/L		10/05/22 10:48	10/06/22 05:09	1

Client Sample ID: TW-02_20221003
Date Collected: 10/03/22 11:30
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-9
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	10	U	10	1.3	ug/L		10/05/22 10:48	10/06/22 05:09	1
Atrazine	2.0	U *	2.0	1.3	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzaldehyde	10	U	10	2.1	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/05/22 10:48	10/06/22 05:09	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/05/22 10:48	10/06/22 05:09	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/05/22 10:48	10/06/22 05:09	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/05/22 10:48	10/06/22 05:09	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/05/22 10:48	10/06/22 05:09	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/05/22 10:48	10/06/22 05:09	1
Carbazole	10	U	10	0.68	ug/L		10/05/22 10:48	10/06/22 05:09	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/05/22 10:48	10/06/22 05:09	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/05/22 10:48	10/06/22 05:09	1
Dibenzofuran	10	U	10	1.1	ug/L		10/05/22 10:48	10/06/22 05:09	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/05/22 10:48	10/06/22 05:09	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/05/22 10:48	10/06/22 05:09	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/05/22 10:48	10/06/22 05:09	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/05/22 10:48	10/06/22 05:09	1
Fluoranthene	10	U	10	0.84	ug/L		10/05/22 10:48	10/06/22 05:09	1
Fluorene	10	U	10	0.91	ug/L		10/05/22 10:48	10/06/22 05:09	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/05/22 10:48	10/06/22 05:09	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/05/22 10:48	10/06/22 05:09	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/05/22 10:48	10/06/22 05:09	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/05/22 10:48	10/06/22 05:09	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/05/22 10:48	10/06/22 05:09	1
Isophorone	10	U	10	0.80	ug/L		10/05/22 10:48	10/06/22 05:09	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/05/22 10:48	10/06/22 05:09	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/05/22 10:48	10/06/22 05:09	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/05/22 10:48	10/06/22 05:09	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/05/22 10:48	10/06/22 05:09	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/05/22 10:48	10/06/22 05:09	1
Phenanthrene	10	U	10	1.3	ug/L		10/05/22 10:48	10/06/22 05:09	1
Phenol	10	U	10	0.29	ug/L		10/05/22 10:48	10/06/22 05:09	1
Pyrene	10	U	10	1.6	ug/L		10/05/22 10:48	10/06/22 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*124*		*37 - 150*	*10/05/22 10:48*	*10/06/22 05:09*	*1*
2-Fluorobiphenyl	*104*		*46 - 139*	*10/05/22 10:48*	*10/06/22 05:09*	*1*
2-Fluorophenol (Surr)	*51*		*19 - 80*	*10/05/22 10:48*	*10/06/22 05:09*	*1*
Nitrobenzene-d5 (Surr)	*97*		*52 - 137*	*10/05/22 10:48*	*10/06/22 05:09*	*1*
Phenol-d5 (Surr)	*34*		*10 - 56*	*10/05/22 10:48*	*10/06/22 05:09*	*1*
Terphenyl-d14 (Surr)	*82*		*22 - 150*	*10/05/22 10:48*	*10/06/22 05:09*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**98**		50	11	ug/L		10/05/22 10:48	10/06/22 07:37	5

Client Sample ID: TW-02_20221003

Date Collected: 10/03/22 11:30
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Lab Sample ID: 460-266752-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	*81*		*37 - 150*	*10/05/22 10:48*	*10/06/22 07:37*	*5*
2-Fluorobiphenyl	*85*		*46 - 139*	*10/05/22 10:48*	*10/06/22 07:37*	*5*
2-Fluorophenol (Surr)	*39*		*19 - 80*	*10/05/22 10:48*	*10/06/22 07:37*	*5*
Nitrobenzene-d5 (Surr)	*79*		*52 - 137*	*10/05/22 10:48*	*10/06/22 07:37*	*5*
Phenol-d5 (Surr)	*26*		*10 - 56*	*10/05/22 10:48*	*10/06/22 07:37*	*5*
Terphenyl-d14 (Surr)	*70*		*22 - 150*	*10/05/22 10:48*	*10/06/22 07:37*	*5*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 07:27	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:27	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:27	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:27	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/05/22 23:06	10/06/22 07:27	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/05/22 23:06	10/06/22 07:27	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/05/22 23:06	10/06/22 07:27	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:27	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 07:27	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 07:27	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 07:27	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/05/22 23:06	10/06/22 07:27	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:27	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 07:27	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:27	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/05/22 23:06	10/06/22 07:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*108*		*15 - 121*	*10/05/22 23:06*	*10/06/22 07:27*	*1*
DCB Decachlorobiphenyl	*76*		*15 - 121*	*10/05/22 23:06*	*10/06/22 07:27*	*1*
Tetrachloro-m-xylene	*74*		*17 - 120*	*10/05/22 23:06*	*10/06/22 07:27*	*1*
Tetrachloro-m-xylene	*64*		*17 - 120*	*10/05/22 23:06*	*10/06/22 07:27*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:30	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:30	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:30	1

Client Sample ID: TW-02_20221003

Date Collected: 10/03/22 11:30
Date Received: 10/03/22 19:00

Lab Sample ID: 460-266752-9

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*12 - 150*	*10/05/22 22:53*	*10/06/22 11:30*	*1*
DCB Decachlorobiphenyl	*70*		*12 - 150*	*10/05/22 22:53*	*10/06/22 11:30*	*1*
Tetrachloro-m-xylene	*62*		*11 - 131*	*10/05/22 22:53*	*10/06/22 11:30*	*1*
Tetrachloro-m-xylene	*57*		*11 - 131*	*10/05/22 22:53*	*10/06/22 11:30*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**21.1**	**J**	40.0	19.5	ug/L		10/06/22 19:16	10/09/22 14:29	1
Antimony	2.0	U	2.0	0.76	ug/L		10/06/22 19:16	10/09/22 14:29	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/06/22 19:16	10/09/22 14:29	1
Barium	**103**		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:29	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/06/22 19:16	10/09/22 14:29	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/06/22 19:16	10/09/22 14:29	1
Calcium	**88000**		500	53.6	ug/L		10/06/22 19:16	10/09/22 14:29	1
Chromium	4.0	U	4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:29	1
Cobalt	**1.7**	**J**	4.0	0.71	ug/L		10/06/22 19:16	10/09/22 14:29	1
Copper	4.0	U	4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:29	1
Iron	120	U	120	58.2	ug/L		10/06/22 19:16	10/09/22 14:29	1
Lead	1.2	U	1.2	0.84	ug/L		10/06/22 19:16	10/09/22 14:29	1
Magnesium	**33700**		200	46.9	ug/L		10/06/22 19:16	10/09/22 14:29	1
Manganese	**439**		8.0	1.5	ug/L		10/06/22 19:16	10/09/22 14:29	1
Nickel	**4.3**		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:29	1
Potassium	**3480**		200	112	ug/L		10/06/22 19:16	10/09/22 14:29	1
Selenium	**3.1**		2.5	0.59	ug/L		10/06/22 19:16	10/09/22 14:29	1
Silver	2.0	U	2.0	0.29	ug/L		10/06/22 19:16	10/09/22 14:29	1
Sodium	**140000**		500	163	ug/L		10/06/22 19:16	10/09/22 14:29	1
Thallium	0.80	U	0.80	0.21	ug/L		10/06/22 19:16	10/09/22 14:29	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/06/22 19:16	10/09/22 14:29	1
Zinc	16.0	U	16.0	6.5	ug/L		10/06/22 19:16	10/09/22 14:29	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	19.5	ug/L		10/05/22 21:01	10/06/22 20:55	1
Antimony	2.0	U	2.0	0.76	ug/L		10/05/22 21:01	10/05/22 23:30	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/05/22 21:01	10/05/22 23:30	1
Barium	**107**		4.0	0.91	ug/L		10/05/22 21:01	10/05/22 23:30	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/05/22 21:01	10/05/22 23:30	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/05/22 21:01	10/05/22 23:30	1
Calcium	**88300**		500	53.6	ug/L		10/05/22 21:01	10/05/22 23:30	1
Chromium	4.0	U	4.0	2.5	ug/L		10/05/22 21:01	10/05/22 23:30	1
Cobalt	**1.7**	**J**	4.0	0.71	ug/L		10/05/22 21:01	10/05/22 23:30	1
Copper	4.0	U	4.0	2.5	ug/L		10/05/22 21:01	10/05/22 23:30	1
Iron	120	U	120	58.2	ug/L		10/05/22 21:01	10/05/22 23:30	1
Lead	1.2	U	1.2	0.84	ug/L		10/05/22 21:01	10/06/22 01:45	1
Magnesium	**34500**		200	46.9	ug/L		10/05/22 21:01	10/05/22 23:30	1
Manganese	**450**		8.0	1.5	ug/L		10/05/22 21:01	10/05/22 23:30	1
Nickel	**3.9**	**J**	4.0	0.91	ug/L		10/05/22 21:01	10/05/22 23:30	1
Potassium	**3590**		200	112	ug/L		10/05/22 21:01	10/05/22 23:30	1
Selenium	**2.9**		2.5	0.59	ug/L		10/05/22 21:01	10/05/22 23:30	1
Silver	2.0	U	2.0	0.29	ug/L		10/05/22 21:01	10/05/22 23:30	1

Client Sample ID: TW-02_20221003

Lab Sample ID: 460-266752-9

Date Collected: 10/03/22 11:30

Matrix: Water

Date Received: 10/03/22 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	141000		500	163	ug/L		10/05/22 21:01	10/05/22 23:30	1
Thallium	0.80	U	0.80	0.21	ug/L		10/05/22 21:01	10/05/22 23:30	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/05/22 21:01	10/05/22 23:30	1
Zinc	16.0	U	16.0	6.5	ug/L		10/05/22 21:01	10/05/22 23:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/05/22 10:46	10/05/22 14:07	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 14:18	10/07/22 15:41	1

Client Sample ID: TB_20221003

Lab Sample ID: 460-266752-10

Date Collected: 10/03/22 14:30

Matrix: Water

Date Received: 10/03/22 19:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/07/22 15:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/07/22 15:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/07/22 15:33	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/07/22 15:33	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/07/22 15:33	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/07/22 15:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:33	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/07/22 15:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/07/22 15:33	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/07/22 15:33	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/07/22 15:33	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:33	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/07/22 15:33	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/07/22 15:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/07/22 15:33	1
Acetone	5.0	U	5.0	4.4	ug/L			10/07/22 15:33	1
Benzene	1.0	U	1.0	0.20	ug/L			10/07/22 15:33	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/07/22 15:33	1
Bromomethane	1.0	U *	1.0	0.55	ug/L			10/07/22 15:33	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/07/22 15:33	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/07/22 15:33	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/07/22 15:33	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/07/22 15:33	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/07/22 15:33	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:33	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/07/22 15:33	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/07/22 15:33	1

Client Sample ID: TB_20221003

Lab Sample ID: 460-266752-10

Date Collected: 10/03/22 14:30

Matrix: Water

Date Received: 10/03/22 19:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/07/22 15:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:33	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/07/22 15:33	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/07/22 15:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:33	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/07/22 15:33	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/07/22 15:33	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:33	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/07/22 15:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/07/22 15:33	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/07/22 15:33	1
Methylene Chloride	0.32	J	1.0	0.32	ug/L			10/07/22 15:33	1
m-Xylene & p-Xylene	0.47	J	1.0	0.30	ug/L			10/07/22 15:33	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:33	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:33	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/07/22 15:33	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:33	1
Styrene	1.0	U	1.0	0.42	ug/L			10/07/22 15:33	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:33	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/07/22 15:33	1
Toluene	1.0	U	1.0	0.38	ug/L			10/07/22 15:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/07/22 15:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:33	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/07/22 15:33	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:33	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/07/22 15:33	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/07/22 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*10/07/22 15:33*	*1*
4-Bromofluorobenzene	*113*		*76 - 120*		*10/07/22 15:33*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*10/07/22 15:33*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/07/22 15:33*	*1*

Client Sample ID: TW-03_20221004

Lab Sample ID: 460-266826-5

Date Collected: 10/04/22 00:00

Matrix: Water

Date Received: 10/04/22 18:30

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/07/22 15:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/07/22 15:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/07/22 15:54	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/07/22 15:54	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/07/22 15:54	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/07/22 15:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:54	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/07/22 15:54	1

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-03_20221004
Date Collected: 10/04/22 00:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/07/22 15:54	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/07/22 15:54	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/07/22 15:54	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:54	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:54	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/07/22 15:54	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/07/22 15:54	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/07/22 15:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/07/22 15:54	1
Acetone	5.0	U	5.0	4.4	ug/L			10/07/22 15:54	1
Benzene	1.0	U	1.0	0.20	ug/L			10/07/22 15:54	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/07/22 15:54	1
Bromomethane	1.0	U *	1.0	0.55	ug/L			10/07/22 15:54	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/07/22 15:54	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/07/22 15:54	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/07/22 15:54	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/07/22 15:54	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/07/22 15:54	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
Chloroform	2.7		1.0	0.33	ug/L			10/07/22 15:54	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/07/22 15:54	1
cis-1,2-Dichloroethene	0.41	J	1.0	0.22	ug/L			10/07/22 15:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:54	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/07/22 15:54	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/07/22 15:54	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/07/22 15:54	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/07/22 15:54	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:54	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/07/22 15:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/07/22 15:54	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/07/22 15:54	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/07/22 15:54	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/07/22 15:54	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 15:54	1
Styrene	1.0	U	1.0	0.42	ug/L			10/07/22 15:54	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 15:54	1
Tetrachloroethene	100		1.0	0.25	ug/L			10/07/22 15:54	1
Toluene	1.0	U	1.0	0.38	ug/L			10/07/22 15:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/07/22 15:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 15:54	1
Trichloroethene	0.69	J	1.0	0.31	ug/L			10/07/22 15:54	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/07/22 15:54	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/07/22 15:54	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/07/22 15:54	1

Client Sample ID: TW-03_20221004
Date Collected: 10/04/22 00:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*10/07/22 15:54*	*1*
4-Bromofluorobenzene	*113*		*76 - 120*		*10/07/22 15:54*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*10/07/22 15:54*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/07/22 15:54*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:03	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:03	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/06/22 10:27	10/07/22 03:03	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Methylphenol	10	U	10	0.67	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/06/22 10:27	10/07/22 03:03	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:03	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/06/22 10:27	10/07/22 03:03	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/06/22 10:27	10/07/22 03:03	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/07/22 03:03	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Methylphenol	10	U	10	0.65	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:03	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/06/22 10:27	10/07/22 03:03	1
Acenaphthene	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:03	1
Acenaphthylene	10	U	10	0.82	ug/L		10/06/22 10:27	10/07/22 03:03	1
Acetophenone	10	U	10	2.3	ug/L		10/06/22 10:27	10/07/22 03:03	1
Anthracene	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:03	1
Atrazine	2.0	U *	2.0	1.3	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzaldehyde	10	U	10	2.1	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/06/22 10:27	10/07/22 03:03	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/06/22 10:27	10/07/22 03:03	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/06/22 10:27	10/07/22 03:03	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/06/22 10:27	10/07/22 03:03	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/07/22 03:03	1

Client Sample ID: TW-03_20221004
Date Collected: 10/04/22 00:00
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Lab Sample ID: 460-266826-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/06/22 10:27	10/07/22 03:03	1
Caprolactam	10	U	10	2.2	ug/L		10/06/22 10:27	10/07/22 03:03	1
Carbazole	10	U	10	0.68	ug/L		10/06/22 10:27	10/07/22 03:03	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/06/22 10:27	10/07/22 03:03	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/06/22 10:27	10/07/22 03:03	1
Dibenzofuran	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:03	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/06/22 10:27	10/07/22 03:03	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/06/22 10:27	10/07/22 03:03	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/06/22 10:27	10/07/22 03:03	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:03	1
Fluoranthene	10	U	10	0.84	ug/L		10/06/22 10:27	10/07/22 03:03	1
Fluorene	10	U	10	0.91	ug/L		10/06/22 10:27	10/07/22 03:03	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/06/22 10:27	10/07/22 03:03	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/06/22 10:27	10/07/22 03:03	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/06/22 10:27	10/07/22 03:03	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/07/22 03:03	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/06/22 10:27	10/07/22 03:03	1
Isophorone	10	U	10	0.80	ug/L		10/06/22 10:27	10/07/22 03:03	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/06/22 10:27	10/07/22 03:03	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/06/22 10:27	10/07/22 03:03	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/06/22 10:27	10/07/22 03:03	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/06/22 10:27	10/07/22 03:03	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/06/22 10:27	10/07/22 03:03	1
Phenanthrene	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:03	1
Phenol	10	U	10	0.29	ug/L		10/06/22 10:27	10/07/22 03:03	1
Pyrene	10	U	10	1.6	ug/L		10/06/22 10:27	10/07/22 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*37 - 150*	*10/06/22 10:27*	*10/07/22 03:03*	*1*
2-Fluorobiphenyl	*99*		*46 - 139*	*10/06/22 10:27*	*10/07/22 03:03*	*1*
2-Fluorophenol (Surr)	*46*		*19 - 80*	*10/06/22 10:27*	*10/07/22 03:03*	*1*
Nitrobenzene-d5 (Surr)	*98*		*52 - 137*	*10/06/22 10:27*	*10/07/22 03:03*	*1*
Phenol-d5 (Surr)	*29*		*10 - 56*	*10/06/22 10:27*	*10/07/22 03:03*	*1*
Terphenyl-d14 (Surr)	*43*		*22 - 150*	*10/06/22 10:27*	*10/07/22 03:03*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:55	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:55	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:55	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:55	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/05/22 23:06	10/06/22 06:55	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/05/22 23:06	10/06/22 06:55	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/05/22 23:06	10/06/22 06:55	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:55	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:55	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:55	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:55	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:55	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:55	1

Client Sample ID: TW-03_20221004

Date Collected: 10/04/22 00:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-5

Matrix: Water

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:55	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:55	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:55	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/05/22 23:06	10/06/22 06:55	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:55	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:55	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:55	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/05/22 23:06	10/06/22 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*125*	*	*15 - 121*	*10/05/22 23:06*	*10/06/22 06:55*	*1*
DCB Decachlorobiphenyl	*88*		*15 - 121*	*10/05/22 23:06*	*10/06/22 06:55*	*1*
Tetrachloro-m-xylene	*86*		*17 - 120*	*10/05/22 23:06*	*10/06/22 06:55*	*1*
Tetrachloro-m-xylene	*74*		*17 - 120*	*10/05/22 23:06*	*10/06/22 06:55*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 10:57	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 10:57	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*12 - 150*	*10/05/22 22:53*	*10/06/22 10:57*	*1*
DCB Decachlorobiphenyl	*79*		*12 - 150*	*10/05/22 22:53*	*10/06/22 10:57*	*1*
Tetrachloro-m-xylene	*70*		*11 - 131*	*10/05/22 22:53*	*10/06/22 10:57*	*1*
Tetrachloro-m-xylene	*64*		*11 - 131*	*10/05/22 22:53*	*10/06/22 10:57*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**771**		40.0	19.5	ug/L		10/06/22 19:16	10/09/22 14:32	1
Antimony	2.0	U	2.0	0.76	ug/L		10/06/22 19:16	10/09/22 14:32	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/06/22 19:16	10/09/22 14:32	1
Barium	**140**		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:32	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/06/22 19:16	10/09/22 14:32	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/06/22 19:16	10/09/22 14:32	1
Calcium	**116000**		500	53.6	ug/L		10/06/22 19:16	10/09/22 14:32	1
Chromium	**5.5**		4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:32	1
Cobalt	**1.6**	**J**	4.0	0.71	ug/L		10/06/22 19:16	10/09/22 14:32	1
Copper	**3.7**	**J**	4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:32	1
Iron	**1660**		120	58.2	ug/L		10/06/22 19:16	10/09/22 14:32	1
Lead	**2.7**		1.2	0.84	ug/L		10/06/22 19:16	10/09/22 14:32	1
Magnesium	**47500**		200	46.9	ug/L		10/06/22 19:16	10/09/22 14:32	1
Manganese	**261**		8.0	1.5	ug/L		10/06/22 19:16	10/09/22 14:32	1

Client Sample ID: TW-03_20221004

Lab Sample ID: 460-266826-5

Date Collected: 10/04/22 00:00

Matrix: Water

Date Received: 10/04/22 18:30

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	4.3		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:32	1
Potassium	5380		200	112	ug/L		10/06/22 19:16	10/09/22 14:32	1
Selenium	2.8		2.5	0.59	ug/L		10/06/22 19:16	10/09/22 14:32	1
Silver	2.0	U	2.0	0.29	ug/L		10/06/22 19:16	10/09/22 14:32	1
Sodium	128000		500	163	ug/L		10/06/22 19:16	10/09/22 14:32	1
Thallium	0.80	U	0.80	0.21	ug/L		10/06/22 19:16	10/09/22 14:32	1
Vanadium	3.2	J	4.0	0.68	ug/L		10/06/22 19:16	10/09/22 14:32	1
Zinc	6.7	J	16.0	6.5	ug/L		10/06/22 19:16	10/09/22 14:32	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	233		40.0	19.5	ug/L		10/10/22 20:34	10/10/22 22:33	1
Antimony	2.0	U	2.0	0.76	ug/L		10/10/22 20:34	10/10/22 22:33	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/10/22 20:34	10/10/22 22:33	1
Barium	125		4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:33	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/10/22 20:34	10/11/22 20:10	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/10/22 20:34	10/10/22 22:33	1
Calcium	106000		500	53.6	ug/L		10/10/22 20:34	10/10/22 22:33	1
Chromium	4.0	U	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:33	1
Cobalt	1.1	J	4.0	0.71	ug/L		10/10/22 20:34	10/10/22 22:33	1
Copper	2.5	J	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:33	1
Iron	492		120	58.2	ug/L		10/10/22 20:34	10/10/22 22:33	1
Lead	3.8		1.2	0.84	ug/L		10/10/22 20:34	10/10/22 22:33	1
Magnesium	45900		200	46.9	ug/L		10/10/22 20:34	10/10/22 22:33	1
Manganese	216		8.0	1.5	ug/L		10/10/22 20:34	10/10/22 22:33	1
Nickel	2.4	J	4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:33	1
Potassium	4950		200	112	ug/L		10/10/22 20:34	10/10/22 22:33	1
Selenium	2.2	J	2.5	0.59	ug/L		10/10/22 20:34	10/10/22 22:33	1
Silver	2.0	U	2.0	0.29	ug/L		10/10/22 20:34	10/10/22 22:33	1
Sodium	127000		500	163	ug/L		10/10/22 20:34	10/10/22 22:33	1
Thallium	0.80	U	0.80	0.21	ug/L		10/10/22 20:34	10/10/22 22:33	1
Vanadium	2.0	J	4.0	0.68	ug/L		10/10/22 20:34	10/10/22 22:33	1
Zinc	16.0	U	16.0	6.5	ug/L		10/10/22 20:34	10/10/22 22:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 11:23	10/07/22 14:25	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 14:18	10/07/22 15:42	1

Client Sample ID: TW-04_20221004

Lab Sample ID: 460-266826-6

Date Collected: 10/04/22 00:00

Matrix: Water

Date Received: 10/04/22 18:30

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/07/22 16:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/07/22 16:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/07/22 16:16	1

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Lab Sample ID: 460-266826-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/07/22 16:16	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/07/22 16:16	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/07/22 16:16	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/07/22 16:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/07/22 16:16	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 16:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/07/22 16:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/07/22 16:16	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/07/22 16:16	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/07/22 16:16	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/07/22 16:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/07/22 16:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/07/22 16:16	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/07/22 16:16	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/07/22 16:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/07/22 16:16	1
Acetone	5.0	U	5.0	4.4	ug/L			10/07/22 16:16	1
Benzene	1.0	U	1.0	0.20	ug/L			10/07/22 16:16	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/07/22 16:16	1
Bromomethane	1.0	U *	1.0	0.55	ug/L			10/07/22 16:16	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/07/22 16:16	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/07/22 16:16	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/07/22 16:16	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/07/22 16:16	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/07/22 16:16	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
Chloroform	9.2		1.0	0.33	ug/L			10/07/22 16:16	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/07/22 16:16	1
cis-1,2-Dichloroethene	2.3		1.0	0.22	ug/L			10/07/22 16:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 16:16	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
Dichlorobromomethane	0.50	J	1.0	0.34	ug/L			10/07/22 16:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/07/22 16:16	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/07/22 16:16	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/07/22 16:16	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 16:16	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/07/22 16:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/07/22 16:16	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/07/22 16:16	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/07/22 16:16	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/07/22 16:16	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 16:16	1
Styrene	1.0	U	1.0	0.42	ug/L			10/07/22 16:16	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 16:16	1
Tetrachloroethene	330		1.0	0.25	ug/L			10/07/22 16:16	1
Toluene	1.0	U	1.0	0.38	ug/L			10/07/22 16:16	1

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Lab Sample ID: 460-266826-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/07/22 16:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 16:16	1
Trichloroethene	1.9		1.0	0.31	ug/L			10/07/22 16:16	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/07/22 16:16	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/07/22 16:16	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/07/22 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*10/07/22 16:16*	*1*
4-Bromofluorobenzene	*112*		*76 - 120*		*10/07/22 16:16*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*10/07/22 16:16*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/07/22 16:16*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:24	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:24	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/06/22 10:27	10/07/22 03:24	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Methylphenol	10	U	10	0.67	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/06/22 10:27	10/07/22 03:24	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:24	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/06/22 10:27	10/07/22 03:24	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/06/22 10:27	10/07/22 03:24	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/07/22 03:24	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Methylphenol	10	U	10	0.65	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/06/22 10:27	10/07/22 03:24	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/06/22 10:27	10/07/22 03:24	1
Acenaphthene	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:24	1
Acenaphthylene	10	U	10	0.82	ug/L		10/06/22 10:27	10/07/22 03:24	1
Acetophenone	10	U	10	2.3	ug/L		10/06/22 10:27	10/07/22 03:24	1
Anthracene	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:24	1
Atrazine	2.0	U *	2.0	1.3	ug/L		10/06/22 10:27	10/07/22 03:24	1
Benzaldehyde	10	U	10	2.1	ug/L		10/06/22 10:27	10/07/22 03:24	1

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Lab Sample ID: 460-266826-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/06/22 10:27	10/07/22 03:24	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/06/22 10:27	10/07/22 03:24	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/06/22 10:27	10/07/22 03:24	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/06/22 10:27	10/07/22 03:24	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/06/22 10:27	10/07/22 03:24	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/06/22 10:27	10/07/22 03:24	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/06/22 10:27	10/07/22 03:24	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/07/22 03:24	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/06/22 10:27	10/07/22 03:24	1
Caprolactam	10	U	10	2.2	ug/L		10/06/22 10:27	10/07/22 03:24	1
Carbazole	10	U	10	0.68	ug/L		10/06/22 10:27	10/07/22 03:24	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/06/22 10:27	10/07/22 03:24	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/06/22 10:27	10/07/22 03:24	1
Dibenzofuran	10	U	10	1.1	ug/L		10/06/22 10:27	10/07/22 03:24	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/06/22 10:27	10/07/22 03:24	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/06/22 10:27	10/07/22 03:24	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/06/22 10:27	10/07/22 03:24	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/06/22 10:27	10/07/22 03:24	1
Fluoranthene	10	U	10	0.84	ug/L		10/06/22 10:27	10/07/22 03:24	1
Fluorene	10	U	10	0.91	ug/L		10/06/22 10:27	10/07/22 03:24	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/06/22 10:27	10/07/22 03:24	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/06/22 10:27	10/07/22 03:24	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/06/22 10:27	10/07/22 03:24	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/07/22 03:24	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/06/22 10:27	10/07/22 03:24	1
Isophorone	10	U	10	0.80	ug/L		10/06/22 10:27	10/07/22 03:24	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/06/22 10:27	10/07/22 03:24	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/06/22 10:27	10/07/22 03:24	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/06/22 10:27	10/07/22 03:24	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/06/22 10:27	10/07/22 03:24	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/06/22 10:27	10/07/22 03:24	1
Phenanthrene	10	U	10	1.3	ug/L		10/06/22 10:27	10/07/22 03:24	1
Phenol	10	U	10	0.29	ug/L		10/06/22 10:27	10/07/22 03:24	1
Pyrene	10	U	10	1.6	ug/L		10/06/22 10:27	10/07/22 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*37 - 150*	*10/06/22 10:27*	*10/07/22 03:24*	*1*
2-Fluorobiphenyl	*89*		*46 - 139*	*10/06/22 10:27*	*10/07/22 03:24*	*1*
2-Fluorophenol (Surr)	*40*		*19 - 80*	*10/06/22 10:27*	*10/07/22 03:24*	*1*
Nitrobenzene-d5 (Surr)	*88*		*52 - 137*	*10/06/22 10:27*	*10/07/22 03:24*	*1*
Phenol-d5 (Surr)	*25*		*10 - 56*	*10/06/22 10:27*	*10/07/22 03:24*	*1*
Terphenyl-d14 (Surr)	*37*		*22 - 150*	*10/06/22 10:27*	*10/07/22 03:24*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 07:11	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:11	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:11	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:11	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/05/22 23:06	10/06/22 07:11	1

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Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.020	U	0.020	0.015	ug/L		10/05/22 23:06	10/06/22 07:11	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/05/22 23:06	10/06/22 07:11	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:11	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 07:11	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 07:11	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 07:11	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/05/22 23:06	10/06/22 07:11	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 07:11	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 07:11	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 07:11	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/05/22 23:06	10/06/22 07:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*15 - 121*	*10/05/22 23:06*	*10/06/22 07:11*	*1*
DCB Decachlorobiphenyl	*71*		*15 - 121*	*10/05/22 23:06*	*10/06/22 07:11*	*1*
Tetrachloro-m-xylene	*69*		*17 - 120*	*10/05/22 23:06*	*10/06/22 07:11*	*1*
Tetrachloro-m-xylene	*60*		*17 - 120*	*10/05/22 23:06*	*10/06/22 07:11*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:14	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 11:14	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*12 - 150*	*10/05/22 22:53*	*10/06/22 11:14*	*1*
DCB Decachlorobiphenyl	*73*		*12 - 150*	*10/05/22 22:53*	*10/06/22 11:14*	*1*
Tetrachloro-m-xylene	*64*		*11 - 131*	*10/05/22 22:53*	*10/06/22 11:14*	*1*
Tetrachloro-m-xylene	*60*		*11 - 131*	*10/05/22 22:53*	*10/06/22 11:14*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2320**		40.0	19.5	ug/L		10/06/22 19:16	10/09/22 14:34	1
Antimony	2.0	U	2.0	0.76	ug/L		10/06/22 19:16	10/09/22 14:34	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/06/22 19:16	10/09/22 14:34	1
Barium	**171**		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:34	1
Beryllium	**0.16**	**J**	0.80	0.13	ug/L		10/06/22 19:16	10/09/22 14:34	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/06/22 19:16	10/09/22 14:34	1

Client Sample ID: TW-04_20221004
Date Collected: 10/04/22 00:00
Date Received: 10/04/22 18:30

Lab Sample ID: 460-266826-6
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	88700		500	53.6	ug/L		10/06/22 19:16	10/09/22 14:34	1
Chromium	14.6		4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:34	1
Cobalt	3.3	J	4.0	0.71	ug/L		10/06/22 19:16	10/09/22 14:34	1
Copper	8.6		4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:34	1
Iron	4430		120	58.2	ug/L		10/06/22 19:16	10/09/22 14:34	1
Lead	1.6		1.2	0.84	ug/L		10/06/22 19:16	10/09/22 14:34	1
Magnesium	33100		200	46.9	ug/L		10/06/22 19:16	10/09/22 14:34	1
Manganese	1090		8.0	1.5	ug/L		10/06/22 19:16	10/09/22 14:34	1
Nickel	11.7		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:34	1
Potassium	8380		200	112	ug/L		10/06/22 19:16	10/09/22 14:34	1
Selenium	0.78	J	2.5	0.59	ug/L		10/06/22 19:16	10/09/22 14:34	1
Silver	2.0	U	2.0	0.29	ug/L		10/06/22 19:16	10/09/22 14:34	1
Sodium	109000		500	163	ug/L		10/06/22 19:16	10/09/22 14:34	1
Thallium	0.80	U	0.80	0.21	ug/L		10/06/22 19:16	10/09/22 14:34	1
Vanadium	7.1		4.0	0.68	ug/L		10/06/22 19:16	10/09/22 14:34	1
Zinc	11.9	J	16.0	6.5	ug/L		10/06/22 19:16	10/09/22 14:34	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	797		40.0	19.5	ug/L		10/10/22 20:34	10/10/22 22:35	1
Antimony	2.0	U	2.0	0.76	ug/L		10/10/22 20:34	10/10/22 22:35	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/10/22 20:34	10/10/22 22:35	1
Barium	147		4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:35	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/10/22 20:34	10/11/22 20:13	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/10/22 20:34	10/10/22 22:35	1
Calcium	82600		500	53.6	ug/L		10/10/22 20:34	10/10/22 22:35	1
Chromium	3.9	J	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:35	1
Cobalt	2.5	J	4.0	0.71	ug/L		10/10/22 20:34	10/10/22 22:35	1
Copper	4.9		4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:35	1
Iron	1630		120	58.2	ug/L		10/10/22 20:34	10/10/22 22:35	1
Lead	1.1	J	1.2	0.84	ug/L		10/10/22 20:34	10/10/22 22:35	1
Magnesium	30400		200	46.9	ug/L		10/10/22 20:34	10/10/22 22:35	1
Manganese	1020		8.0	1.5	ug/L		10/10/22 20:34	10/10/22 22:35	1
Nickel	4.9		4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:35	1
Potassium	7610		200	112	ug/L		10/10/22 20:34	10/10/22 22:35	1
Selenium	0.85	J	2.5	0.59	ug/L		10/10/22 20:34	10/10/22 22:35	1
Silver	2.0	U	2.0	0.29	ug/L		10/10/22 20:34	10/10/22 22:35	1
Sodium	107000		500	163	ug/L		10/10/22 20:34	10/10/22 22:35	1
Thallium	0.80	U	0.80	0.21	ug/L		10/10/22 20:34	10/10/22 22:35	1
Vanadium	2.8	J	4.0	0.68	ug/L		10/10/22 20:34	10/10/22 22:35	1
Zinc	16.0	U	16.0	6.5	ug/L		10/10/22 20:34	10/10/22 22:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 11:23	10/07/22 14:30	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 14:18	10/07/22 15:44	1

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-01_20221005
Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/10/22 11:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/10/22 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/10/22 11:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/10/22 11:01	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/10/22 11:01	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/10/22 11:01	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/10/22 11:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/10/22 11:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/10/22 11:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/10/22 11:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/10/22 11:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/10/22 11:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/10/22 11:01	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/10/22 11:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/10/22 11:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/10/22 11:01	1
2-Butanone (MEK)	9.4		5.0	1.9	ug/L			10/10/22 11:01	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/10/22 11:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/10/22 11:01	1
Acetone	50		5.0	4.4	ug/L			10/10/22 11:01	1
Benzene	0.30	J	1.0	0.20	ug/L			10/10/22 11:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/10/22 11:01	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/10/22 11:01	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/10/22 11:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/10/22 11:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/10/22 11:01	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/10/22 11:01	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/10/22 11:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
Chloroform	1.6		1.0	0.33	ug/L			10/10/22 11:01	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/10/22 11:01	1
cis-1,2-Dichloroethene	14		1.0	0.22	ug/L			10/10/22 11:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/10/22 11:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/10/22 11:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/10/22 11:01	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/10/22 11:01	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/10/22 11:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/10/22 11:01	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/10/22 11:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/10/22 11:01	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/10/22 11:01	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/10/22 11:01	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/10/22 11:01	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/10/22 11:01	1
Styrene	1.0	U	1.0	0.42	ug/L			10/10/22 11:01	1

Client Sample ID: TW-01_20221005
Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/10/22 11:01	1
Tetrachloroethene	100		1.0	0.25	ug/L			10/10/22 11:01	1
Toluene	1.0	U	1.0	0.38	ug/L			10/10/22 11:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/10/22 11:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/10/22 11:01	1
Trichloroethene	2.1		1.0	0.31	ug/L			10/10/22 11:01	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/10/22 11:01	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/10/22 11:01	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/10/22 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*10/10/22 11:01*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*10/10/22 11:01*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 124*		*10/10/22 11:01*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/10/22 11:01*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/07/22 10:38	10/08/22 07:05	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/07/22 10:38	10/08/22 07:05	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/07/22 10:38	10/08/22 07:05	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Methylphenol	10	U	10	0.67	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/07/22 10:38	10/08/22 07:05	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/07/22 10:38	10/08/22 07:05	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/07/22 10:38	10/08/22 07:05	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/07/22 10:38	10/08/22 07:05	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/07/22 10:38	10/08/22 07:05	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Methylphenol	10	U	10	0.65	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/07/22 10:38	10/08/22 07:05	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/07/22 10:38	10/08/22 07:05	1
Acenaphthene	10	U	10	1.1	ug/L		10/07/22 10:38	10/08/22 07:05	1
Acenaphthylene	10	U	10	0.82	ug/L		10/07/22 10:38	10/08/22 07:05	1
Acetophenone	10	U	10	2.3	ug/L		10/07/22 10:38	10/08/22 07:05	1

Client Sample ID: TW-01_20221005
Lab Sample ID: 460-266877-3

Date Collected: 10/05/22 10:30
Matrix: Water
Date Received: 10/05/22 18:00

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	10	U	10	1.3	ug/L		10/07/22 10:38	10/08/22 07:05	1
Atrazine	2.0	U *	2.0	1.3	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzaldehyde	10	U	10	2.1	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzo[a]anthracene	2.1		1.0	0.59	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzo[a]pyrene	1.6		1.0	0.41	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzo[b]fluoranthene	2.2		2.0	0.68	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzo[g,h,i]perylene	1.7	J	10	0.70	ug/L		10/07/22 10:38	10/08/22 07:05	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/07/22 10:38	10/08/22 07:05	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/07/22 10:38	10/08/22 07:05	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/07/22 10:38	10/08/22 07:05	1
Bis(2-ethylhexyl) phthalate	6.2		2.0	0.80	ug/L		10/07/22 10:38	10/08/22 07:05	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/07/22 10:38	10/08/22 07:05	1
Caprolactam	10	U	10	2.2	ug/L		10/07/22 10:38	10/08/22 07:05	1
Carbazole	10	U	10	0.68	ug/L		10/07/22 10:38	10/08/22 07:05	1
Chrysene	2.0		2.0	0.91	ug/L		10/07/22 10:38	10/08/22 07:05	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/07/22 10:38	10/08/22 07:05	1
Dibenzofuran	10	U	10	1.1	ug/L		10/07/22 10:38	10/08/22 07:05	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/07/22 10:38	10/08/22 07:05	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/07/22 10:38	10/08/22 07:05	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/07/22 10:38	10/08/22 07:05	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/07/22 10:38	10/08/22 07:05	1
Fluoranthene	4.0	J	10	0.84	ug/L		10/07/22 10:38	10/08/22 07:05	1
Fluorene	10	U	10	0.91	ug/L		10/07/22 10:38	10/08/22 07:05	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/07/22 10:38	10/08/22 07:05	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/07/22 10:38	10/08/22 07:05	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/07/22 10:38	10/08/22 07:05	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/07/22 10:38	10/08/22 07:05	1
Indeno[1,2,3-cd]pyrene	1.6	J	2.0	0.94	ug/L		10/07/22 10:38	10/08/22 07:05	1
Isophorone	10	U	10	0.80	ug/L		10/07/22 10:38	10/08/22 07:05	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/07/22 10:38	10/08/22 07:05	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/07/22 10:38	10/08/22 07:05	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/07/22 10:38	10/08/22 07:05	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/07/22 10:38	10/08/22 07:05	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/07/22 10:38	10/08/22 07:05	1
Phenanthrene	2.6	J	10	1.3	ug/L		10/07/22 10:38	10/08/22 07:05	1
Phenol	10	U	10	0.29	ug/L		10/07/22 10:38	10/08/22 07:05	1
Pyrene	3.4	J	10	1.6	ug/L		10/07/22 10:38	10/08/22 07:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*128*		*37 - 150*	*10/07/22 10:38*	*10/08/22 07:05*	*1*
2-Fluorobiphenyl	*92*		*46 - 139*	*10/07/22 10:38*	*10/08/22 07:05*	*1*
2-Fluorophenol (Surr)	*55*		*19 - 80*	*10/07/22 10:38*	*10/08/22 07:05*	*1*
Nitrobenzene-d5 (Surr)	*90*		*52 - 137*	*10/07/22 10:38*	*10/08/22 07:05*	*1*
Phenol-d5 (Surr)	*44*		*10 - 56*	*10/07/22 10:38*	*10/08/22 07:05*	*1*
Terphenyl-d14 (Surr)	*65*		*22 - 150*	*10/07/22 10:38*	*10/08/22 07:05*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/07/22 11:20	10/10/22 12:11	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/07/22 11:20	10/10/22 12:11	1

Client Sample ID: TW-01_20221005
Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3
Matrix: Water

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/07/22 11:20	10/10/22 12:11	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:20	10/10/22 12:11	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/07/22 11:20	10/10/22 12:11	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/07/22 11:20	10/10/22 12:11	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/07/22 11:20	10/10/22 12:11	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/07/22 11:20	10/10/22 12:11	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/07/22 11:20	10/10/22 12:11	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/07/22 11:20	10/10/22 12:11	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/07/22 11:20	10/10/22 12:11	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/07/22 11:20	10/10/22 12:11	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/07/22 11:20	10/10/22 12:11	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/07/22 11:20	10/10/22 12:11	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/07/22 11:20	10/10/22 12:11	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/07/22 11:20	10/10/22 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*15 - 121*	*10/07/22 11:20*	*10/10/22 12:11*	*1*
DCB Decachlorobiphenyl	*126*	*	*15 - 121*	*10/07/22 11:20*	*10/10/22 12:11*	*1*
Tetrachloro-m-xylene	*95*		*17 - 120*	*10/07/22 11:20*	*10/10/22 12:11*	*1*
Tetrachloro-m-xylene	*100*		*17 - 120*	*10/07/22 11:20*	*10/10/22 12:11*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:40	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:40	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*121*		*12 - 150*	*10/07/22 11:11*	*10/10/22 11:40*	*1*
DCB Decachlorobiphenyl	*116*		*12 - 150*	*10/07/22 11:11*	*10/10/22 11:40*	*1*
Tetrachloro-m-xylene	*86*		*11 - 131*	*10/07/22 11:11*	*10/10/22 11:40*	*1*
Tetrachloro-m-xylene	*76*		*11 - 131*	*10/07/22 11:11*	*10/10/22 11:40*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**294000**		200	97.5	ug/L		10/06/22 19:16	10/09/22 14:44	5
Antimony	**1.9**	**J**	2.0	0.76	ug/L		10/06/22 19:16	10/09/22 14:37	1
Arsenic	**63.9**		2.0	0.89	ug/L		10/06/22 19:16	10/09/22 14:37	1

Client Sample ID: TW-01_20221005

Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	3540		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:37	1
Beryllium	14.2		0.80	0.13	ug/L		10/06/22 19:16	10/09/22 14:37	1
Cadmium	5.0		2.0	0.39	ug/L		10/06/22 19:16	10/09/22 14:37	1
Calcium	913000		2500	268	ug/L		10/06/22 19:16	10/09/22 14:44	5
Chromium	3390		4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:37	1
Cobalt	325		4.0	0.71	ug/L		10/06/22 19:16	10/09/22 14:37	1
Copper	1340		4.0	2.5	ug/L		10/06/22 19:16	10/09/22 14:37	1
Iron	971000		600	291	ug/L		10/06/22 19:16	10/09/22 14:44	5
Lead	857		1.2	0.84	ug/L		10/06/22 19:16	10/09/22 14:37	1
Magnesium	355000		200	46.9	ug/L		10/06/22 19:16	10/09/22 14:37	1
Manganese	24600		40.0	7.4	ug/L		10/06/22 19:16	10/09/22 14:44	5
Nickel	922		4.0	0.91	ug/L		10/06/22 19:16	10/09/22 14:37	1
Potassium	66400		200	112	ug/L		10/06/22 19:16	10/09/22 14:37	1
Selenium	1.5	J	2.5	0.59	ug/L		10/06/22 19:16	10/09/22 14:37	1
Silver	2.5		2.0	0.29	ug/L		10/06/22 19:16	10/09/22 14:37	1
Sodium	74600		500	163	ug/L		10/06/22 19:16	10/09/22 14:37	1
Thallium	5.1		0.80	0.21	ug/L		10/06/22 19:16	10/09/22 14:37	1
Vanadium	707		4.0	0.68	ug/L		10/06/22 19:16	10/09/22 14:37	1
Zinc	2640		16.0	6.5	ug/L		10/06/22 19:16	10/09/22 14:37	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	19.5	ug/L		10/10/22 20:34	10/10/22 23:21	1
Antimony	1.9	J	2.0	0.76	ug/L		10/10/22 20:34	10/10/22 23:21	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/10/22 20:34	10/10/22 23:21	1
Barium	16.3		4.0	0.91	ug/L		10/10/22 20:34	10/10/22 23:21	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/10/22 20:34	10/10/22 23:21	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/10/22 20:34	10/10/22 23:21	1
Calcium	19500		500	53.6	ug/L		10/10/22 20:34	10/10/22 23:21	1
Chromium	4.0	U	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 23:21	1
Cobalt	0.91	J	4.0	0.71	ug/L		10/10/22 20:34	10/10/22 23:21	1
Copper	4.0	U	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 23:21	1
Iron	120	U	120	58.2	ug/L		10/10/22 20:34	10/10/22 23:21	1
Lead	1.2	U	1.2	0.84	ug/L		10/10/22 20:34	10/10/22 23:21	1
Magnesium	4050		200	46.9	ug/L		10/10/22 20:34	10/10/22 23:21	1
Manganese	185		8.0	1.5	ug/L		10/10/22 20:34	10/10/22 23:21	1
Nickel	9.9		4.0	0.91	ug/L		10/10/22 20:34	10/10/22 23:21	1
Potassium	4310		200	112	ug/L		10/10/22 20:34	10/10/22 23:21	1
Selenium	2.5	U	2.5	0.59	ug/L		10/10/22 20:34	10/10/22 23:21	1
Silver	2.0	U	2.0	0.29	ug/L		10/10/22 20:34	10/10/22 23:21	1
Sodium	35300		500	163	ug/L		10/10/22 20:34	10/10/22 23:21	1
Thallium	0.80	U	0.80	0.21	ug/L		10/10/22 20:34	10/10/22 23:21	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/10/22 20:34	10/10/22 23:21	1
Zinc	16.0	U	16.0	6.5	ug/L		10/10/22 20:34	10/10/22 23:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.20	0.091	ug/L		10/11/22 11:10	10/11/22 14:36	1

Client Sample Results

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-01_20221005
Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/11/22 14:45	10/11/22 15:31	1

Surrogate Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-128)	(76-120)	(77-124)	(80-120)
460-266752-9	TW-02_20221003	104	114	113	99
460-266752-10	TB_20221003	106	113	111	98
460-266826-5	TW-03_20221004	103	113	109	98
460-266826-6	TW-04_20221004	101	112	108	97
460-266877-3	TW-01_20221005	109	106	107	100
LCS 460-870628/3	Lab Control Sample	98	116	105	100
LCS 460-870989/3	Lab Control Sample	109	105	107	100
LCSD 460-870628/4	Lab Control Sample Dup	101	117	107	99
LCSD 460-870989/18	Lab Control Sample Dup	104	105	102	99
MB 460-870628/7	Method Blank	101	118	110	96
MB 460-870989/8	Method Blank	110	106	104	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(37-150)	(46-139)	(19-80)	(52-137)	(10-56)	(22-150)
460-266752-9	TW-02_20221003	124	104	51	97	34	82
460-266752-9 - DL	TW-02_20221003	81	85	39	79	26	70
460-266826-5	TW-03_20221004	87	99	46	98	29	43
460-266826-6	TW-04_20221004	75	89	40	88	25	37
460-266877-3	TW-01_20221005	128	92	55	90	44	65
LCS 460-870235/2-A	Lab Control Sample	125	96	44	93	30	82
LCS 460-870445/2-A	Lab Control Sample	103	89	48	90	33	78
LCS 460-870657/2-A	Lab Control Sample	119	95	42	85	31	77
LCSD 460-870235/3-A	Lab Control Sample Dup	124	100	43	93	30	86
LCSD 460-870445/3-A	Lab Control Sample Dup	114	92	49	89	32	77
LCSD 460-870657/3-A	Lab Control Sample Dup	118	94	43	86	31	79
MB 460-870235/1-A	Method Blank	112	95	42	94	29	81
MB 460-870439/1-B	Method Blank	123	108	73	110	50	93
MB 460-870445/1-A	Method Blank	108	98	46	95	27	67
MB 460-870657/1-A	Method Blank	124	103	47	96	29	84

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: AKRF Inc
Job ID: 460-266752-2
Project/Site: Ikos Senior Living

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(15-121)	(15-121)	(17-120)	(17-120)
460-266752-9	TW-02_20221003	76	108	64	74
460-266826-5	TW-03_20221004	88	125 *	74	86
460-266826-6	TW-04_20221004	71	100	60	69
460-266842-J-4-B MS	Matrix Spike	98	82	59	57
460-266842-J-4-C MSD	Matrix Spike Duplicate	116	112	85	84
460-266877-3	TW-01_20221005	126 *	107	100	95
LCS 460-870354/2-A	Lab Control Sample	88	122 *	79	90
LCS 460-870667/2-A	Lab Control Sample	91	81	86	83
LCSD 460-870354/3-A	Lab Control Sample Dup	87	122 *	79	89
LCSD 460-870667/3-A	Lab Control Sample Dup	90	85	85	85
MB 460-870354/1-A	Method Blank	89	126 *	80	92
MB 460-870667/1-A	Method Blank	85	80	80	82

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(12-150)	(12-150)	(11-131)	(11-131)
460-266752-9	TW-02_20221003	70	69	57	62
460-266826-5	TW-03_20221004	79	80	64	70
460-266826-6	TW-04_20221004	73	74	60	64
460-266877-3	TW-01_20221005	116	121	76	86
LCS 460-870353/2-A	Lab Control Sample	81	80	71	73
LCS 460-870664/2-A	Lab Control Sample	116	124	75	109
LCSD 460-870353/3-A	Lab Control Sample Dup	78	76	68	69
LCSD 460-870664/3-A	Lab Control Sample Dup	119	124	101	107
MB 460-870353/1-A	Method Blank	83	78	68	69
MB 460-870664/1-A	Method Blank	110	107	97	97

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-870628/7
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/07/22 10:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/07/22 10:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/07/22 10:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/07/22 10:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/07/22 10:12	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/07/22 10:12	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/07/22 10:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/07/22 10:12	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 10:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/07/22 10:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/07/22 10:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/07/22 10:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/07/22 10:12	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/07/22 10:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/07/22 10:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/07/22 10:12	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/07/22 10:12	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/07/22 10:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/07/22 10:12	1
Acetone	5.0	U	5.0	4.4	ug/L			10/07/22 10:12	1
Benzene	1.0	U	1.0	0.20	ug/L			10/07/22 10:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/07/22 10:12	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/07/22 10:12	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/07/22 10:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/07/22 10:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/07/22 10:12	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/07/22 10:12	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/07/22 10:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/07/22 10:12	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/07/22 10:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/07/22 10:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 10:12	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/07/22 10:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/07/22 10:12	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/07/22 10:12	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/07/22 10:12	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 10:12	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/07/22 10:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/07/22 10:12	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/07/22 10:12	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/07/22 10:12	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/07/22 10:12	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/07/22 10:12	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870628/7
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.42	ug/L			10/07/22 10:12	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/07/22 10:12	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/07/22 10:12	1
Toluene	1.0	U	1.0	0.38	ug/L			10/07/22 10:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/07/22 10:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/07/22 10:12	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/07/22 10:12	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/07/22 10:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/07/22 10:12	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/07/22 10:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*10/07/22 10:12*	*1*
4-Bromofluorobenzene	*118*		*76 - 120*		*10/07/22 10:12*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*10/07/22 10:12*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/07/22 10:12*	*1*

Lab Sample ID: LCS 460-870628/3
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	18.1		ug/L		90	68 - 128
1,1,2,2-Tetrachloroethane	20.0	15.5		ug/L		77	63 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	13.9		ug/L		70	51 - 142
1,1,2-Trichloroethane	20.0	17.7		ug/L		89	74 - 125
1,1-Dichloroethane	20.0	15.9		ug/L		79	73 - 130
1,1-Dichloroethene	20.0	19.1		ug/L		95	68 - 133
1,2,3-Trichlorobenzene	20.0	20.4		ug/L		102	56 - 144
1,2,4-Trichlorobenzene	20.0	20.7		ug/L		103	67 - 132
1,2,4-Trimethylbenzene	20.0	18.2		ug/L		91	75 - 125
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		97	58 - 132
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	80 - 120
1,2-Dichloroethane	20.0	17.3		ug/L		87	66 - 129
1,2-Dichloropropane	20.0	15.4		ug/L		77	68 - 128
1,3,5-Trimethylbenzene	20.0	18.0		ug/L		90	75 - 125
1,3-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120
1,4-Dichlorobenzene	20.0	18.6		ug/L		93	80 - 120
2-Butanone (MEK)	100	109		ug/L		109	61 - 128
2-Hexanone	100	91.3		ug/L		91	61 - 134
4-Methyl-2-pentanone (MIBK)	100	92.4		ug/L		92	69 - 128
Acetone	100	90.1		ug/L		90	61 - 134
Benzene	20.0	16.8		ug/L		84	71 - 126
Bromoform	20.0	21.2		ug/L		106	48 - 144
Bromomethane	20.0	45.8	*	ug/L		229	32 - 150
Carbon disulfide	20.0	17.6		ug/L		88	64 - 138
Carbon tetrachloride	20.0	18.8		ug/L		94	61 - 131
Chlorobenzene	20.0	18.0		ug/L		90	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870628/3
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobromomethane	20.0	20.8		ug/L		104	67 - 126
Chlorodibromomethane	20.0	20.2		ug/L		101	62 - 130
Chloroethane	20.0	22.8		ug/L		114	42 - 150
Chloroform	20.0	18.3		ug/L		92	78 - 125
Chloromethane	20.0	18.3		ug/L		92	43 - 150
cis-1,2-Dichloroethene	20.0	18.2		ug/L		91	78 - 121
cis-1,3-Dichloropropene	20.0	16.4		ug/L		82	74 - 125
Cyclohexane	20.0	14.5		ug/L		72	60 - 133
Dichlorobromomethane	20.0	17.9		ug/L		89	76 - 121
Dichlorodifluoromethane	20.0	12.1		ug/L		61	33 - 150
Ethylbenzene	20.0	19.1		ug/L		96	78 - 120
Ethylene Dibromide	20.0	18.8		ug/L		94	79 - 126
Isopropylbenzene	20.0	19.6		ug/L		98	79 - 125
Methyl acetate	40.0	29.2		ug/L		73	55 - 146
Methyl tert-butyl ether	20.0	20.0		ug/L		100	72 - 131
Methylcyclohexane	20.0	13.5		ug/L		68	54 - 139
Methylene Chloride	20.0	17.5		ug/L		87	74 - 127
m-Xylene & p-Xylene	20.0	18.9		ug/L		94	78 - 120
n-Butylbenzene	20.0	17.4		ug/L		87	69 - 135
N-Propylbenzene	20.0	16.9		ug/L		84	68 - 129
o-Xylene	20.0	19.4		ug/L		97	78 - 120
sec-Butylbenzene	20.0	18.1		ug/L		91	73 - 129
Styrene	20.0	19.2		ug/L		96	75 - 127
tert-Butylbenzene	20.0	18.3		ug/L		91	72 - 124
Tetrachloroethene	20.0	20.4		ug/L		102	70 - 127
Toluene	20.0	16.9		ug/L		84	78 - 120
trans-1,2-Dichloroethene	20.0	18.4		ug/L		92	74 - 126
trans-1,3-Dichloropropene	20.0	17.3		ug/L		87	66 - 127
Trichloroethene	20.0	18.6		ug/L		93	71 - 121
Trichlorofluoromethane	20.0	17.2		ug/L		86	50 - 150
Vinyl chloride	20.0	21.6		ug/L		108	55 - 144
Xylenes, Total	40.0	38.2		ug/L		96	78 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene	*116*		*76 - 120*
Dibromofluoromethane (Surr)	*105*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 460-870628/4
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	18.7		ug/L		93	68 - 128	3	30
1,1,2,2-Tetrachloroethane	20.0	15.8		ug/L		79	63 - 139	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	13.6		ug/L		68	51 - 142	3	30
1,1,2-Trichloroethane	20.0	17.6		ug/L		88	74 - 125	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870628/4
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	20.0	15.3		ug/L		77	73 - 130	4	30
1,1-Dichloroethene	20.0	18.7		ug/L		93	68 - 133	2	30
1,2,3-Trichlorobenzene	20.0	21.1		ug/L		106	56 - 144	4	30
1,2,4-Trichlorobenzene	20.0	21.4		ug/L		107	67 - 132	3	30
1,2,4-Trimethylbenzene	20.0	17.9		ug/L		90	75 - 125	2	30
1,2-Dibromo-3-Chloropropane	20.0	21.0		ug/L		105	58 - 132	7	30
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	80 - 120	0	30
1,2-Dichloroethane	20.0	17.7		ug/L		88	66 - 129	2	30
1,2-Dichloropropane	20.0	15.0		ug/L		75	68 - 128	2	30
1,3,5-Trimethylbenzene	20.0	17.3		ug/L		86	75 - 125	4	30
1,3-Dichlorobenzene	20.0	18.1		ug/L		91	80 - 120	2	30
1,4-Dichlorobenzene	20.0	18.3		ug/L		91	80 - 120	2	30
2-Butanone (MEK)	100	112		ug/L		112	61 - 128	2	30
2-Hexanone	100	92.9		ug/L		93	61 - 134	2	30
4-Methyl-2-pentanone (MIBK)	100	92.8		ug/L		93	69 - 128	0	30
Acetone	100	91.7		ug/L		92	61 - 134	2	30
Benzene	20.0	16.6		ug/L		83	71 - 126	1	30
Bromoform	20.0	21.9		ug/L		110	48 - 144	3	30
Bromomethane	20.0	44.5	*	ug/L		223	32 - 150	3	30
Carbon disulfide	20.0	17.6		ug/L		88	64 - 138	0	30
Carbon tetrachloride	20.0	19.1		ug/L		96	61 - 131	1	30
Chlorobenzene	20.0	17.6		ug/L		88	80 - 120	2	30
Chlorobromomethane	20.0	21.2		ug/L		106	67 - 126	2	30
Chlorodibromomethane	20.0	19.8		ug/L		99	62 - 130	2	30
Chloroethane	20.0	21.1		ug/L		106	42 - 150	7	30
Chloroform	20.0	17.7		ug/L		89	78 - 125	3	30
Chloromethane	20.0	18.4		ug/L		92	43 - 150	1	30
cis-1,2-Dichloroethene	20.0	17.8		ug/L		89	78 - 121	2	30
cis-1,3-Dichloropropene	20.0	16.2		ug/L		81	74 - 125	1	30
Cyclohexane	20.0	14.1		ug/L		70	60 - 133	3	30
Dichlorobromomethane	20.0	17.7		ug/L		89	76 - 121	1	30
Dichlorodifluoromethane	20.0	12.0		ug/L		60	33 - 150	2	30
Ethylbenzene	20.0	18.6		ug/L		93	78 - 120	3	30
Ethylene Dibromide	20.0	18.6		ug/L		93	79 - 126	1	30
Isopropylbenzene	20.0	18.9		ug/L		95	79 - 125	4	30
Methyl acetate	40.0	32.3		ug/L		81	55 - 146	10	30
Methyl tert-butyl ether	20.0	19.8		ug/L		99	72 - 131	1	30
Methylcyclohexane	20.0	12.7		ug/L		63	54 - 139	7	30
Methylene Chloride	20.0	16.8		ug/L		84	74 - 127	4	30
m-Xylene & p-Xylene	20.0	17.7		ug/L		88	78 - 120	7	30
n-Butylbenzene	20.0	16.6		ug/L		83	69 - 135	5	30
N-Propylbenzene	20.0	16.0		ug/L		80	68 - 129	6	30
o-Xylene	20.0	18.8		ug/L		94	78 - 120	3	30
sec-Butylbenzene	20.0	17.5		ug/L		87	73 - 129	4	30
Styrene	20.0	18.3		ug/L		92	75 - 127	5	30
tert-Butylbenzene	20.0	17.8		ug/L		89	72 - 124	2	30
Tetrachloroethene	20.0	20.0		ug/L		100	70 - 127	2	30
Toluene	20.0	16.4		ug/L		82	78 - 120	3	30
trans-1,2-Dichloroethene	20.0	18.7		ug/L		93	74 - 126	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870628/4
Matrix: Water
Analysis Batch: 870628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			20.0	16.9		ug/L		84	66 - 127	3	30
Trichloroethene			20.0	17.8		ug/L		89	71 - 121	4	30
Trichlorofluoromethane			20.0	17.7		ug/L		88	50 - 150	3	30
Vinyl chloride			20.0	22.4		ug/L		112	55 - 144	3	30
Xylenes, Total			40.0	36.4		ug/L		91	78 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*
4-Bromofluorobenzene	*117*		*76 - 120*
Dibromofluoromethane (Surr)	*107*		*77 - 124*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 460-870989/8
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/10/22 09:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			10/10/22 09:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			10/10/22 09:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			10/10/22 09:15	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			10/10/22 09:15	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/10/22 09:15	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			10/10/22 09:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			10/10/22 09:15	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			10/10/22 09:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			10/10/22 09:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			10/10/22 09:15	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			10/10/22 09:15	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			10/10/22 09:15	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			10/10/22 09:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			10/10/22 09:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			10/10/22 09:15	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			10/10/22 09:15	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			10/10/22 09:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			10/10/22 09:15	1
Acetone	5.0	U	5.0	4.4	ug/L			10/10/22 09:15	1
Benzene	1.0	U	1.0	0.20	ug/L			10/10/22 09:15	1
Bromoform	1.0	U	1.0	0.54	ug/L			10/10/22 09:15	1
Bromomethane	1.0	U	1.0	0.55	ug/L			10/10/22 09:15	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			10/10/22 09:15	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			10/10/22 09:15	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			10/10/22 09:15	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			10/10/22 09:15	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			10/10/22 09:15	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
Chloroform	1.0	U	1.0	0.33	ug/L			10/10/22 09:15	1
Chloromethane	1.0	U	1.0	0.40	ug/L			10/10/22 09:15	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-870989/8
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			10/10/22 09:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/10/22 09:15	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			10/10/22 09:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/10/22 09:15	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			10/10/22 09:15	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			10/10/22 09:15	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			10/10/22 09:15	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			10/10/22 09:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.22	ug/L			10/10/22 09:15	1
Methylcyclohexane	1.0	U	1.0	0.71	ug/L			10/10/22 09:15	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			10/10/22 09:15	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
o-Xylene	1.0	U	1.0	0.36	ug/L			10/10/22 09:15	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			10/10/22 09:15	1
Styrene	1.0	U	1.0	0.42	ug/L			10/10/22 09:15	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			10/10/22 09:15	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			10/10/22 09:15	1
Toluene	1.0	U	1.0	0.38	ug/L			10/10/22 09:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			10/10/22 09:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			10/10/22 09:15	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			10/10/22 09:15	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			10/10/22 09:15	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			10/10/22 09:15	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			10/10/22 09:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*10/10/22 09:15*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*10/10/22 09:15*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*10/10/22 09:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/10/22 09:15*	*1*

Lab Sample ID: LCS 460-870989/3
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	68 - 128
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		96	63 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	15.0		ug/L		75	51 - 142
1,1,2-Trichloroethane	20.0	19.0		ug/L		95	74 - 125
1,1-Dichloroethane	20.0	19.4		ug/L		97	73 - 130
1,1-Dichloroethene	20.0	18.0		ug/L		90	68 - 133
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		100	56 - 144
1,2,4-Trichlorobenzene	20.0	18.4		ug/L		92	67 - 132
1,2,4-Trimethylbenzene	20.0	19.3		ug/L		96	75 - 125

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-870989/3
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	20.0	17.9		ug/L		89	58 - 132
1,2-Dichlorobenzene	20.0	19.0		ug/L		95	80 - 120
1,2-Dichloroethane	20.0	20.6		ug/L		103	66 - 129
1,2-Dichloropropane	20.0	18.7		ug/L		94	68 - 128
1,3,5-Trimethylbenzene	20.0	18.6		ug/L		93	75 - 125
1,3-Dichlorobenzene	20.0	19.1		ug/L		96	80 - 120
1,4-Dichlorobenzene	20.0	18.8		ug/L		94	80 - 120
2-Butanone (MEK)	100	89.5		ug/L		89	61 - 128
2-Hexanone	100	100		ug/L		100	61 - 134
4-Methyl-2-pentanone (MIBK)	100	104		ug/L		104	69 - 128
Acetone	100	132		ug/L		132	61 - 134
Benzene	20.0	18.4		ug/L		92	71 - 126
Bromoform	20.0	19.8		ug/L		99	48 - 144
Bromomethane	20.0	17.0		ug/L		85	32 - 150
Carbon disulfide	20.0	18.5		ug/L		92	64 - 138
Carbon tetrachloride	20.0	19.6		ug/L		98	61 - 131
Chlorobenzene	20.0	18.2		ug/L		91	80 - 120
Chlorobromomethane	20.0	20.5		ug/L		102	67 - 126
Chlorodibromomethane	20.0	19.2		ug/L		96	62 - 130
Chloroethane	20.0	18.0		ug/L		90	42 - 150
Chloroform	20.0	19.7		ug/L		98	78 - 125
Chloromethane	20.0	18.6		ug/L		93	43 - 150
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	78 - 121
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	74 - 125
Cyclohexane	20.0	15.4		ug/L		77	60 - 133
Dichlorobromomethane	20.0	19.8		ug/L		99	76 - 121
Dichlorodifluoromethane	20.0	14.8		ug/L		74	33 - 150
Ethylbenzene	20.0	18.6		ug/L		93	78 - 120
Ethylene Dibromide	20.0	19.7		ug/L		98	79 - 126
Isopropylbenzene	20.0	19.7		ug/L		98	79 - 125
Methyl acetate	40.0	50.8		ug/L		127	55 - 146
Methyl tert-butyl ether	20.0	20.6		ug/L		103	72 - 131
Methylcyclohexane	20.0	14.8		ug/L		74	54 - 139
Methylene Chloride	20.0	19.2		ug/L		96	74 - 127
m-Xylene & p-Xylene	20.0	19.1		ug/L		95	78 - 120
n-Butylbenzene	20.0	18.8		ug/L		94	69 - 135
N-Propylbenzene	20.0	19.7		ug/L		98	68 - 129
o-Xylene	20.0	19.8		ug/L		99	78 - 120
sec-Butylbenzene	20.0	19.6		ug/L		98	73 - 129
Styrene	20.0	19.8		ug/L		99	75 - 127
tert-Butylbenzene	20.0	18.8		ug/L		94	72 - 124
Tetrachloroethene	20.0	18.6		ug/L		93	70 - 127
Toluene	20.0	18.3		ug/L		91	78 - 120
trans-1,2-Dichloroethene	20.0	18.1		ug/L		91	74 - 126
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	66 - 127
Trichloroethene	20.0	19.0		ug/L		95	71 - 121
Trichlorofluoromethane	20.0	19.0		ug/L		95	50 - 150
Vinyl chloride	20.0	18.3		ug/L		91	55 - 144
Xylenes, Total	40.0	38.9		ug/L		97	78 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 128
4-Bromofluorobenzene	105		76 - 120
Dibromofluoromethane (Surr)	107		77 - 124
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 460-870989/18
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	18.9		ug/L		95	68 - 128	5	30
1,1,2,2-Tetrachloroethane			20.0	19.4		ug/L		97	63 - 139	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	12.7		ug/L		64	51 - 142	17	30
1,1,2-Trichloroethane			20.0	19.3		ug/L		96	74 - 125	2	30
1,1-Dichloroethane			20.0	18.9		ug/L		94	73 - 130	3	30
1,1-Dichloroethene			20.0	16.8		ug/L		84	68 - 133	7	30
1,2,3-Trichlorobenzene			20.0	18.9		ug/L		94	56 - 144	6	30
1,2,4-Trichlorobenzene			20.0	16.9		ug/L		84	67 - 132	9	30
1,2,4-Trimethylbenzene			20.0	18.7		ug/L		93	75 - 125	3	30
1,2-Dibromo-3-Chloropropane			20.0	17.7		ug/L		89	58 - 132	1	30
1,2-Dichlorobenzene			20.0	18.7		ug/L		94	80 - 120	1	30
1,2-Dichloroethane			20.0	19.5		ug/L		98	66 - 129	5	30
1,2-Dichloropropane			20.0	18.1		ug/L		90	68 - 128	4	30
1,3,5-Trimethylbenzene			20.0	19.2		ug/L		96	75 - 125	3	30
1,3-Dichlorobenzene			20.0	19.0		ug/L		95	80 - 120	1	30
1,4-Dichlorobenzene			20.0	18.3		ug/L		91	80 - 120	3	30
2-Butanone (MEK)			100	86.2		ug/L		86	61 - 128	4	30
2-Hexanone			100	102		ug/L		102	61 - 134	1	30
4-Methyl-2-pentanone (MIBK)			100	105		ug/L		105	69 - 128	1	30
Acetone			100	123		ug/L		123	61 - 134	7	30
Benzene			20.0	18.2		ug/L		91	71 - 126	1	30
Bromoform			20.0	19.7		ug/L		99	48 - 144	0	30
Bromomethane			20.0	17.4		ug/L		87	32 - 150	2	30
Carbon disulfide			20.0	17.2		ug/L		86	64 - 138	7	30
Carbon tetrachloride			20.0	18.5		ug/L		92	61 - 131	6	30
Chlorobenzene			20.0	18.4		ug/L		92	80 - 120	1	30
Chlorobromomethane			20.0	19.3		ug/L		96	67 - 126	6	30
Chlorodibromomethane			20.0	18.8		ug/L		94	62 - 130	2	30
Chloroethane			20.0	17.5		ug/L		87	42 - 150	3	30
Chloroform			20.0	19.3		ug/L		96	78 - 125	2	30
Chloromethane			20.0	17.8		ug/L		89	43 - 150	4	30
cis-1,2-Dichloroethene			20.0	19.0		ug/L		95	78 - 121	4	30
cis-1,3-Dichloropropene			20.0	18.9		ug/L		95	74 - 125	4	30
Cyclohexane			20.0	14.1		ug/L		70	60 - 133	9	30
Dichlorobromomethane			20.0	18.8		ug/L		94	76 - 121	5	30
Dichlorodifluoromethane			20.0	13.1		ug/L		65	33 - 150	12	30
Ethylbenzene			20.0	17.9		ug/L		89	78 - 120	4	30
Ethylene Dibromide			20.0	19.1		ug/L		95	79 - 126	3	30
Isopropylbenzene			20.0	18.9		ug/L		95	79 - 125	4	30
Methyl acetate			40.0	50.9		ug/L		127	55 - 146	0	30
Methyl tert-butyl ether			20.0	20.0		ug/L		100	72 - 131	3	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-870989/18
Matrix: Water
Analysis Batch: 870989

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methylcyclohexane			20.0	12.5		ug/L		63	54 - 139	17	30
Methylene Chloride			20.0	18.6		ug/L		93	74 - 127	3	30
m-Xylene & p-Xylene			20.0	18.6		ug/L		93	78 - 120	2	30
n-Butylbenzene			20.0	17.6		ug/L		88	69 - 135	6	30
N-Propylbenzene			20.0	18.8		ug/L		94	68 - 129	5	30
o-Xylene			20.0	18.8		ug/L		94	78 - 120	5	30
sec-Butylbenzene			20.0	18.9		ug/L		94	73 - 129	4	30
Styrene			20.0	19.2		ug/L		96	75 - 127	3	30
tert-Butylbenzene			20.0	18.2		ug/L		91	72 - 124	3	30
Tetrachloroethene			20.0	18.0		ug/L		90	70 - 127	3	30
Toluene			20.0	18.1		ug/L		90	78 - 120	1	30
trans-1,2-Dichloroethene			20.0	17.4		ug/L		87	74 - 126	4	30
trans-1,3-Dichloropropene			20.0	18.9		ug/L		94	66 - 127	6	30
Trichloroethene			20.0	18.1		ug/L		91	71 - 121	5	30
Trichlorofluoromethane			20.0	17.5		ug/L		88	50 - 150	8	30
Vinyl chloride			20.0	19.3		ug/L		96	55 - 144	5	30
Xylenes, Total			40.0	37.4		ug/L		93	78 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*
4-Bromofluorobenzene	*105*		*76 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-870235/1-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/05/22 10:48	10/05/22 21:35	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/05/22 10:48	10/05/22 21:35	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/05/22 10:48	10/05/22 21:35	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Methylphenol	10	U	10	0.67	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/05/22 10:48	10/05/22 21:35	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/05/22 10:48	10/05/22 21:35	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870235/1-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/05/22 10:48	10/05/22 21:35	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/05/22 10:48	10/05/22 21:35	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/05/22 10:48	10/05/22 21:35	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Methylphenol	10	U	10	0.65	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/05/22 10:48	10/05/22 21:35	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/05/22 10:48	10/05/22 21:35	1
Acenaphthene	10	U	10	1.1	ug/L		10/05/22 10:48	10/05/22 21:35	1
Acenaphthylene	10	U	10	0.82	ug/L		10/05/22 10:48	10/05/22 21:35	1
Acetophenone	10	U	10	2.3	ug/L		10/05/22 10:48	10/05/22 21:35	1
Anthracene	10	U	10	1.3	ug/L		10/05/22 10:48	10/05/22 21:35	1
Atrazine	2.0	U	2.0	1.3	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzaldehyde	10	U	10	2.1	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/05/22 10:48	10/05/22 21:35	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/05/22 10:48	10/05/22 21:35	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/05/22 10:48	10/05/22 21:35	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/05/22 10:48	10/05/22 21:35	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/05/22 10:48	10/05/22 21:35	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/05/22 10:48	10/05/22 21:35	1
Caprolactam	10	U	10	2.2	ug/L		10/05/22 10:48	10/05/22 21:35	1
Carbazole	10	U	10	0.68	ug/L		10/05/22 10:48	10/05/22 21:35	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/05/22 10:48	10/05/22 21:35	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/05/22 10:48	10/05/22 21:35	1
Dibenzofuran	10	U	10	1.1	ug/L		10/05/22 10:48	10/05/22 21:35	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/05/22 10:48	10/05/22 21:35	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/05/22 10:48	10/05/22 21:35	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/05/22 10:48	10/05/22 21:35	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/05/22 10:48	10/05/22 21:35	1
Fluoranthene	10	U	10	0.84	ug/L		10/05/22 10:48	10/05/22 21:35	1
Fluorene	10	U	10	0.91	ug/L		10/05/22 10:48	10/05/22 21:35	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/05/22 10:48	10/05/22 21:35	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/05/22 10:48	10/05/22 21:35	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/05/22 10:48	10/05/22 21:35	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/05/22 10:48	10/05/22 21:35	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/05/22 10:48	10/05/22 21:35	1
Isophorone	10	U	10	0.80	ug/L		10/05/22 10:48	10/05/22 21:35	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/05/22 10:48	10/05/22 21:35	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/05/22 10:48	10/05/22 21:35	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/05/22 10:48	10/05/22 21:35	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/05/22 10:48	10/05/22 21:35	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/05/22 10:48	10/05/22 21:35	1
Phenanthrene	10	U	10	1.3	ug/L		10/05/22 10:48	10/05/22 21:35	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870235/1-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	10	U	10	0.29	ug/L		10/05/22 10:48	10/05/22 21:35	1
Pyrene	10	U	10	1.6	ug/L		10/05/22 10:48	10/05/22 21:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*112*		*37 - 150*	*10/05/22 10:48*	*10/05/22 21:35*	*1*
2-Fluorobiphenyl	*95*		*46 - 139*	*10/05/22 10:48*	*10/05/22 21:35*	*1*
2-Fluorophenol (Surr)	*42*		*19 - 80*	*10/05/22 10:48*	*10/05/22 21:35*	*1*
Nitrobenzene-d5 (Surr)	*94*		*52 - 137*	*10/05/22 10:48*	*10/05/22 21:35*	*1*
Phenol-d5 (Surr)	*29*		*10 - 56*	*10/05/22 10:48*	*10/05/22 21:35*	*1*
Terphenyl-d14 (Surr)	*81*		*22 - 150*	*10/05/22 10:48*	*10/05/22 21:35*	*1*

Lab Sample ID: LCS 460-870235/2-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	80.0	68.3		ug/L		85	53 - 120
1,2,4,5-Tetrachlorobenzene	80.0	72.7		ug/L		91	46 - 117
1,4-Dioxane	80.0	28.2		ug/L		35	26 - 120
2,2'-oxybis[1-chloropropane]	80.0	37.7		ug/L		47	37 - 120
2,3,4,6-Tetrachlorophenol	80.0	80.8		ug/L		101	54 - 122
2,4,5-Trichlorophenol	80.0	70.5		ug/L		88	58 - 120
2,4,6-Trichlorophenol	80.0	73.0		ug/L		91	61 - 120
2,4-Dichlorophenol	80.0	67.4		ug/L		84	65 - 120
2,4-Dimethylphenol	80.0	58.4		ug/L		73	62 - 120
2,4-Dinitrophenol	160	164		ug/L		103	36 - 150
2,4-Dinitrotoluene	80.0	85.1		ug/L		106	68 - 134
2,6-Dinitrotoluene	80.0	81.3		ug/L		102	65 - 124
2-Chloronaphthalene	80.0	70.4		ug/L		88	52 - 120
2-Chlorophenol	80.0	55.2		ug/L		69	53 - 120
2-Methylnaphthalene	80.0	60.5		ug/L		76	44 - 120
2-Methylphenol	80.0	46.2		ug/L		58	44 - 120
2-Nitroaniline	80.0	55.8		ug/L		70	49 - 120
2-Nitrophenol	80.0	71.5		ug/L		89	60 - 125
3 & 4 Methylphenol	80.0	40.8		ug/L		51	35 - 120
3,3'-Dichlorobenzidine	80.0	69.7		ug/L		87	37 - 137
3-Nitroaniline	80.0	67.2		ug/L		84	40 - 120
4,6-Dinitro-2-methylphenol	160	154		ug/L		96	59 - 135
4-Bromophenyl phenyl ether	80.0	70.1		ug/L		88	62 - 125
4-Chloro-3-methylphenol	80.0	64.1		ug/L		80	61 - 120
4-Chloroaniline	80.0	57.2		ug/L		71	29 - 127
4-Chlorophenyl phenyl ether	80.0	75.6		ug/L		94	59 - 122
4-Methylphenol	80.0	38.7		ug/L		48	33 - 120
4-Nitroaniline	80.0	77.8		ug/L		97	45 - 120
4-Nitrophenol	160	60.4		ug/L		38	12 - 120
Acenaphthene	80.0	69.0		ug/L		86	49 - 120
Acenaphthylene	80.0	66.2		ug/L		83	60 - 120
Acetophenone	80.0	66.2		ug/L		83	62 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870235/2-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	80.0	67.4		ug/L		84	65 - 120
Atrazine	40.0	75.0	*	ug/L		188	43 - 150
Benzaldehyde	40.0	47.9		ug/L		120	41 - 150
Benzo[a]anthracene	80.0	66.9		ug/L		84	63 - 120
Benzo[a]pyrene	80.0	63.2		ug/L		79	60 - 139
Benzo[b]fluoranthene	80.0	68.4		ug/L		85	66 - 125
Benzo[g,h,i]perylene	80.0	76.5		ug/L		96	59 - 136
Benzo[k]fluoranthene	80.0	71.3		ug/L		89	64 - 125
Bis(2-chloroethoxy)methane	80.0	62.5		ug/L		78	64 - 120
Bis(2-chloroethyl)ether	80.0	61.4		ug/L		77	63 - 120
Bis(2-ethylhexyl) phthalate	80.0	75.8		ug/L		95	60 - 132
Butyl benzyl phthalate	80.0	72.7		ug/L		91	58 - 132
Caprolactam	40.0	17.7		ug/L		44	10 - 120
Carbazole	80.0	69.6		ug/L		87	65 - 120
Chrysene	80.0	68.5		ug/L		86	63 - 120
Dibenz(a,h)anthracene	80.0	79.3		ug/L		99	62 - 140
Dibenzofuran	80.0	73.2		ug/L		92	58 - 120
Diethyl phthalate	80.0	77.5		ug/L		97	53 - 129
Dimethyl phthalate	80.0	76.5		ug/L		96	60 - 124
Di-n-butyl phthalate	80.0	69.9		ug/L		87	59 - 133
Di-n-octyl phthalate	80.0	70.2		ug/L		88	49 - 135
Fluoranthene	80.0	72.0		ug/L		90	65 - 123
Fluorene	80.0	75.1		ug/L		94	58 - 120
Hexachlorobenzene	80.0	71.0		ug/L		89	61 - 128
Hexachlorobutadiene	80.0	71.9		ug/L		90	27 - 127
Hexachlorocyclopentadiene	80.0	63.9		ug/L		80	24 - 123
Hexachloroethane	80.0	61.3		ug/L		77	26 - 120
Indeno[1,2,3-cd]pyrene	80.0	77.8		ug/L		97	59 - 137
Isophorone	80.0	66.4		ug/L		83	68 - 121
Naphthalene	80.0	65.6		ug/L		82	51 - 120
Nitrobenzene	80.0	67.9		ug/L		85	64 - 120
N-Nitrosodi-n-propylamine	80.0	62.5		ug/L		78	60 - 120
N-Nitrosodiphenylamine	80.0	66.2		ug/L		83	63 - 120
Pentachlorophenol	160	135		ug/L		84	24 - 131
Phenanthrene	80.0	66.8		ug/L		83	65 - 120
Phenol	80.0	25.3		ug/L		32	18 - 120
Pyrene	80.0	64.4		ug/L		81	51 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*125*		*37 - 150*
2-Fluorobiphenyl	*96*		*46 - 139*
2-Fluorophenol (Surr)	*44*		*19 - 80*
Nitrobenzene-d5 (Surr)	*93*		*52 - 137*
Phenol-d5 (Surr)	*30*		*10 - 56*
Terphenyl-d14 (Surr)	*82*		*22 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870235/3-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870235

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl			80.0	69.8		ug/L		87	53 - 120	2	30
1,2,4,5-Tetrachlorobenzene			80.0	75.1		ug/L		94	46 - 117	3	30
1,4-Dioxane			80.0	27.3		ug/L		34	26 - 120	3	30
2,2'-oxybis[1-chloropropane]			80.0	38.3		ug/L		48	37 - 120	1	30
2,3,4,6-Tetrachlorophenol			80.0	81.5		ug/L		102	54 - 122	1	30
2,4,5-Trichlorophenol			80.0	70.1		ug/L		88	58 - 120	1	30
2,4,6-Trichlorophenol			80.0	74.7		ug/L		93	61 - 120	2	30
2,4-Dichlorophenol			80.0	67.4		ug/L		84	65 - 120	0	30
2,4-Dimethylphenol			80.0	57.6		ug/L		72	62 - 120	1	30
2,4-Dinitrophenol			160	164		ug/L		103	36 - 150	0	30
2,4-Dinitrotoluene			80.0	84.9		ug/L		106	68 - 134	0	30
2,6-Dinitrotoluene			80.0	81.0		ug/L		101	65 - 124	0	30
2-Chloronaphthalene			80.0	71.3		ug/L		89	52 - 120	1	30
2-Chlorophenol			80.0	55.3		ug/L		69	53 - 120	0	30
2-Methylnaphthalene			80.0	59.8		ug/L		75	44 - 120	1	30
2-Methylphenol			80.0	45.5		ug/L		57	44 - 120	1	30
2-Nitroaniline			80.0	54.7		ug/L		68	49 - 120	2	30
2-Nitrophenol			80.0	71.6		ug/L		89	60 - 125	0	30
3 & 4 Methylphenol			80.0	39.8		ug/L		50	35 - 120	2	30
3,3'-Dichlorobenzidine			80.0	73.1		ug/L		91	37 - 137	5	30
3-Nitroaniline			80.0	65.6		ug/L		82	40 - 120	2	30
4,6-Dinitro-2-methylphenol			160	154		ug/L		96	59 - 135	0	30
4-Bromophenyl phenyl ether			80.0	69.8		ug/L		87	62 - 125	0	30
4-Chloro-3-methylphenol			80.0	61.4		ug/L		77	61 - 120	4	30
4-Chloroaniline			80.0	58.0		ug/L		72	29 - 127	1	30
4-Chlorophenyl phenyl ether			80.0	77.1		ug/L		96	59 - 122	2	30
4-Methylphenol			80.0	37.5		ug/L		47	33 - 120	3	30
4-Nitroaniline			80.0	75.2		ug/L		94	45 - 120	3	30
4-Nitrophenol			160	59.9		ug/L		37	12 - 120	1	30
Acenaphthene			80.0	69.4		ug/L		87	49 - 120	1	30
Acenaphthylene			80.0	66.6		ug/L		83	60 - 120	1	30
Acetophenone			80.0	64.9		ug/L		81	62 - 120	2	30
Anthracene			80.0	66.8		ug/L		83	65 - 120	1	30
Atrazine			40.0	74.6	*	ug/L		186	43 - 150	1	30
Benzaldehyde			40.0	47.3		ug/L		118	41 - 150	1	30
Benzo[a]anthracene			80.0	67.6		ug/L		85	63 - 120	1	30
Benzo[a]pyrene			80.0	63.6		ug/L		79	60 - 139	1	30
Benzo[b]fluoranthene			80.0	68.6		ug/L		86	66 - 125	0	30
Benzo[g,h,i]perylene			80.0	76.8		ug/L		96	59 - 136	0	30
Benzo[k]fluoranthene			80.0	71.8		ug/L		90	64 - 125	1	30
Bis(2-chloroethoxy)methane			80.0	65.0		ug/L		81	64 - 120	4	30
Bis(2-chloroethyl)ether			80.0	61.6		ug/L		77	63 - 120	0	30
Bis(2-ethylhexyl) phthalate			80.0	79.8		ug/L		100	60 - 132	5	30
Butyl benzyl phthalate			80.0	76.8		ug/L		96	58 - 132	5	30
Caprolactam			40.0	16.7		ug/L		42	10 - 120	6	30
Carbazole			80.0	68.7		ug/L		86	65 - 120	1	30
Chrysene			80.0	69.0		ug/L		86	63 - 120	1	30
Dibenz(a,h)anthracene			80.0	79.9		ug/L		100	62 - 140	1	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870235/3-A
Matrix: Water
Analysis Batch: 870337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870235

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran			80.0	74.0		ug/L		92	58 - 120	1	30
Diethyl phthalate			80.0	77.3		ug/L		97	53 - 129	0	30
Dimethyl phthalate			80.0	78.0		ug/L		97	60 - 124	2	30
Di-n-butyl phthalate			80.0	71.1		ug/L		89	59 - 133	2	30
Di-n-octyl phthalate			80.0	73.4		ug/L		92	49 - 135	5	30
Fluoranthene			80.0	71.8		ug/L		90	65 - 123	0	30
Fluorene			80.0	75.3		ug/L		94	58 - 120	0	30
Hexachlorobenzene			80.0	72.1		ug/L		90	61 - 128	2	30
Hexachlorobutadiene			80.0	72.5		ug/L		91	27 - 127	1	30
Hexachlorocyclopentadiene			80.0	69.0		ug/L		86	24 - 123	8	30
Hexachloroethane			80.0	60.8		ug/L		76	26 - 120	1	30
Indeno[1,2,3-cd]pyrene			80.0	77.9		ug/L		97	59 - 137	0	30
Isophorone			80.0	65.6		ug/L		82	68 - 121	1	30
Naphthalene			80.0	66.4		ug/L		83	51 - 120	1	30
Nitrobenzene			80.0	68.3		ug/L		85	64 - 120	1	30
N-Nitrosodi-n-propylamine			80.0	62.7		ug/L		78	60 - 120	0	30
N-Nitrosodiphenylamine			80.0	65.4		ug/L		82	63 - 120	1	30
Pentachlorophenol			160	135		ug/L		84	24 - 131	0	30
Phenanthrene			80.0	66.6		ug/L		83	65 - 120	0	30
Phenol			80.0	25.1		ug/L		31	18 - 120	1	30
Pyrene			80.0	67.0		ug/L		84	51 - 124	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*124*		*37 - 150*
2-Fluorobiphenyl	*100*		*46 - 139*
2-Fluorophenol (Surr)	*43*		*19 - 80*
Nitrobenzene-d5 (Surr)	*93*		*52 - 137*
Phenol-d5 (Surr)	*30*		*10 - 56*
Terphenyl-d14 (Surr)	*86*		*22 - 150*

Lab Sample ID: MB 460-870439/1-B
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/06/22 10:31	10/06/22 21:49	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/06/22 10:31	10/06/22 21:49	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/06/22 10:31	10/06/22 21:49	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/06/22 10:31	10/06/22 21:49	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/06/22 10:31	10/06/22 21:49	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870439/1-B
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	10	U	10	0.38	ug/L		10/06/22 10:31	10/06/22 21:49	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/06/22 10:31	10/06/22 21:49	1
2-Methylphenol	10	U	10	0.67	ug/L		10/06/22 10:31	10/06/22 21:49	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/06/22 10:31	10/06/22 21:49	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/06/22 10:31	10/06/22 21:49	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/06/22 10:31	10/06/22 21:49	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/06/22 10:31	10/06/22 21:49	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/06/22 10:31	10/06/22 21:49	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Methylphenol	10	U	10	0.65	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/06/22 10:31	10/06/22 21:49	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/06/22 10:31	10/06/22 21:49	1
Acenaphthene	10	U	10	1.1	ug/L		10/06/22 10:31	10/06/22 21:49	1
Acenaphthylene	10	U	10	0.82	ug/L		10/06/22 10:31	10/06/22 21:49	1
Acetophenone	10	U	10	2.3	ug/L		10/06/22 10:31	10/06/22 21:49	1
Anthracene	10	U	10	1.3	ug/L		10/06/22 10:31	10/06/22 21:49	1
Atrazine	2.0	U	2.0	1.3	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzaldehyde	10	U	10	2.1	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/06/22 10:31	10/06/22 21:49	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/06/22 10:31	10/06/22 21:49	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/06/22 10:31	10/06/22 21:49	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/06/22 10:31	10/06/22 21:49	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/06/22 10:31	10/06/22 21:49	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/06/22 10:31	10/06/22 21:49	1
Caprolactam	10	U	10	2.2	ug/L		10/06/22 10:31	10/06/22 21:49	1
Carbazole	10	U	10	0.68	ug/L		10/06/22 10:31	10/06/22 21:49	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/06/22 10:31	10/06/22 21:49	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/06/22 10:31	10/06/22 21:49	1
Dibenzofuran	10	U	10	1.1	ug/L		10/06/22 10:31	10/06/22 21:49	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/06/22 10:31	10/06/22 21:49	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/06/22 10:31	10/06/22 21:49	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/06/22 10:31	10/06/22 21:49	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/06/22 10:31	10/06/22 21:49	1
Fluoranthene	10	U	10	0.84	ug/L		10/06/22 10:31	10/06/22 21:49	1
Fluorene	10	U	10	0.91	ug/L		10/06/22 10:31	10/06/22 21:49	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/06/22 10:31	10/06/22 21:49	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/06/22 10:31	10/06/22 21:49	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/06/22 10:31	10/06/22 21:49	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/06/22 10:31	10/06/22 21:49	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/06/22 10:31	10/06/22 21:49	1
Isophorone	10	U	10	0.80	ug/L		10/06/22 10:31	10/06/22 21:49	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/06/22 10:31	10/06/22 21:49	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870439/1-B
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/06/22 10:31	10/06/22 21:49	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/06/22 10:31	10/06/22 21:49	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/06/22 10:31	10/06/22 21:49	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/06/22 10:31	10/06/22 21:49	1
Phenanthrene	10	U	10	1.3	ug/L		10/06/22 10:31	10/06/22 21:49	1
Phenol	10	U	10	0.29	ug/L		10/06/22 10:31	10/06/22 21:49	1
Pyrene	10	U	10	1.6	ug/L		10/06/22 10:31	10/06/22 21:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*123*		*37 - 150*	*10/06/22 10:31*	*10/06/22 21:49*	*1*
2-Fluorobiphenyl	*108*		*46 - 139*	*10/06/22 10:31*	*10/06/22 21:49*	*1*
2-Fluorophenol (Surr)	*73*		*19 - 80*	*10/06/22 10:31*	*10/06/22 21:49*	*1*
Nitrobenzene-d5 (Surr)	*110*		*52 - 137*	*10/06/22 10:31*	*10/06/22 21:49*	*1*
Phenol-d5 (Surr)	*50*		*10 - 56*	*10/06/22 10:31*	*10/06/22 21:49*	*1*
Terphenyl-d14 (Surr)	*93*		*22 - 150*	*10/06/22 10:31*	*10/06/22 21:49*	*1*

Lab Sample ID: MB 460-870445/1-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/06/22 10:27	10/06/22 20:46	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/06/22 10:27	10/06/22 20:46	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/06/22 10:27	10/06/22 20:46	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Methylphenol	10	U	10	0.67	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/06/22 10:27	10/06/22 20:46	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/06/22 10:27	10/06/22 20:46	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/06/22 10:27	10/06/22 20:46	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/06/22 10:27	10/06/22 20:46	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/06/22 20:46	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Methylphenol	10	U	10	0.65	ug/L		10/06/22 10:27	10/06/22 20:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870445/1-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	10	U	10	1.2	ug/L		10/06/22 10:27	10/06/22 20:46	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/06/22 10:27	10/06/22 20:46	1
Acenaphthene	10	U	10	1.1	ug/L		10/06/22 10:27	10/06/22 20:46	1
Acenaphthylene	10	U	10	0.82	ug/L		10/06/22 10:27	10/06/22 20:46	1
Acetophenone	10	U	10	2.3	ug/L		10/06/22 10:27	10/06/22 20:46	1
Anthracene	10	U	10	1.3	ug/L		10/06/22 10:27	10/06/22 20:46	1
Atrazine	2.0	U	2.0	1.3	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzaldehyde	10	U	10	2.1	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/06/22 10:27	10/06/22 20:46	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/06/22 10:27	10/06/22 20:46	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/06/22 10:27	10/06/22 20:46	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/06/22 10:27	10/06/22 20:46	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/06/22 20:46	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/06/22 10:27	10/06/22 20:46	1
Caprolactam	10	U	10	2.2	ug/L		10/06/22 10:27	10/06/22 20:46	1
Carbazole	10	U	10	0.68	ug/L		10/06/22 10:27	10/06/22 20:46	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/06/22 10:27	10/06/22 20:46	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/06/22 10:27	10/06/22 20:46	1
Dibenzofuran	10	U	10	1.1	ug/L		10/06/22 10:27	10/06/22 20:46	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/06/22 10:27	10/06/22 20:46	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/06/22 10:27	10/06/22 20:46	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/06/22 10:27	10/06/22 20:46	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/06/22 10:27	10/06/22 20:46	1
Fluoranthene	10	U	10	0.84	ug/L		10/06/22 10:27	10/06/22 20:46	1
Fluorene	10	U	10	0.91	ug/L		10/06/22 10:27	10/06/22 20:46	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/06/22 10:27	10/06/22 20:46	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/06/22 10:27	10/06/22 20:46	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/06/22 10:27	10/06/22 20:46	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/06/22 10:27	10/06/22 20:46	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/06/22 10:27	10/06/22 20:46	1
Isophorone	10	U	10	0.80	ug/L		10/06/22 10:27	10/06/22 20:46	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/06/22 10:27	10/06/22 20:46	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/06/22 10:27	10/06/22 20:46	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/06/22 10:27	10/06/22 20:46	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/06/22 10:27	10/06/22 20:46	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/06/22 10:27	10/06/22 20:46	1
Phenanthrene	10	U	10	1.3	ug/L		10/06/22 10:27	10/06/22 20:46	1
Phenol	10	U	10	0.29	ug/L		10/06/22 10:27	10/06/22 20:46	1
Pyrene	10	U	10	1.6	ug/L		10/06/22 10:27	10/06/22 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*108*		*37 - 150*	*10/06/22 10:27*	*10/06/22 20:46*	*1*
2-Fluorobiphenyl	*98*		*46 - 139*	*10/06/22 10:27*	*10/06/22 20:46*	*1*
2-Fluorophenol (Surr)	*46*		*19 - 80*	*10/06/22 10:27*	*10/06/22 20:46*	*1*
Nitrobenzene-d5 (Surr)	*95*		*52 - 137*	*10/06/22 10:27*	*10/06/22 20:46*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870445/1-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870445

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	27		10 - 56	10/06/22 10:27	10/06/22 20:46	1
Terphenyl-d14 (Surr)	67		22 - 150	10/06/22 10:27	10/06/22 20:46	1

Lab Sample ID: LCS 460-870445/2-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	80.0	71.7		ug/L		90	53 - 120
1,2,4,5-Tetrachlorobenzene	80.0	74.6		ug/L		93	46 - 117
1,4-Dioxane	80.0	38.1		ug/L		48	26 - 120
2,2'-oxybis[1-chloropropane]	80.0	50.1		ug/L		63	37 - 120
2,3,4,6-Tetrachlorophenol	80.0	83.3		ug/L		104	54 - 122
2,4,5-Trichlorophenol	80.0	72.9		ug/L		91	58 - 120
2,4,6-Trichlorophenol	80.0	76.7		ug/L		96	61 - 120
2,4-Dichlorophenol	80.0	71.2		ug/L		89	65 - 120
2,4-Dimethylphenol	80.0	61.8		ug/L		77	62 - 120
2,4-Dinitrophenol	160	124		ug/L		78	36 - 150
2,4-Dinitrotoluene	80.0	86.1		ug/L		108	68 - 134
2,6-Dinitrotoluene	80.0	81.8		ug/L		102	65 - 124
2-Chloronaphthalene	80.0	72.2		ug/L		90	52 - 120
2-Chlorophenol	80.0	59.5		ug/L		74	53 - 120
2-Methylnaphthalene	80.0	59.4		ug/L		74	44 - 120
2-Methylphenol	80.0	50.0		ug/L		63	44 - 120
2-Nitroaniline	80.0	63.8		ug/L		80	49 - 120
2-Nitrophenol	80.0	77.0		ug/L		96	60 - 125
3 & 4 Methylphenol	80.0	46.0		ug/L		57	35 - 120
3,3'-Dichlorobenzidine	80.0	84.9		ug/L		106	37 - 137
3-Nitroaniline	80.0	59.3		ug/L		74	40 - 120
4,6-Dinitro-2-methylphenol	160	158		ug/L		99	59 - 135
4-Bromophenyl phenyl ether	80.0	80.4		ug/L		101	62 - 125
4-Chloro-3-methylphenol	80.0	67.8		ug/L		85	61 - 120
4-Chloroaniline	80.0	60.2		ug/L		75	29 - 127
4-Chlorophenyl phenyl ether	80.0	78.1		ug/L		98	59 - 122
4-Methylphenol	80.0	44.9		ug/L		56	33 - 120
4-Nitroaniline	80.0	63.7		ug/L		80	45 - 120
4-Nitrophenol	160	46.0		ug/L		29	12 - 120
Acenaphthene	80.0	67.4		ug/L		84	49 - 120
Acenaphthylene	80.0	68.9		ug/L		86	60 - 120
Acetophenone	80.0	65.5		ug/L		82	62 - 120
Anthracene	80.0	75.1		ug/L		94	65 - 120
Atrazine	40.0	68.5	*	ug/L		171	43 - 150
Benzaldehyde	40.0	51.9		ug/L		130	41 - 150
Benzo[a]anthracene	80.0	76.5		ug/L		96	63 - 120
Benzo[a]pyrene	80.0	73.5		ug/L		92	60 - 139
Benzo[b]fluoranthene	80.0	78.6		ug/L		98	66 - 125
Benzo[g,h,i]perylene	80.0	77.7		ug/L		97	59 - 136
Benzo[k]fluoranthene	80.0	78.7		ug/L		98	64 - 125

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870445/2-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethoxy)methane	80.0	66.9		ug/L		84	64 - 120
Bis(2-chloroethyl)ether	80.0	64.3		ug/L		80	63 - 120
Bis(2-ethylhexyl) phthalate	80.0	81.3		ug/L		102	60 - 132
Butyl benzyl phthalate	80.0	82.5		ug/L		103	58 - 132
Caprolactam	40.0	18.1		ug/L		45	10 - 120
Carbazole	80.0	71.6		ug/L		89	65 - 120
Chrysene	80.0	73.2		ug/L		92	63 - 120
Dibenz(a,h)anthracene	80.0	86.6		ug/L		108	62 - 140
Dibenzofuran	80.0	74.7		ug/L		93	58 - 120
Diethyl phthalate	80.0	77.4		ug/L		97	53 - 129
Dimethyl phthalate	80.0	76.1		ug/L		95	60 - 124
Di-n-butyl phthalate	80.0	75.8		ug/L		95	59 - 133
Di-n-octyl phthalate	80.0	77.4		ug/L		97	49 - 135
Fluoranthene	80.0	75.2		ug/L		94	65 - 123
Fluorene	80.0	74.2		ug/L		93	58 - 120
Hexachlorobenzene	80.0	82.6		ug/L		103	61 - 128
Hexachlorobutadiene	80.0	51.8		ug/L		65	27 - 127
Hexachlorocyclopentadiene	80.0	69.6		ug/L		87	24 - 123
Hexachloroethane	80.0	33.3		ug/L		42	26 - 120
Indeno[1,2,3-cd]pyrene	80.0	89.8		ug/L		112	59 - 137
Isophorone	80.0	69.9		ug/L		87	68 - 121
Naphthalene	80.0	55.8		ug/L		70	51 - 120
Nitrobenzene	80.0	63.6		ug/L		79	64 - 120
N-Nitrosodi-n-propylamine	80.0	63.0		ug/L		79	60 - 120
N-Nitrosodiphenylamine	80.0	72.7		ug/L		91	63 - 120
Pentachlorophenol	160	153		ug/L		96	24 - 131
Phenanthrene	80.0	72.9		ug/L		91	65 - 120
Phenol	80.0	25.0		ug/L		31	18 - 120
Pyrene	80.0	74.7		ug/L		93	51 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*103*		*37 - 150*
2-Fluorobiphenyl	*89*		*46 - 139*
2-Fluorophenol (Surr)	*48*		*19 - 80*
Nitrobenzene-d5 (Surr)	*90*		*52 - 137*
Phenol-d5 (Surr)	*33*		*10 - 56*
Terphenyl-d14 (Surr)	*78*		*22 - 150*

Lab Sample ID: LCSD 460-870445/3-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870445

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	80.0	73.0		ug/L		91	53 - 120	2	30
1,2,4,5-Tetrachlorobenzene	80.0	76.6		ug/L		96	46 - 117	3	30
1,4-Dioxane	80.0	37.6		ug/L		47	26 - 120	1	30
2,2'-oxybis[1-chloropropane]	80.0	50.2		ug/L		63	37 - 120	0	30
2,3,4,6-Tetrachlorophenol	80.0	86.3		ug/L		108	54 - 122	4	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870445/3-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870445

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	80.0	76.7		ug/L		96	58 - 120	5	30
2,4,6-Trichlorophenol	80.0	78.3		ug/L		98	61 - 120	2	30
2,4-Dichlorophenol	80.0	73.2		ug/L		92	65 - 120	3	30
2,4-Dimethylphenol	80.0	63.0		ug/L		79	62 - 120	2	30
2,4-Dinitrophenol	160	130		ug/L		81	36 - 150	4	30
2,4-Dinitrotoluene	80.0	86.7		ug/L		108	68 - 134	1	30
2,6-Dinitrotoluene	80.0	82.0		ug/L		103	65 - 124	0	30
2-Chloronaphthalene	80.0	75.7		ug/L		95	52 - 120	5	30
2-Chlorophenol	80.0	60.6		ug/L		76	53 - 120	2	30
2-Methylnaphthalene	80.0	59.4		ug/L		74	44 - 120	0	30
2-Methylphenol	80.0	49.7		ug/L		62	44 - 120	1	30
2-Nitroaniline	80.0	64.7		ug/L		81	49 - 120	1	30
2-Nitrophenol	80.0	75.6		ug/L		95	60 - 125	2	30
3 & 4 Methylphenol	80.0	47.5		ug/L		59	35 - 120	3	30
3,3'-Dichlorobenzidine	80.0	83.9		ug/L		105	37 - 137	1	30
3-Nitroaniline	80.0	62.6		ug/L		78	40 - 120	5	30
4,6-Dinitro-2-methylphenol	160	161		ug/L		101	59 - 135	2	30
4-Bromophenyl phenyl ether	80.0	80.1		ug/L		100	62 - 125	0	30
4-Chloro-3-methylphenol	80.0	65.7		ug/L		82	61 - 120	3	30
4-Chloroaniline	80.0	61.1		ug/L		76	29 - 127	2	30
4-Chlorophenyl phenyl ether	80.0	82.5		ug/L		103	59 - 122	6	30
4-Methylphenol	80.0	45.9		ug/L		57	33 - 120	2	30
4-Nitroaniline	80.0	62.8		ug/L		79	45 - 120	1	30
4-Nitrophenol	160	47.7		ug/L		30	12 - 120	4	30
Acenaphthene	80.0	70.0		ug/L		88	49 - 120	4	30
Acenaphthylene	80.0	70.7		ug/L		88	60 - 120	2	30
Acetophenone	80.0	63.1		ug/L		79	62 - 120	4	30
Anthracene	80.0	74.2		ug/L		93	65 - 120	1	30
Atrazine	40.0	69.0	*	ug/L		172	43 - 150	1	30
Benzaldehyde	40.0	53.1		ug/L		133	41 - 150	2	30
Benzo[a]anthracene	80.0	77.7		ug/L		97	63 - 120	2	30
Benzo[a]pyrene	80.0	75.9		ug/L		95	60 - 139	3	30
Benzo[b]fluoranthene	80.0	82.4		ug/L		103	66 - 125	5	30
Benzo[g,h,i]perylene	80.0	81.2		ug/L		102	59 - 136	4	30
Benzo[k]fluoranthene	80.0	78.6		ug/L		98	64 - 125	0	30
Bis(2-chloroethoxy)methane	80.0	66.7		ug/L		83	64 - 120	0	30
Bis(2-chloroethyl)ether	80.0	64.5		ug/L		81	63 - 120	0	30
Bis(2-ethylhexyl) phthalate	80.0	80.9		ug/L		101	60 - 132	0	30
Butyl benzyl phthalate	80.0	83.0		ug/L		104	58 - 132	0	30
Caprolactam	40.0	16.2		ug/L		41	10 - 120	11	30
Carbazole	80.0	72.8		ug/L		91	65 - 120	2	30
Chrysene	80.0	73.1		ug/L		91	63 - 120	0	30
Dibenz(a,h)anthracene	80.0	89.9		ug/L		112	62 - 140	4	30
Dibenzofuran	80.0	76.5		ug/L		96	58 - 120	2	30
Diethyl phthalate	80.0	80.2		ug/L		100	53 - 129	4	30
Dimethyl phthalate	80.0	78.5		ug/L		98	60 - 124	3	30
Di-n-butyl phthalate	80.0	77.7		ug/L		97	59 - 133	3	30
Di-n-octyl phthalate	80.0	78.8		ug/L		99	49 - 135	2	30
Fluoranthene	80.0	76.1		ug/L		95	65 - 123	1	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870445/3-A
Matrix: Water
Analysis Batch: 870558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870445

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			80.0	77.7		ug/L		97	58 - 120	5	30
Hexachlorobenzene			80.0	85.0		ug/L		106	61 - 128	3	30
Hexachlorobutadiene			80.0	52.6		ug/L		66	27 - 127	2	30
Hexachlorocyclopentadiene			80.0	75.0		ug/L		94	24 - 123	7	30
Hexachloroethane			80.0	33.9		ug/L		42	26 - 120	2	30
Indeno[1,2,3-cd]pyrene			80.0	91.9		ug/L		115	59 - 137	2	30
Isophorone			80.0	71.0		ug/L		89	68 - 121	2	30
Naphthalene			80.0	56.0		ug/L		70	51 - 120	0	30
Nitrobenzene			80.0	63.2		ug/L		79	64 - 120	1	30
N-Nitrosodi-n-propylamine			80.0	61.7		ug/L		77	60 - 120	2	30
N-Nitrosodiphenylamine			80.0	75.4		ug/L		94	63 - 120	4	30
Pentachlorophenol			160	153		ug/L		95	24 - 131	0	30
Phenanthrene			80.0	74.1		ug/L		93	65 - 120	2	30
Phenol			80.0	26.1		ug/L		33	18 - 120	4	30
Pyrene			80.0	75.6		ug/L		95	51 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*114*		*37 - 150*
2-Fluorobiphenyl	*92*		*46 - 139*
2-Fluorophenol (Surr)	*49*		*19 - 80*
Nitrobenzene-d5 (Surr)	*89*		*52 - 137*
Phenol-d5 (Surr)	*32*		*10 - 56*
Terphenyl-d14 (Surr)	*77*		*22 - 150*

Lab Sample ID: MB 460-870657/1-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		10/07/22 10:38	10/07/22 23:46	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		10/07/22 10:38	10/07/22 23:46	1
1,4-Dioxane	10	U	10	1.6	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4,5-Trichlorophenol	10	U	10	0.88	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4,6-Trichlorophenol	10	U	10	0.86	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4-Dichlorophenol	10	U	10	1.1	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4-Dimethylphenol	10	U	10	0.62	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4-Dinitrophenol	40	U	40	2.6	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,4-Dinitrotoluene	10	U	10	1.0	ug/L		10/07/22 10:38	10/07/22 23:46	1
2,6-Dinitrotoluene	2.0	U	2.0	0.83	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Chlorophenol	10	U	10	0.38	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Methylnaphthalene	10	U	10	0.53	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Methylphenol	10	U	10	0.67	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Nitroaniline	10	U	10	0.47	ug/L		10/07/22 10:38	10/07/22 23:46	1
2-Nitrophenol	10	U	10	0.75	ug/L		10/07/22 10:38	10/07/22 23:46	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		10/07/22 10:38	10/07/22 23:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870657/1-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		10/07/22 10:38	10/07/22 23:46	1
3-Nitroaniline	10	U	10	1.9	ug/L		10/07/22 10:38	10/07/22 23:46	1
4,6-Dinitro-2-methylphenol	20	U	20	3.0	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Chloroaniline	10	U	10	1.9	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Methylphenol	10	U	10	0.65	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Nitroaniline	10	U	10	1.2	ug/L		10/07/22 10:38	10/07/22 23:46	1
4-Nitrophenol	20	U	20	4.0	ug/L		10/07/22 10:38	10/07/22 23:46	1
Acenaphthene	10	U	10	1.1	ug/L		10/07/22 10:38	10/07/22 23:46	1
Acenaphthylene	10	U	10	0.82	ug/L		10/07/22 10:38	10/07/22 23:46	1
Acetophenone	10	U	10	2.3	ug/L		10/07/22 10:38	10/07/22 23:46	1
Anthracene	10	U	10	1.3	ug/L		10/07/22 10:38	10/07/22 23:46	1
Atrazine	2.0	U	2.0	1.3	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzaldehyde	10	U	10	2.1	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzo[g,h,i]perylene	10	U	10	0.70	ug/L		10/07/22 10:38	10/07/22 23:46	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		10/07/22 10:38	10/07/22 23:46	1
Bis(2-chloroethoxy)methane	10	U	10	0.59	ug/L		10/07/22 10:38	10/07/22 23:46	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.63	ug/L		10/07/22 10:38	10/07/22 23:46	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80	ug/L		10/07/22 10:38	10/07/22 23:46	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		10/07/22 10:38	10/07/22 23:46	1
Caprolactam	10	U	10	2.2	ug/L		10/07/22 10:38	10/07/22 23:46	1
Carbazole	10	U	10	0.68	ug/L		10/07/22 10:38	10/07/22 23:46	1
Chrysene	2.0	U	2.0	0.91	ug/L		10/07/22 10:38	10/07/22 23:46	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		10/07/22 10:38	10/07/22 23:46	1
Dibenzofuran	10	U	10	1.1	ug/L		10/07/22 10:38	10/07/22 23:46	1
Diethyl phthalate	10	U	10	0.98	ug/L		10/07/22 10:38	10/07/22 23:46	1
Dimethyl phthalate	10	U	10	0.77	ug/L		10/07/22 10:38	10/07/22 23:46	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		10/07/22 10:38	10/07/22 23:46	1
Di-n-octyl phthalate	10	U	10	0.75	ug/L		10/07/22 10:38	10/07/22 23:46	1
Fluoranthene	10	U	10	0.84	ug/L		10/07/22 10:38	10/07/22 23:46	1
Fluorene	10	U	10	0.91	ug/L		10/07/22 10:38	10/07/22 23:46	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		10/07/22 10:38	10/07/22 23:46	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		10/07/22 10:38	10/07/22 23:46	1
Hexachlorocyclopentadiene	10	U	10	3.6	ug/L		10/07/22 10:38	10/07/22 23:46	1
Hexachloroethane	2.0	U	2.0	0.80	ug/L		10/07/22 10:38	10/07/22 23:46	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		10/07/22 10:38	10/07/22 23:46	1
Isophorone	10	U	10	0.80	ug/L		10/07/22 10:38	10/07/22 23:46	1
Naphthalene	2.0	U	2.0	0.54	ug/L		10/07/22 10:38	10/07/22 23:46	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		10/07/22 10:38	10/07/22 23:46	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		10/07/22 10:38	10/07/22 23:46	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		10/07/22 10:38	10/07/22 23:46	1
Pentachlorophenol	20	U	20	1.4	ug/L		10/07/22 10:38	10/07/22 23:46	1
Phenanthrene	10	U	10	1.3	ug/L		10/07/22 10:38	10/07/22 23:46	1
Phenol	10	U	10	0.29	ug/L		10/07/22 10:38	10/07/22 23:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-870657/1-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	10	U	10	1.6	ug/L		10/07/22 10:38	10/07/22 23:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*124*		*37 - 150*	*10/07/22 10:38*	*10/07/22 23:46*	*1*
2-Fluorobiphenyl	*103*		*46 - 139*	*10/07/22 10:38*	*10/07/22 23:46*	*1*
2-Fluorophenol (Surr)	*47*		*19 - 80*	*10/07/22 10:38*	*10/07/22 23:46*	*1*
Nitrobenzene-d5 (Surr)	*96*		*52 - 137*	*10/07/22 10:38*	*10/07/22 23:46*	*1*
Phenol-d5 (Surr)	*29*		*10 - 56*	*10/07/22 10:38*	*10/07/22 23:46*	*1*
Terphenyl-d14 (Surr)	*84*		*22 - 150*	*10/07/22 10:38*	*10/07/22 23:46*	*1*

Lab Sample ID: LCS 460-870657/2-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	80.0	74.0		ug/L		93	53 - 120
1,2,4,5-Tetrachlorobenzene	80.0	76.9		ug/L		96	46 - 117
1,4-Dioxane	80.0	34.8		ug/L		43	26 - 120
2,2'-oxybis[1-chloropropane]	80.0	34.8		ug/L		43	37 - 120
2,3,4,6-Tetrachlorophenol	80.0	92.0		ug/L		115	54 - 122
2,4,5-Trichlorophenol	80.0	82.7		ug/L		103	58 - 120
2,4,6-Trichlorophenol	80.0	83.2		ug/L		104	61 - 120
2,4-Dichlorophenol	80.0	73.9		ug/L		92	65 - 120
2,4-Dimethylphenol	80.0	64.3		ug/L		80	62 - 120
2,4-Dinitrophenol	160	174		ug/L		109	36 - 150
2,4-Dinitrotoluene	80.0	97.1		ug/L		121	68 - 134
2,6-Dinitrotoluene	80.0	89.1		ug/L		111	65 - 124
2-Chloronaphthalene	80.0	76.3		ug/L		95	52 - 120
2-Chlorophenol	80.0	59.2		ug/L		74	53 - 120
2-Methylnaphthalene	80.0	59.4		ug/L		74	44 - 120
2-Methylphenol	80.0	50.9		ug/L		64	44 - 120
2-Nitroaniline	80.0	62.3		ug/L		78	49 - 120
2-Nitrophenol	80.0	77.7		ug/L		97	60 - 125
3 & 4 Methylphenol	80.0	46.4		ug/L		58	35 - 120
3,3'-Dichlorobenzidine	80.0	76.4		ug/L		96	37 - 137
3-Nitroaniline	80.0	73.4		ug/L		92	40 - 120
4,6-Dinitro-2-methylphenol	160	179		ug/L		112	59 - 135
4-Bromophenyl phenyl ether	80.0	82.7		ug/L		103	62 - 125
4-Chloro-3-methylphenol	80.0	72.9		ug/L		91	61 - 120
4-Chloroaniline	80.0	61.4		ug/L		77	29 - 127
4-Chlorophenyl phenyl ether	80.0	86.7		ug/L		108	59 - 122
4-Methylphenol	80.0	46.1		ug/L		58	33 - 120
4-Nitroaniline	80.0	86.4		ug/L		108	45 - 120
4-Nitrophenol	160	69.8		ug/L		44	12 - 120
Acenaphthene	80.0	77.7		ug/L		97	49 - 120
Acenaphthylene	80.0	74.4		ug/L		93	60 - 120
Acetophenone	80.0	69.2		ug/L		87	62 - 120
Anthracene	80.0	79.8		ug/L		100	65 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-870657/2-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	40.0	74.0	*	ug/L		185	43 - 150
Benzaldehyde	40.0	48.6		ug/L		121	41 - 150
Benzo[a]anthracene	80.0	80.0		ug/L		100	63 - 120
Benzo[a]pyrene	80.0	76.3		ug/L		95	60 - 139
Benzo[b]fluoranthene	80.0	82.8		ug/L		103	66 - 125
Benzo[g,h,i]perylene	80.0	90.1		ug/L		113	59 - 136
Benzo[k]fluoranthene	80.0	84.5		ug/L		106	64 - 125
Bis(2-chloroethoxy)methane	80.0	67.9		ug/L		85	64 - 120
Bis(2-chloroethyl)ether	80.0	63.3		ug/L		79	63 - 120
Bis(2-ethylhexyl) phthalate	80.0	85.0		ug/L		106	60 - 132
Butyl benzyl phthalate	80.0	77.0		ug/L		96	58 - 132
Caprolactam	40.0	19.6		ug/L		49	10 - 120
Carbazole	80.0	83.0		ug/L		104	65 - 120
Chrysene	80.0	81.6		ug/L		102	63 - 120
Dibenz(a,h)anthracene	80.0	101		ug/L		126	62 - 140
Dibenzofuran	80.0	83.2		ug/L		104	58 - 120
Diethyl phthalate	80.0	85.0		ug/L		106	53 - 129
Dimethyl phthalate	80.0	85.6		ug/L		107	60 - 124
Di-n-butyl phthalate	80.0	77.8		ug/L		97	59 - 133
Di-n-octyl phthalate	80.0	91.2		ug/L		114	49 - 135
Fluoranthene	80.0	86.7		ug/L		108	65 - 123
Fluorene	80.0	85.2		ug/L		107	58 - 120
Hexachlorobenzene	80.0	86.4		ug/L		108	61 - 128
Hexachlorobutadiene	80.0	48.5		ug/L		61	27 - 127
Hexachlorocyclopentadiene	80.0	60.2		ug/L		75	24 - 123
Hexachloroethane	80.0	30.5		ug/L		38	26 - 120
Indeno[1,2,3-cd]pyrene	80.0	97.1		ug/L		121	59 - 137
Isophorone	80.0	71.0		ug/L		89	68 - 121
Naphthalene	80.0	55.8		ug/L		70	51 - 120
Nitrobenzene	80.0	67.8		ug/L		85	64 - 120
N-Nitrosodi-n-propylamine	80.0	67.5		ug/L		84	60 - 120
N-Nitrosodiphenylamine	80.0	76.3		ug/L		95	63 - 120
Pentachlorophenol	160	166		ug/L		104	24 - 131
Phenanthrene	80.0	80.2		ug/L		100	65 - 120
Phenol	80.0	31.0		ug/L		39	18 - 120
Pyrene	80.0	76.5		ug/L		96	51 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*119*		*37 - 150*
2-Fluorobiphenyl	*95*		*46 - 139*
2-Fluorophenol (Surr)	*42*		*19 - 80*
Nitrobenzene-d5 (Surr)	*85*		*52 - 137*
Phenol-d5 (Surr)	*31*		*10 - 56*
Terphenyl-d14 (Surr)	*77*		*22 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870657/3-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870657

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl			80.0	73.6		ug/L		92	53 - 120	1	30
1,2,4,5-Tetrachlorobenzene			80.0	74.9		ug/L		94	46 - 117	3	30
1,4-Dioxane			80.0	38.1		ug/L		48	26 - 120	9	30
2,2'-oxybis[1-chloropropane]			80.0	36.2		ug/L		45	37 - 120	4	30
2,3,4,6-Tetrachlorophenol			80.0	91.3		ug/L		114	54 - 122	1	30
2,4,5-Trichlorophenol			80.0	81.9		ug/L		102	58 - 120	1	30
2,4,6-Trichlorophenol			80.0	82.5		ug/L		103	61 - 120	1	30
2,4-Dichlorophenol			80.0	75.1		ug/L		94	65 - 120	2	30
2,4-Dimethylphenol			80.0	64.9		ug/L		81	62 - 120	1	30
2,4-Dinitrophenol			160	182		ug/L		114	36 - 150	5	30
2,4-Dinitrotoluene			80.0	96.9		ug/L		121	68 - 134	0	30
2,6-Dinitrotoluene			80.0	89.3		ug/L		112	65 - 124	0	30
2-Chloronaphthalene			80.0	75.1		ug/L		94	52 - 120	2	30
2-Chlorophenol			80.0	60.5		ug/L		76	53 - 120	2	30
2-Methylnaphthalene			80.0	59.8		ug/L		75	44 - 120	1	30
2-Methylphenol			80.0	53.0		ug/L		66	44 - 120	4	30
2-Nitroaniline			80.0	61.6		ug/L		77	49 - 120	1	30
2-Nitrophenol			80.0	75.2		ug/L		94	60 - 125	3	30
3 & 4 Methylphenol			80.0	48.5		ug/L		61	35 - 120	4	30
3,3'-Dichlorobenzidine			80.0	79.3		ug/L		99	37 - 137	4	30
3-Nitroaniline			80.0	69.8		ug/L		87	40 - 120	5	30
4,6-Dinitro-2-methylphenol			160	181		ug/L		113	59 - 135	1	30
4-Bromophenyl phenyl ether			80.0	81.1		ug/L		101	62 - 125	2	30
4-Chloro-3-methylphenol			80.0	73.2		ug/L		91	61 - 120	0	30
4-Chloroaniline			80.0	62.4		ug/L		78	29 - 127	2	30
4-Chlorophenyl phenyl ether			80.0	84.8		ug/L		106	59 - 122	2	30
4-Methylphenol			80.0	46.2		ug/L		58	33 - 120	0	30
4-Nitroaniline			80.0	85.7		ug/L		107	45 - 120	1	30
4-Nitrophenol			160	69.6		ug/L		44	12 - 120	0	30
Acenaphthene			80.0	75.5		ug/L		94	49 - 120	3	30
Acenaphthylene			80.0	73.1		ug/L		91	60 - 120	2	30
Acetophenone			80.0	70.5		ug/L		88	62 - 120	2	30
Anthracene			80.0	77.3		ug/L		97	65 - 120	3	30
Atrazine			40.0	75.2	*	ug/L		188	43 - 150	2	30
Benzaldehyde			40.0	50.0		ug/L		125	41 - 150	3	30
Benzo[a]anthracene			80.0	81.3		ug/L		102	63 - 120	2	30
Benzo[a]pyrene			80.0	76.6		ug/L		96	60 - 139	0	30
Benzo[b]fluoranthene			80.0	83.7		ug/L		105	66 - 125	1	30
Benzo[g,h,i]perylene			80.0	90.2		ug/L		113	59 - 136	0	30
Benzo[k]fluoranthene			80.0	86.1		ug/L		108	64 - 125	2	30
Bis(2-chloroethoxy)methane			80.0	68.1		ug/L		85	64 - 120	0	30
Bis(2-chloroethyl)ether			80.0	64.3		ug/L		80	63 - 120	2	30
Bis(2-ethylhexyl) phthalate			80.0	86.0		ug/L		107	60 - 132	1	30
Butyl benzyl phthalate			80.0	79.4		ug/L		99	58 - 132	3	30
Caprolactam			40.0	20.3		ug/L		51	10 - 120	3	30
Carbazole			80.0	82.5		ug/L		103	65 - 120	1	30
Chrysene			80.0	82.2		ug/L		103	63 - 120	1	30
Dibenz(a,h)anthracene			80.0	99.2		ug/L		124	62 - 140	1	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-870657/3-A
Matrix: Water
Analysis Batch: 870554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870657

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran			80.0	81.6		ug/L		102	58 - 120	2	30
Diethyl phthalate			80.0	83.2		ug/L		104	53 - 129	2	30
Dimethyl phthalate			80.0	84.5		ug/L		106	60 - 124	1	30
Di-n-butyl phthalate			80.0	76.1		ug/L		95	59 - 133	2	30
Di-n-octyl phthalate			80.0	88.9		ug/L		111	49 - 135	3	30
Fluoranthene			80.0	85.9		ug/L		107	65 - 123	1	30
Fluorene			80.0	84.9		ug/L		106	58 - 120	0	30
Hexachlorobenzene			80.0	86.1		ug/L		108	61 - 128	0	30
Hexachlorobutadiene			80.0	49.6		ug/L		62	27 - 127	2	30
Hexachlorocyclopentadiene			80.0	59.5		ug/L		74	24 - 123	1	30
Hexachloroethane			80.0	31.2		ug/L		39	26 - 120	2	30
Indeno[1,2,3-cd]pyrene			80.0	94.7		ug/L		118	59 - 137	2	30
Isophorone			80.0	71.3		ug/L		89	68 - 121	0	30
Naphthalene			80.0	55.6		ug/L		70	51 - 120	0	30
Nitrobenzene			80.0	72.1		ug/L		90	64 - 120	6	30
N-Nitrosodi-n-propylamine			80.0	68.2		ug/L		85	60 - 120	1	30
N-Nitrosodiphenylamine			80.0	76.2		ug/L		95	63 - 120	0	30
Pentachlorophenol			160	165		ug/L		103	24 - 131	1	30
Phenanthrene			80.0	79.0		ug/L		99	65 - 120	2	30
Phenol			80.0	30.6		ug/L		38	18 - 120	2	30
Pyrene			80.0	76.8		ug/L		96	51 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*118*		*37 - 150*
2-Fluorobiphenyl	*94*		*46 - 139*
2-Fluorophenol (Surr)	*43*		*19 - 80*
Nitrobenzene-d5 (Surr)	*86*		*52 - 137*
Phenol-d5 (Surr)	*31*		*10 - 56*
Terphenyl-d14 (Surr)	*79*		*22 - 150*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 460-870354/1-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:05	1
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:05	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/05/22 23:06	10/06/22 06:05	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/05/22 23:06	10/06/22 06:05	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/05/22 23:06	10/06/22 06:05	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/05/22 23:06	10/06/22 06:05	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 460-870354/1-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/05/22 23:06	10/06/22 06:05	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/05/22 23:06	10/06/22 06:05	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:05	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:05	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:05	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/05/22 23:06	10/06/22 06:05	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/05/22 23:06	10/06/22 06:05	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/05/22 23:06	10/06/22 06:05	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/05/22 23:06	10/06/22 06:05	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:05	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/05/22 23:06	10/06/22 06:05	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/05/22 23:06	10/06/22 06:05	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/05/22 23:06	10/06/22 06:05	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/05/22 23:06	10/06/22 06:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*126*	*	*15 - 121*	*10/05/22 23:06*	*10/06/22 06:05*	*1*
DCB Decachlorobiphenyl	*89*		*15 - 121*	*10/05/22 23:06*	*10/06/22 06:05*	*1*
Tetrachloro-m-xylene	*92*		*17 - 120*	*10/05/22 23:06*	*10/06/22 06:05*	*1*
Tetrachloro-m-xylene	*80*		*17 - 120*	*10/05/22 23:06*	*10/06/22 06:05*	*1*

Lab Sample ID: LCS 460-870354/2-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.800	0.958		ug/L		120	59 - 125
4,4'-DDD	0.800	0.823		ug/L		103	59 - 125
4,4'-DDE	0.800	0.890		ug/L		111	60 - 128
4,4'-DDE	0.800	0.692		ug/L		87	60 - 128
4,4'-DDT	0.800	1.02		ug/L		128	42 - 136
4,4'-DDT	0.800	0.833		ug/L		104	42 - 136

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-870354/2-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870354

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.800	0.830		ug/L		104	58 - 125		
Aldrin			0.800	0.741		ug/L		93	58 - 125		
alpha-BHC			0.800	0.823		ug/L		103	65 - 122		
alpha-BHC			0.800	0.780		ug/L		97	65 - 122		
beta-BHC			0.800	0.838		ug/L		105	66 - 128		
beta-BHC			0.800	0.836		ug/L		105	66 - 128		
cis-Chlordane			0.800	0.872		ug/L		109	57 - 123		
cis-Chlordane			0.800	0.737		ug/L		92	57 - 123		
delta-BHC			0.800	0.705		ug/L		88	38 - 125		
delta-BHC			0.800	0.738		ug/L		92	38 - 125		
Dieldrin			0.800	0.924		ug/L		115	57 - 133		
Dieldrin			0.800	0.772		ug/L		97	57 - 133		
Endosulfan I			0.800	0.893		ug/L		112	56 - 124		
Endosulfan I			0.800	0.752		ug/L		94	56 - 124		
Endosulfan II			0.800	0.966		ug/L		121	56 - 134		
Endosulfan II			0.800	0.831		ug/L		104	56 - 134		
Endosulfan sulfate			0.800	0.932		ug/L		116	54 - 124		
Endosulfan sulfate			0.800	0.812		ug/L		102	54 - 124		
Endrin			0.800	0.884		ug/L		110	57 - 135		
Endrin			0.800	0.771		ug/L		96	57 - 135		
Endrin aldehyde			0.800	0.906		ug/L		113	54 - 122		
Endrin aldehyde			0.800	0.791		ug/L		99	54 - 122		
Endrin ketone			0.800	1.10	*	ug/L		137	51 - 132		
Endrin ketone			0.800	0.857		ug/L		107	51 - 132		
gamma-BHC (Lindane)			0.800	0.853		ug/L		107	65 - 123		
gamma-BHC (Lindane)			0.800	0.778		ug/L		97	65 - 123		
Heptachlor			0.800	0.901		ug/L		113	59 - 120		
Heptachlor			0.800	0.819		ug/L		102	59 - 120		
Heptachlor epoxide			0.800	0.856		ug/L		107	59 - 128		
Heptachlor epoxide			0.800	0.762		ug/L		95	59 - 128		
Methoxychlor			0.800	1.04		ug/L		130	35 - 138		
Methoxychlor			0.800	0.831		ug/L		104	35 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*122*	*	*15 - 121*
DCB Decachlorobiphenyl	*88*		*15 - 121*
Tetrachloro-m-xylene	*90*		*17 - 120*
Tetrachloro-m-xylene	*79*		*17 - 120*

Lab Sample ID: LCSD 460-870354/3-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870354

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.800	0.943		ug/L		118	59 - 125	2	30
4,4'-DDD			0.800	0.851		ug/L		106	59 - 125	3	30
4,4'-DDE			0.800	0.879		ug/L		110	60 - 128	1	30
4,4'-DDE			0.800	0.691		ug/L		86	60 - 128	0	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-870354/3-A
Matrix: Water
Analysis Batch: 870370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870354

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDT			0.800	1.01		ug/L		126	42 - 136	1	30
4,4'-DDT			0.800	0.868		ug/L		109	42 - 136	4	30
Aldrin			0.800	0.822		ug/L		103	58 - 125	1	30
Aldrin			0.800	0.739		ug/L		92	58 - 125	0	30
alpha-BHC			0.800	0.824		ug/L		103	65 - 122	0	30
alpha-BHC			0.800	0.784		ug/L		98	65 - 122	1	30
beta-BHC			0.800	0.833		ug/L		104	66 - 128	1	30
beta-BHC			0.800	0.842		ug/L		105	66 - 128	1	30
cis-Chlordane			0.800	0.863		ug/L		108	57 - 123	1	30
cis-Chlordane			0.800	0.737		ug/L		92	57 - 123	0	30
delta-BHC			0.800	0.702		ug/L		88	38 - 125	0	30
delta-BHC			0.800	0.739		ug/L		92	38 - 125	0	30
Dieldrin			0.800	0.912		ug/L		114	57 - 133	1	30
Dieldrin			0.800	0.771		ug/L		96	57 - 133	0	30
Endosulfan I			0.800	0.883		ug/L		110	56 - 124	1	30
Endosulfan I			0.800	0.753		ug/L		94	56 - 124	0	30
Endosulfan II			0.800	0.956		ug/L		119	56 - 134	1	30
Endosulfan II			0.800	0.855		ug/L		107	56 - 134	3	30
Endosulfan sulfate			0.800	0.924		ug/L		116	54 - 124	1	30
Endosulfan sulfate			0.800	0.824		ug/L		103	54 - 124	2	30
Endrin			0.800	0.870		ug/L		109	57 - 135	2	30
Endrin			0.800	0.773		ug/L		97	57 - 135	0	30
Endrin aldehyde			0.800	0.899		ug/L		112	54 - 122	1	30
Endrin aldehyde			0.800	0.825		ug/L		103	54 - 122	4	30
Endrin ketone			0.800	1.10	*	ug/L		138	51 - 132	0	30
Endrin ketone			0.800	0.860		ug/L		107	51 - 132	0	30
gamma-BHC (Lindane)			0.800	0.853		ug/L		107	65 - 123	0	30
gamma-BHC (Lindane)			0.800	0.784		ug/L		98	65 - 123	1	30
Heptachlor			0.800	0.897		ug/L		112	59 - 120	0	30
Heptachlor			0.800	0.819		ug/L		102	59 - 120	0	30
Heptachlor epoxide			0.800	0.847		ug/L		106	59 - 128	1	30
Heptachlor epoxide			0.800	0.762		ug/L		95	59 - 128	0	30
Methoxychlor			0.800	1.04		ug/L		130	35 - 138	0	30
Methoxychlor			0.800	0.866		ug/L		108	35 - 138	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*122*	*	*15 - 121*
DCB Decachlorobiphenyl	*87*		*15 - 121*
Tetrachloro-m-xylene	*89*		*17 - 120*
Tetrachloro-m-xylene	*79*		*17 - 120*

Lab Sample ID: MB 460-870667/1-A
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/07/22 11:19	10/10/22 11:42	1
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		10/07/22 11:19	10/10/22 11:42	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 460-870667/1-A
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
Aldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/07/22 11:19	10/10/22 11:42	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		10/07/22 11:19	10/10/22 11:42	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/07/22 11:19	10/10/22 11:42	1
beta-BHC	0.020	U	0.020	0.015	ug/L		10/07/22 11:19	10/10/22 11:42	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/07/22 11:19	10/10/22 11:42	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		10/07/22 11:19	10/10/22 11:42	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/07/22 11:19	10/10/22 11:42	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		10/07/22 11:19	10/10/22 11:42	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/07/22 11:19	10/10/22 11:42	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		10/07/22 11:19	10/10/22 11:42	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/07/22 11:19	10/10/22 11:42	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		10/07/22 11:19	10/10/22 11:42	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		10/07/22 11:19	10/10/22 11:42	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/07/22 11:19	10/10/22 11:42	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		10/07/22 11:19	10/10/22 11:42	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		10/07/22 11:19	10/10/22 11:42	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/07/22 11:19	10/10/22 11:42	1
Toxaphene	0.50	U	0.50	0.11	ug/L		10/07/22 11:19	10/10/22 11:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*15 - 121*	*10/07/22 11:19*	*10/10/22 11:42*	*1*
DCB Decachlorobiphenyl	*85*		*15 - 121*	*10/07/22 11:19*	*10/10/22 11:42*	*1*
Tetrachloro-m-xylene	*82*		*17 - 120*	*10/07/22 11:19*	*10/10/22 11:42*	*1*
Tetrachloro-m-xylene	*80*		*17 - 120*	*10/07/22 11:19*	*10/10/22 11:42*	*1*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-870667/2-A
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.800	0.780		ug/L		97	59 - 125
4,4'-DDD	0.800	0.899		ug/L		112	59 - 125
4,4'-DDE	0.800	0.820		ug/L		103	60 - 128
4,4'-DDE	0.800	0.897		ug/L		112	60 - 128
4,4'-DDT	0.800	1.03		ug/L		129	42 - 136
4,4'-DDT	0.800	1.01		ug/L		126	42 - 136
Aldrin	0.800	0.804		ug/L		101	58 - 125
Aldrin	0.800	0.878		ug/L		110	58 - 125
alpha-BHC	0.800	0.819		ug/L		102	65 - 122
alpha-BHC	0.800	0.885		ug/L		111	65 - 122
beta-BHC	0.800	0.778		ug/L		97	66 - 128
beta-BHC	0.800	0.865		ug/L		108	66 - 128
cis-Chlordane	0.800	0.768		ug/L		96	57 - 123
cis-Chlordane	0.800	0.860		ug/L		107	57 - 123
delta-BHC	0.800	0.721		ug/L		90	38 - 125
delta-BHC	0.800	0.769		ug/L		96	38 - 125
Dieldrin	0.800	0.824		ug/L		103	57 - 133
Dieldrin	0.800	0.884		ug/L		110	57 - 133
Endosulfan I	0.800	0.806		ug/L		101	56 - 124
Endosulfan I	0.800	0.873		ug/L		109	56 - 124
Endosulfan II	0.800	0.807		ug/L		101	56 - 134
Endosulfan II	0.800	0.924		ug/L		115	56 - 134
Endosulfan sulfate	0.800	0.742		ug/L		93	54 - 124
Endosulfan sulfate	0.800	0.788		ug/L		99	54 - 124
Endrin	0.800	0.811		ug/L		101	57 - 135
Endrin	0.800	0.893		ug/L		112	57 - 135
Endrin aldehyde	0.800	0.794		ug/L		99	54 - 122
Endrin aldehyde	0.800	0.837		ug/L		105	54 - 122
Endrin ketone	0.800	0.858		ug/L		107	51 - 132
Endrin ketone	0.800	0.884		ug/L		110	51 - 132
gamma-BHC (Lindane)	0.800	0.814		ug/L		102	65 - 123
gamma-BHC (Lindane)	0.800	0.899		ug/L		112	65 - 123
Heptachlor	0.800	0.824		ug/L		103	59 - 120
Heptachlor	0.800	0.888		ug/L		111	59 - 120
Heptachlor epoxide	0.800	0.796		ug/L		100	59 - 128
Heptachlor epoxide	0.800	0.880		ug/L		110	59 - 128
Methoxychlor	0.800	0.965		ug/L		121	35 - 138
Methoxychlor	0.800	0.965		ug/L		121	35 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*15 - 121*
DCB Decachlorobiphenyl	*91*		*15 - 121*
Tetrachloro-m-xylene	*83*		*17 - 120*
Tetrachloro-m-xylene	*86*		*17 - 120*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-870667/3-A
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.800	0.800		ug/L		100	59 - 125	3	30
4,4'-DDD			0.800	0.852		ug/L		106	59 - 125	5	30
4,4'-DDE			0.800	0.841		ug/L		105	60 - 128	2	30
4,4'-DDE			0.800	0.853		ug/L		107	60 - 128	5	30
4,4'-DDT			0.800	1.03		ug/L		129	42 - 136	0	30
4,4'-DDT			0.800	0.974		ug/L		122	42 - 136	4	30
Aldrin			0.800	0.842		ug/L		105	58 - 125	5	30
Aldrin			0.800	0.855		ug/L		107	58 - 125	3	30
alpha-BHC			0.800	0.845		ug/L		106	65 - 122	3	30
alpha-BHC			0.800	0.863		ug/L		108	65 - 122	3	30
beta-BHC			0.800	0.812		ug/L		102	66 - 128	4	30
beta-BHC			0.800	0.849		ug/L		106	66 - 128	2	30
cis-Chlordane			0.800	0.796		ug/L		100	57 - 123	4	30
cis-Chlordane			0.800	0.838		ug/L		105	57 - 123	3	30
delta-BHC			0.800	0.745		ug/L		93	38 - 125	3	30
delta-BHC			0.800	0.746		ug/L		93	38 - 125	3	30
Dieldrin			0.800	0.840		ug/L		105	57 - 133	2	30
Dieldrin			0.800	0.854		ug/L		107	57 - 133	3	30
Endosulfan I			0.800	0.838		ug/L		105	56 - 124	4	30
Endosulfan I			0.800	0.854		ug/L		107	56 - 124	2	30
Endosulfan II			0.800	0.849		ug/L		106	56 - 134	5	30
Endosulfan II			0.800	0.881		ug/L		110	56 - 134	5	30
Endosulfan sulfate			0.800	0.774		ug/L		97	54 - 124	4	30
Endosulfan sulfate			0.800	0.765		ug/L		96	54 - 124	3	30
Endrin			0.800	0.835		ug/L		104	57 - 135	3	30
Endrin			0.800	0.854		ug/L		107	57 - 135	5	30
Endrin aldehyde			0.800	0.828		ug/L		103	54 - 122	4	30
Endrin aldehyde			0.800	0.824		ug/L		103	54 - 122	1	30
Endrin ketone			0.800	0.908		ug/L		113	51 - 132	6	30
Endrin ketone			0.800	0.866		ug/L		108	51 - 132	2	30
gamma-BHC (Lindane)			0.800	0.848		ug/L		106	65 - 123	4	30
gamma-BHC (Lindane)			0.800	0.878		ug/L		110	65 - 123	2	30
Heptachlor			0.800	0.856		ug/L		107	59 - 120	4	30
Heptachlor			0.800	0.863		ug/L		108	59 - 120	3	30
Heptachlor epoxide			0.800	0.830		ug/L		104	59 - 128	4	30
Heptachlor epoxide			0.800	0.860		ug/L		107	59 - 128	2	30
Methoxychlor			0.800	0.931		ug/L		116	35 - 138	4	30
Methoxychlor			0.800	0.895		ug/L		112	35 - 138	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*85*		*15 - 121*
DCB Decachlorobiphenyl	*90*		*15 - 121*
Tetrachloro-m-xylene	*85*		*17 - 120*
Tetrachloro-m-xylene	*85*		*17 - 120*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266842-J-4-B MS
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.020	U	0.800	0.735		ug/L		92	59 - 125
4,4'-DDD	0.020	U	0.800	0.785		ug/L		98	59 - 125
4,4'-DDE	0.020	U	0.800	0.737		ug/L		92	60 - 128
4,4'-DDE	0.020	U	0.800	0.750		ug/L		94	60 - 128
4,4'-DDT	0.020	U	0.800	0.945		ug/L		118	42 - 136
4,4'-DDT	0.020	U	0.800	0.884		ug/L		111	42 - 136
Aldrin	0.020	U	0.800	0.707		ug/L		88	58 - 125
Aldrin	0.020	U	0.800	0.713		ug/L		89	58 - 125
alpha-BHC	0.020	U	0.800	0.781		ug/L		98	65 - 122
alpha-BHC	0.020	U	0.800	0.810		ug/L		101	65 - 122
beta-BHC	0.020	U	0.800	0.777		ug/L		97	66 - 128
beta-BHC	0.020	U	0.800	0.826		ug/L		103	66 - 128
cis-Chlordane	0.020	U	0.800	0.737		ug/L		92	57 - 123
cis-Chlordane	0.020	U	0.800	0.802		ug/L		100	57 - 123
delta-BHC	0.020	U	0.800	0.634		ug/L		79	38 - 125
delta-BHC	0.020	U	0.800	0.641		ug/L		80	38 - 125
Dieldrin	0.020	U	0.800	0.798		ug/L		100	57 - 133
Dieldrin	0.020	U	0.800	0.820		ug/L		103	57 - 133
Endosulfan I	0.020	U	0.800	0.797		ug/L		100	56 - 124
Endosulfan I	0.020	U	0.800	0.816		ug/L		102	56 - 124
Endosulfan II	0.020	U	0.800	0.802		ug/L		100	56 - 134
Endosulfan II	0.020	U	0.800	0.823		ug/L		103	56 - 134
Endosulfan sulfate	0.020	U	0.800	0.733		ug/L		92	54 - 124
Endosulfan sulfate	0.020	U	0.800	0.722		ug/L		90	54 - 124
Endrin	0.020	U	0.800	0.798		ug/L		100	57 - 135
Endrin	0.020	U	0.800	0.821		ug/L		103	57 - 135
Endrin aldehyde	0.020	U	0.800	0.736		ug/L		92	54 - 122
Endrin aldehyde	0.020	U	0.800	0.738		ug/L		92	54 - 122
Endrin ketone	0.020	U	0.800	0.833		ug/L		104	51 - 132
Endrin ketone	0.020	U	0.800	0.845		ug/L		106	51 - 132
gamma-BHC (Lindane)	0.020	U	0.800	0.798		ug/L		100	65 - 123
gamma-BHC (Lindane)	0.020	U	0.800	0.835		ug/L		104	65 - 123
Heptachlor	0.020	U	0.800	0.739		ug/L		92	59 - 120
Heptachlor	0.020	U	0.800	0.755		ug/L		94	59 - 120
Heptachlor epoxide	0.020	U	0.800	0.784		ug/L		98	59 - 128
Heptachlor epoxide	0.020	U	0.800	0.818		ug/L		102	59 - 128
Methoxychlor	0.020	U	0.800	0.941		ug/L		118	35 - 138
Methoxychlor	0.020	U	0.800	0.869		ug/L		109	35 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*82*		*15 - 121*
DCB Decachlorobiphenyl	*98*		*15 - 121*
Tetrachloro-m-xylene	*57*		*17 - 120*
Tetrachloro-m-xylene	*59*		*17 - 120*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-266842-J-4-C MSD
Matrix: Water
Analysis Batch: 871010

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	0.020	U	0.800	0.757		ug/L		95	59 - 125	3	30
4,4'-DDD	0.020	U	0.800	0.796		ug/L		99	59 - 125	1	30
4,4'-DDE	0.020	U	0.800	0.770		ug/L		96	60 - 128	4	30
4,4'-DDE	0.020	U	0.800	0.782		ug/L		98	60 - 128	4	30
4,4'-DDT	0.020	U	0.800	0.964		ug/L		120	42 - 136	2	30
4,4'-DDT	0.020	U	0.800	0.911		ug/L		114	42 - 136	3	30
Aldrin	0.020	U	0.800	0.738		ug/L		92	58 - 125	4	30
Aldrin	0.020	U	0.800	0.739		ug/L		92	58 - 125	4	30
alpha-BHC	0.020	U	0.800	0.752		ug/L		94	65 - 122	4	30
alpha-BHC	0.020	U	0.800	0.774		ug/L		97	65 - 122	4	30
beta-BHC	0.020	U	0.800	0.779		ug/L		97	66 - 128	0	30
beta-BHC	0.020	U	0.800	0.825		ug/L		103	66 - 128	0	30
cis-Chlordane	0.020	U	0.800	0.746		ug/L		93	57 - 123	1	30
cis-Chlordane	0.020	U	0.800	0.804		ug/L		101	57 - 123	0	30
delta-BHC	0.020	U	0.800	0.634		ug/L		79	38 - 125	0	30
delta-BHC	0.020	U	0.800	0.640		ug/L		80	38 - 125	0	30
Dieldrin	0.020	U	0.800	0.816		ug/L		102	57 - 133	2	30
Dieldrin	0.020	U	0.800	0.823		ug/L		103	57 - 133	0	30
Endosulfan I	0.020	U	0.800	0.794		ug/L		99	56 - 124	0	30
Endosulfan I	0.020	U	0.800	0.812		ug/L		102	56 - 124	1	30
Endosulfan II	0.020	U	0.800	0.821		ug/L		103	56 - 134	2	30
Endosulfan II	0.020	U	0.800	0.835		ug/L		104	56 - 134	1	30
Endosulfan sulfate	0.020	U	0.800	0.748		ug/L		93	54 - 124	2	30
Endosulfan sulfate	0.020	U	0.800	0.735		ug/L		92	54 - 124	2	30
Endrin	0.020	U	0.800	0.804		ug/L		101	57 - 135	1	30
Endrin	0.020	U	0.800	0.820		ug/L		103	57 - 135	0	30
Endrin aldehyde	0.020	U	0.800	0.740		ug/L		92	54 - 122	1	30
Endrin aldehyde	0.020	U	0.800	0.740		ug/L		92	54 - 122	0	30
Endrin ketone	0.020	U	0.800	0.851		ug/L		106	51 - 132	2	30
Endrin ketone	0.020	U	0.800	0.862		ug/L		108	51 - 132	2	30
gamma-BHC (Lindane)	0.020	U	0.800	0.782		ug/L		98	65 - 123	2	30
gamma-BHC (Lindane)	0.020	U	0.800	0.812		ug/L		101	65 - 123	3	30
Heptachlor	0.020	U	0.800	0.763		ug/L		95	59 - 120	3	30
Heptachlor	0.020	U	0.800	0.783		ug/L		98	59 - 120	4	30
Heptachlor epoxide	0.020	U	0.800	0.785		ug/L		98	59 - 128	0	30
Heptachlor epoxide	0.020	U	0.800	0.813		ug/L		102	59 - 128	1	30
Methoxychlor	0.020	U	0.800	0.958		ug/L		120	35 - 138	2	30
Methoxychlor	0.020	U	0.800	0.883		ug/L		110	35 - 138	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*112*		*15 - 121*
DCB Decachlorobiphenyl	*116*		*15 - 121*
Tetrachloro-m-xylene	*84*		*17 - 120*
Tetrachloro-m-xylene	*85*		*17 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-870353/1-A
Matrix: Water
Analysis Batch: 870405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/05/22 22:53	10/06/22 09:33	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/05/22 22:53	10/06/22 09:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*12 - 150*	*10/05/22 22:53*	*10/06/22 09:33*	*1*
DCB Decachlorobiphenyl	*83*		*12 - 150*	*10/05/22 22:53*	*10/06/22 09:33*	*1*
Tetrachloro-m-xylene	*69*		*11 - 131*	*10/05/22 22:53*	*10/06/22 09:33*	*1*
Tetrachloro-m-xylene	*68*		*11 - 131*	*10/05/22 22:53*	*10/06/22 09:33*	*1*

Lab Sample ID: LCS 460-870353/2-A
Matrix: Water
Analysis Batch: 870405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aroclor 1016	4.00	3.03		ug/L		76	53 - 141
Aroclor 1016	4.00	3.02		ug/L		76	53 - 141
Aroclor 1260	4.00	3.14		ug/L		79	55 - 142
Aroclor 1260	4.00	3.01		ug/L		75	55 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*80*		*12 - 150*
DCB Decachlorobiphenyl	*81*		*12 - 150*
Tetrachloro-m-xylene	*73*		*11 - 131*
Tetrachloro-m-xylene	*71*		*11 - 131*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 460-870353/3-A
Matrix: Water
Analysis Batch: 870405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870353

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016			4.00	2.93		ug/L		73	53 - 141	4	30
Aroclor 1016			4.00	2.74		ug/L		69	53 - 141	10	30
Aroclor 1260			4.00	3.02		ug/L		76	55 - 142	4	30
Aroclor 1260			4.00	2.94		ug/L		73	55 - 142	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*76*		*12 - 150*
DCB Decachlorobiphenyl	*78*		*12 - 150*
Tetrachloro-m-xylene	*69*		*11 - 131*
Tetrachloro-m-xylene	*68*		*11 - 131*

Lab Sample ID: MB 460-870664/1-A
Matrix: Water
Analysis Batch: 871037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1016	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		10/07/22 11:11	10/10/22 11:01	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		10/07/22 11:11	10/10/22 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*12 - 150*	*10/07/22 11:11*	*10/10/22 11:01*	*1*
DCB Decachlorobiphenyl	*110*		*12 - 150*	*10/07/22 11:11*	*10/10/22 11:01*	*1*
Tetrachloro-m-xylene	*97*		*11 - 131*	*10/07/22 11:11*	*10/10/22 11:01*	*1*
Tetrachloro-m-xylene	*97*		*11 - 131*	*10/07/22 11:11*	*10/10/22 11:01*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 460-870664/2-A
Matrix: Water
Analysis Batch: 871037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870664

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aroclor 1016			4.00	4.25		ug/L		106	53 - 141		
Aroclor 1016			4.00	3.99		ug/L		100	53 - 141		
Aroclor 1260			4.00	4.38		ug/L		110	55 - 142		
Aroclor 1260			4.00	4.13		ug/L		103	55 - 142		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*124*		*12 - 150*
DCB Decachlorobiphenyl	*116*		*12 - 150*
Tetrachloro-m-xylene	*109*		*11 - 131*
Tetrachloro-m-xylene	*75*		*11 - 131*

Lab Sample ID: LCSD 460-870664/3-A
Matrix: Water
Analysis Batch: 871037

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 870664

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aroclor 1016			4.00	4.28		ug/L		107	53 - 141	7	30
Aroclor 1016			4.00	4.30		ug/L		107	53 - 141	1	30
Aroclor 1260			4.00	4.52		ug/L		113	55 - 142	3	30
Aroclor 1260			4.00	4.43		ug/L		111	55 - 142	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*124*		*12 - 150*
DCB Decachlorobiphenyl	*119*		*12 - 150*
Tetrachloro-m-xylene	*107*		*11 - 131*
Tetrachloro-m-xylene	*101*		*11 - 131*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-870341/1-A
Matrix: Water
Analysis Batch: 870271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0	U	2.0	0.76	ug/L		10/05/22 21:01	10/05/22 23:19	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/05/22 21:01	10/05/22 23:19	1
Barium	4.0	U	4.0	0.91	ug/L		10/05/22 21:01	10/05/22 23:19	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/05/22 21:01	10/05/22 23:19	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/05/22 21:01	10/05/22 23:19	1
Calcium	500	U	500	53.6	ug/L		10/05/22 21:01	10/05/22 23:19	1
Chromium	4.0	U	4.0	2.5	ug/L		10/05/22 21:01	10/05/22 23:19	1
Cobalt	4.0	U	4.0	0.71	ug/L		10/05/22 21:01	10/05/22 23:19	1
Copper	4.0	U	4.0	2.5	ug/L		10/05/22 21:01	10/05/22 23:19	1
Iron	120	U	120	58.2	ug/L		10/05/22 21:01	10/05/22 23:19	1
Lead	1.2	U	1.2	0.84	ug/L		10/05/22 21:01	10/05/22 23:19	1
Magnesium	200	U	200	46.9	ug/L		10/05/22 21:01	10/05/22 23:19	1
Manganese	8.0	U	8.0	1.5	ug/L		10/05/22 21:01	10/05/22 23:19	1
Nickel	4.0	U	4.0	0.91	ug/L		10/05/22 21:01	10/05/22 23:19	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-870341/1-A
Matrix: Water
Analysis Batch: 870271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	200	U	200	112	ug/L		10/05/22 21:01	10/05/22 23:19	1
Selenium	2.5	U	2.5	0.59	ug/L		10/05/22 21:01	10/05/22 23:19	1
Silver	2.0	U	2.0	0.29	ug/L		10/05/22 21:01	10/05/22 23:19	1
Sodium	500	U	500	163	ug/L		10/05/22 21:01	10/05/22 23:19	1
Thallium	0.80	U	0.80	0.21	ug/L		10/05/22 21:01	10/05/22 23:19	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/05/22 21:01	10/05/22 23:19	1
Zinc	16.0	U	16.0	6.5	ug/L		10/05/22 21:01	10/05/22 23:19	1

Lab Sample ID: MB 460-870341/1-A
Matrix: Water
Analysis Batch: 870271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.2	U	1.2	0.84	ug/L		10/05/22 21:01	10/06/22 01:36	1

Lab Sample ID: MB 460-870341/1-A
Matrix: Water
Analysis Batch: 870468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	19.5	ug/L		10/05/22 21:01	10/06/22 20:45	1

Lab Sample ID: LCS 460-870341/2-A
Matrix: Water
Analysis Batch: 870271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	25.0	25.44		ug/L		102	80 - 120
Arsenic	50.0	53.10		ug/L		106	80 - 120
Barium	50.0	49.52		ug/L		99	80 - 120
Beryllium	25.0	27.84		ug/L		111	80 - 120
Cadmium	25.0	26.42		ug/L		106	80 - 120
Calcium	2500	2535		ug/L		101	80 - 120
Chromium	50.0	53.28		ug/L		107	80 - 120
Cobalt	25.0	27.11		ug/L		108	80 - 120
Copper	50.0	54.47		ug/L		109	80 - 120
Iron	2500	2627		ug/L		105	80 - 120
Magnesium	2500	2626		ug/L		105	80 - 120
Manganese	250	266.5		ug/L		107	80 - 120
Nickel	50.0	53.92		ug/L		108	80 - 120
Potassium	2500	2545		ug/L		102	80 - 120
Selenium	50.0	54.17		ug/L		108	80 - 120
Silver	25.0	26.04		ug/L		104	80 - 120
Sodium	2500	2676		ug/L		107	80 - 120
Thallium	20.0	21.02		ug/L		105	80 - 120
Vanadium	50.0	53.06		ug/L		106	80 - 120
Zinc	250	261.8		ug/L		105	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-870341/2-A
Matrix: Water
Analysis Batch: 870271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	25.0	27.15		ug/L		109	80 - 120

Lab Sample ID: LCS 460-870341/2-A
Matrix: Water
Analysis Batch: 870468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2500	2561		ug/L		102	80 - 120

Lab Sample ID: MB 460-870563/1-A
Matrix: Water
Analysis Batch: 870930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	19.5	ug/L		10/06/22 19:16	10/09/22 11:54	1
Antimony	2.0	U	2.0	0.76	ug/L		10/06/22 19:16	10/09/22 11:54	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/06/22 19:16	10/09/22 11:54	1
Barium	4.0	U	4.0	0.91	ug/L		10/06/22 19:16	10/09/22 11:54	1
Beryllium	0.80	U	0.80	0.13	ug/L		10/06/22 19:16	10/09/22 11:54	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/06/22 19:16	10/09/22 11:54	1
Calcium	500	U	500	53.6	ug/L		10/06/22 19:16	10/09/22 11:54	1
Chromium	4.0	U	4.0	2.5	ug/L		10/06/22 19:16	10/09/22 11:54	1
Cobalt	4.0	U	4.0	0.71	ug/L		10/06/22 19:16	10/09/22 11:54	1
Copper	4.0	U	4.0	2.5	ug/L		10/06/22 19:16	10/09/22 11:54	1
Iron	120	U	120	58.2	ug/L		10/06/22 19:16	10/09/22 11:54	1
Lead	1.2	U	1.2	0.84	ug/L		10/06/22 19:16	10/09/22 11:54	1
Magnesium	200	U	200	46.9	ug/L		10/06/22 19:16	10/09/22 11:54	1
Manganese	8.0	U	8.0	1.5	ug/L		10/06/22 19:16	10/09/22 11:54	1
Nickel	4.0	U	4.0	0.91	ug/L		10/06/22 19:16	10/09/22 11:54	1
Potassium	200	U	200	112	ug/L		10/06/22 19:16	10/09/22 11:54	1
Selenium	2.5	U	2.5	0.59	ug/L		10/06/22 19:16	10/09/22 11:54	1
Silver	2.0	U	2.0	0.29	ug/L		10/06/22 19:16	10/09/22 11:54	1
Sodium	500	U	500	163	ug/L		10/06/22 19:16	10/09/22 11:54	1
Thallium	0.80	U	0.80	0.21	ug/L		10/06/22 19:16	10/09/22 11:54	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/06/22 19:16	10/09/22 11:54	1
Zinc	16.0	U	16.0	6.5	ug/L		10/06/22 19:16	10/09/22 11:54	1

Lab Sample ID: LCS 460-870563/2-A
Matrix: Water
Analysis Batch: 870930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2500	2449		ug/L		98	80 - 120
Antimony	25.0	25.44		ug/L		102	80 - 120
Arsenic	50.0	48.96		ug/L		98	80 - 120
Barium	50.0	51.82		ug/L		104	80 - 120
Beryllium	25.0	24.84		ug/L		99	80 - 120
Cadmium	25.0	25.73		ug/L		103	80 - 120
Calcium	2500	2565		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-870563/2-A
Matrix: Water
Analysis Batch: 870930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	50.0	52.37		ug/L		105	80 - 120
Cobalt	25.0	25.36		ug/L		101	80 - 120
Copper	50.0	52.48		ug/L		105	80 - 120
Iron	2500	2580		ug/L		103	80 - 120
Lead	25.0	25.13		ug/L		101	80 - 120
Magnesium	2500	2549		ug/L		102	80 - 120
Manganese	250	257.9		ug/L		103	80 - 120
Nickel	50.0	51.75		ug/L		104	80 - 120
Potassium	2500	2501		ug/L		100	80 - 120
Selenium	50.0	48.60		ug/L		97	80 - 120
Silver	25.0	24.49		ug/L		98	80 - 120
Sodium	2500	2595		ug/L		104	80 - 120
Thallium	20.0	19.84		ug/L		99	80 - 120
Vanadium	50.0	50.58		ug/L		101	80 - 120
Zinc	250	254.7		ug/L		102	80 - 120

Lab Sample ID: 460-266887-F-8-C MS
Matrix: Water
Analysis Batch: 870930

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870563

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	39.5	J	2500	2582		ug/L		102	75 - 125
Antimony	2.0	U	25.0	27.53		ug/L		110	75 - 125
Arsenic	2.0	U	50.0	51.03		ug/L		102	75 - 125
Barium	29.9		50.0	82.82		ug/L		106	75 - 125
Beryllium	0.80	U	25.0	26.91		ug/L		108	75 - 125
Cadmium	2.0	U	25.0	27.30		ug/L		109	75 - 125
Calcium	14400		2500	16990	4	ug/L		103	75 - 125
Chromium	2.8	J	50.0	53.53		ug/L		102	75 - 125
Cobalt	4.0	U	25.0	26.82		ug/L		107	75 - 125
Copper	4.0	U	50.0	53.60		ug/L		107	75 - 125
Iron	120	U	2500	2671		ug/L		107	75 - 125
Lead	1.2	U	25.0	26.87		ug/L		107	75 - 125
Magnesium	11300		2500	13960	4	ug/L		104	75 - 125
Manganese	15.6		250	280.9		ug/L		106	75 - 125
Nickel	4.2		50.0	55.84		ug/L		103	75 - 125
Potassium	5660		2500	8158		ug/L		100	75 - 125
Selenium	2.5	U	50.0	51.83		ug/L		104	75 - 125
Silver	2.0	U	25.0	25.52		ug/L		102	75 - 125
Sodium	119000		2500	121200	4	ug/L		93	75 - 125
Thallium	0.80	U	20.0	21.12		ug/L		106	75 - 125
Vanadium	4.0	U	50.0	53.09		ug/L		106	75 - 125
Zinc	8.5	J	250	265.5		ug/L		103	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266887-F-8-B DU
Matrix: Water
Analysis Batch: 870930

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870563

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	39.5	J	35.40	J	ug/L		11	20
Antimony	2.0	U	2.0	U	ug/L		NC	20
Arsenic	2.0	U	2.0	U	ug/L		NC	20
Barium	29.9		29.32		ug/L		2	20
Beryllium	0.80	U	0.80	U	ug/L		NC	20
Cadmium	2.0	U	2.0	U	ug/L		NC	20
Calcium	14400		14570		ug/L		1	20
Chromium	2.8	J	2.77	J	ug/L		0.1	20
Cobalt	4.0	U	4.0	U	ug/L		NC	20
Copper	4.0	U	4.0	U	ug/L		NC	20
Iron	120	U	120	U	ug/L		NC	20
Lead	1.2	U	1.2	U	ug/L		NC	20
Magnesium	11300		11400		ug/L		0.5	20
Manganese	15.6		15.45		ug/L		0.7	20
Nickel	4.2		4.41		ug/L		6	20
Potassium	5660		5636		ug/L		0.4	20
Selenium	2.5	U	2.5	U	ug/L		NC	20
Silver	2.0	U	2.0	U	ug/L		NC	20
Sodium	119000		120700		ug/L		2	20
Thallium	0.80	U	0.80	U	ug/L		NC	20
Vanadium	4.0	U	4.0	U	ug/L		NC	20
Zinc	8.5	J	8.86	J	ug/L		4	20

Lab Sample ID: MB 460-871155/19-A
Matrix: Water
Analysis Batch: 871052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871155

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	19.5	ug/L		10/10/22 20:34	10/10/22 22:18	1
Antimony	2.0	U	2.0	0.76	ug/L		10/10/22 20:34	10/10/22 22:18	1
Arsenic	2.0	U	2.0	0.89	ug/L		10/10/22 20:34	10/10/22 22:18	1
Barium	4.0	U	4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:18	1
Cadmium	2.0	U	2.0	0.39	ug/L		10/10/22 20:34	10/10/22 22:18	1
Calcium	500	U	500	53.6	ug/L		10/10/22 20:34	10/10/22 22:18	1
Chromium	4.0	U	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:18	1
Cobalt	4.0	U	4.0	0.71	ug/L		10/10/22 20:34	10/10/22 22:18	1
Copper	4.0	U	4.0	2.5	ug/L		10/10/22 20:34	10/10/22 22:18	1
Iron	120	U	120	58.2	ug/L		10/10/22 20:34	10/10/22 22:18	1
Lead	1.2	U	1.2	0.84	ug/L		10/10/22 20:34	10/10/22 22:18	1
Magnesium	200	U	200	46.9	ug/L		10/10/22 20:34	10/10/22 22:18	1
Manganese	8.0	U	8.0	1.5	ug/L		10/10/22 20:34	10/10/22 22:18	1
Nickel	4.0	U	4.0	0.91	ug/L		10/10/22 20:34	10/10/22 22:18	1
Potassium	200	U	200	112	ug/L		10/10/22 20:34	10/10/22 22:18	1
Selenium	2.5	U	2.5	0.59	ug/L		10/10/22 20:34	10/10/22 22:18	1
Silver	2.0	U	2.0	0.29	ug/L		10/10/22 20:34	10/10/22 22:18	1
Sodium	500	U	500	163	ug/L		10/10/22 20:34	10/10/22 22:18	1
Thallium	0.80	U	0.80	0.21	ug/L		10/10/22 20:34	10/10/22 22:18	1
Vanadium	4.0	U	4.0	0.68	ug/L		10/10/22 20:34	10/10/22 22:18	1
Zinc	16.0	U	16.0	6.5	ug/L		10/10/22 20:34	10/10/22 22:18	1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-871155/19-A
Matrix: Water
Analysis Batch: 871269

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871155

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.80	U	0.80	0.13	ug/L		10/10/22 20:34	10/11/22 19:48	1

Lab Sample ID: LCS 460-871155/20-A
Matrix: Water
Analysis Batch: 871052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2500	2510		ug/L		100	80 - 120
Antimony	25.0	26.94		ug/L		108	80 - 120
Arsenic	50.0	51.63		ug/L		103	80 - 120
Barium	50.0	50.26		ug/L		101	80 - 120
Cadmium	25.0	26.22		ug/L		105	80 - 120
Calcium	2500	2581		ug/L		103	80 - 120
Chromium	50.0	51.76		ug/L		104	80 - 120
Cobalt	25.0	26.20		ug/L		105	80 - 120
Copper	50.0	52.39		ug/L		105	80 - 120
Iron	2500	2602		ug/L		104	80 - 120
Lead	25.0	26.25		ug/L		105	80 - 120
Magnesium	2500	2633		ug/L		105	80 - 120
Manganese	250	263.4		ug/L		105	80 - 120
Nickel	50.0	52.23		ug/L		104	80 - 120
Potassium	2500	2517		ug/L		101	80 - 120
Selenium	50.0	50.30		ug/L		101	80 - 120
Silver	25.0	26.70		ug/L		107	80 - 120
Sodium	2500	2799		ug/L		112	80 - 120
Thallium	20.0	20.44		ug/L		102	80 - 120
Vanadium	50.0	51.89		ug/L		104	80 - 120
Zinc	250	259.0		ug/L		104	80 - 120

Lab Sample ID: LCS 460-871155/20-A
Matrix: Water
Analysis Batch: 871269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	25.0	26.80		ug/L		107	80 - 120

Lab Sample ID: 460-266752-9 MS
Matrix: Water
Analysis Batch: 870271

Client Sample ID: TW-02_20221003
Prep Type: Dissolved
Prep Batch: 870341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	2.0	U	25.0	21.81		ug/L		87	75 - 125
Arsenic	2.0	U	50.0	52.70		ug/L		105	75 - 125
Barium	107		50.0	157.7		ug/L		102	75 - 125
Beryllium	0.80	U	25.0	26.54		ug/L		106	75 - 125
Cadmium	2.0	U	25.0	25.53		ug/L		102	75 - 125
Calcium	88300		2500	91590	4	ug/L		132	75 - 125
Chromium	4.0	U	50.0	49.69		ug/L		99	75 - 125
Cobalt	1.7	J	25.0	26.64		ug/L		100	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266752-9 MS — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870271 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	4.0	U	50.0	49.82		ug/L		100	75 - 125
Iron	120	U	2500	2505		ug/L		100	75 - 125
Magnesium	34500		2500	37010	4	ug/L		100	75 - 125
Manganese	450		250	696.9		ug/L		99	75 - 125
Nickel	3.9	J	50.0	52.60		ug/L		97	75 - 125
Potassium	3590		2500	6043		ug/L		98	75 - 125
Selenium	2.9		50.0	55.91		ug/L		106	75 - 125
Silver	2.0	U	25.0	23.99		ug/L		96	75 - 125
Sodium	141000		2500	142700	4	ug/L		56	75 - 125
Thallium	0.80	U	20.0	20.22		ug/L		101	75 - 125
Vanadium	4.0	U	50.0	50.97		ug/L		102	75 - 125
Zinc	16.0	U	250	249.5		ug/L		100	75 - 125

Lab Sample ID: 460-266752-9 MS — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870271 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1.2	U	25.0	26.24		ug/L		105	75 - 125

Lab Sample ID: 460-266752-9 MS — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870468 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	40.0	U	2500	2536		ug/L		101	75 - 125

Lab Sample ID: 460-266752-9 DU — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870271 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	2.0	U	2.0	U	ug/L		NC	20
Arsenic	2.0	U	2.0	U	ug/L		NC	20
Barium	107		107.3		ug/L		0.7	20
Beryllium	0.80	U	0.80	U	ug/L		NC	20
Cadmium	2.0	U	2.0	U	ug/L		NC	20
Calcium	88300		88940		ug/L		0.7	20
Chromium	4.0	U	4.0	U	ug/L		NC	20
Cobalt	1.7	J	1.66	J	ug/L		3	20
Copper	4.0	U	4.0	U	ug/L		NC	20
Iron	120	U	120	U	ug/L		NC	20
Magnesium	34500		34170		ug/L		1	20
Manganese	450		444.9		ug/L		1	20
Nickel	3.9	J	3.73	J	ug/L		5	20
Potassium	3590		3560		ug/L		0.9	20
Selenium	2.9		2.83		ug/L		0.9	20
Silver	2.0	U	2.0	U	ug/L		NC	20
Sodium	141000		138800		ug/L		2	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266752-9 DU — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870271 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Thallium	0.80	U	0.80	U	ug/L		NC	20
Vanadium	4.0	U	4.0	U	ug/L		NC	20
Zinc	16.0	U	16.0	U	ug/L		NC	20

Lab Sample ID: 460-266752-9 DU — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870271 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	1.2	U	1.2	U	ug/L		NC	20

Lab Sample ID: 460-266752-9 DU — **Client Sample ID: TW-02_20221003**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 870468 — **Prep Batch: 870341**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	40.0	U	40.0	U	ug/L		NC	20

Lab Sample ID: 460-266466-F-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 871052 — **Prep Batch: 871155**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	40.0	U	2500	2435		ug/L		97	75 - 125
Antimony	2.0	U	25.0	21.82		ug/L		87	75 - 125
Arsenic	2.0	U	50.0	53.01		ug/L		106	75 - 125
Barium	85.1		50.0	133.2		ug/L		96	75 - 125
Cadmium	2.0	U	25.0	25.84		ug/L		103	75 - 125
Calcium	42700		2500	45270	4	ug/L		102	75 - 125
Chromium	4.0	U	50.0	50.21		ug/L		100	75 - 125
Cobalt	4.0	U	25.0	24.70		ug/L		99	75 - 125
Copper	4.0	U	50.0	49.08		ug/L		98	75 - 125
Iron	120	U	2500	2524		ug/L		101	75 - 125
Lead	1.2	U	25.0	25.13		ug/L		101	75 - 125
Magnesium	15300		2500	17620	4	ug/L		92	75 - 125
Manganese	212		250	460.4		ug/L		99	75 - 125
Nickel	2.7	J	50.0	51.84		ug/L		98	75 - 125
Potassium	9780		2500	11810		ug/L		81	75 - 125
Selenium	2.5	U	50.0	52.35		ug/L		105	75 - 125
Silver	2.0	U	25.0	26.13		ug/L		105	75 - 125
Sodium	74000		2500	75380	4	ug/L		56	75 - 125
Thallium	0.80	U	20.0	19.12		ug/L		96	75 - 125
Vanadium	4.0	U	50.0	49.45		ug/L		99	75 - 125
Zinc	16.0	U	250	248.0		ug/L		99	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-266466-F-1-C MS
Matrix: Water
Analysis Batch: 871758

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 871155

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	40.0	U	2500	2492		ug/L		100	75 - 125
Antimony	2.0	U	25.0	22.24		ug/L		89	75 - 125
Arsenic	2.0	U	50.0	53.36		ug/L		107	75 - 125
Barium	85.1		50.0	143.2		ug/L		116	75 - 125
Beryllium	0.80	U ^	25.0	25.11		ug/L		100	75 - 125
Cadmium	2.0	U	25.0	25.93		ug/L		104	75 - 125
Calcium	42700		2500	48350	4	ug/L		225	75 - 125
Chromium	4.0	U	50.0	50.66		ug/L		101	75 - 125
Cobalt	4.0	U	25.0	25.76		ug/L		103	75 - 125
Copper	4.0	U	50.0	50.98		ug/L		102	75 - 125
Iron	120	U	2500	2544		ug/L		102	75 - 125
Lead	1.2	U	25.0	25.91		ug/L		104	75 - 125
Magnesium	15300		2500	18750	4	ug/L		138	75 - 125
Manganese	212		250	476.7		ug/L		106	75 - 125
Nickel	2.7	J	50.0	53.10		ug/L		101	75 - 125
Potassium	9780		2500	12920	N	ug/L		126	75 - 125
Selenium	2.5	U	50.0	50.32		ug/L		101	75 - 125
Silver	2.0	U	25.0	22.97		ug/L		92	75 - 125
Sodium	74000		2500	79780	4	ug/L		232	75 - 125
Thallium	0.80	U	20.0	20.72		ug/L		104	75 - 125
Vanadium	4.0	U	50.0	51.96		ug/L		104	75 - 125
Zinc	16.0	U	250	254.9		ug/L		102	75 - 125

Lab Sample ID: 460-266466-F-1-B DU
Matrix: Water
Analysis Batch: 871052

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 871155

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	40.0	U	40.0	U	ug/L		NC	20
Antimony	2.0	U	2.0	U	ug/L		NC	20
Arsenic	2.0	U	2.0	U	ug/L		NC	20
Barium	85.1		89.78		ug/L		5	20
Cadmium	2.0	U	2.0	U	ug/L		NC	20
Calcium	42700		44620		ug/L		4	20
Chromium	4.0	U	4.0	U	ug/L		NC	20
Cobalt	4.0	U	4.0	U	ug/L		NC	20
Copper	4.0	U	4.0	U	ug/L		NC	20
Iron	120	U	120	U	ug/L		NC	20
Lead	1.2	U	1.2	U	ug/L		NC	20
Magnesium	15300		15890		ug/L		4	20
Manganese	212		216.6		ug/L		2	20
Nickel	2.7	J	2.90	J	ug/L		7	20
Potassium	9780		10260		ug/L		5	20
Selenium	2.5	U	2.5	U	ug/L		NC	20
Silver	2.0	U	2.0	U	ug/L		NC	20
Sodium	74000		77550		ug/L		5	20
Thallium	0.80	U	0.80	U	ug/L		NC	20
Vanadium	4.0	U	4.0	U	ug/L		NC	20
Zinc	16.0	U	16.0	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 460-266466-F-1-B DU
Matrix: Water
Analysis Batch: 871269

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 871155

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	0.80	U	0.80	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-870234/1-A
Matrix: Water
Analysis Batch: 870295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/05/22 10:46	10/05/22 13:43	1

Lab Sample ID: LCS 460-870234/2-A
Matrix: Water
Analysis Batch: 870295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.08		ug/L		108	80 - 120

Lab Sample ID: 460-266745-J-5-C MS
Matrix: Water
Analysis Batch: 870295

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870234

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	0.974		ug/L		97	75 - 125

Lab Sample ID: 460-266745-J-5-D MSD
Matrix: Water
Analysis Batch: 870295

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870234

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.06		ug/L		106	75 - 125	9	20

Lab Sample ID: 460-266745-J-5-B DU
Matrix: Water
Analysis Batch: 870295

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870234

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

Lab Sample ID: MB 460-870669/1-A
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 11:23	10/07/22 14:10	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 460-870669/2-A
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.03		ug/L		103	80 - 120

Lab Sample ID: 460-266440-F-6-B MS
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	1.08		ug/L		108	75 - 125

Lab Sample ID: 460-266440-G-6-F MSD
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.02		ug/L		102	75 - 125	6	20

Lab Sample ID: 460-266440-G-6-E DU
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 870669

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

Lab Sample ID: MB 460-870683/1-A
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/07/22 14:18	10/07/22 14:59	1

Lab Sample ID: LCS 460-870683/3-A
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.12		ug/L		112	80 - 120

Lab Sample ID: MB 460-871270/1-A
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/11/22 11:10	10/11/22 14:24	1

Lab Sample ID: LCS 460-871270/2-A
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.10		ug/L		110	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 460-266968-D-3-G MS
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 871270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	1.14		ug/L		114	75 - 125

Lab Sample ID: 460-266968-D-3-H MSD
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 871270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.07		ug/L		107	75 - 125	7	20

Lab Sample ID: 460-266968-D-3-F DU
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 871270

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

Lab Sample ID: LCS 460-871301/3-A
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.04		ug/L		104	80 - 120

Lab Sample ID: 460-266440-E-6-G MS
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 870683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	1.07		ug/L		107	75 - 125

Lab Sample ID: 460-266440-E-6-H MSD
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 870683

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.06		ug/L		106	75 - 125	0	20

Lab Sample ID: 460-266440-E-6-F DU
Matrix: Water
Analysis Batch: 870709

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 870683

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

Lab Sample ID: MB 460-871296/1-B
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 871301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		10/11/22 14:45	10/11/22 15:17	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 460-266972-D-1-F MS
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 871301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.20	U	1.00	1.02		ug/L		102	75 - 125

Lab Sample ID: 460-266972-D-1-E DU
Matrix: Water
Analysis Batch: 871337

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 871301

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

GC/MS VOA

Analysis Batch: 870628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	8260D	
460-266752-10	TB_20221003	Total/NA	Water	8260D	
460-266826-5	TW-03_20221004	Total/NA	Water	8260D	
460-266826-6	TW-04_20221004	Total/NA	Water	8260D	
MB 460-870628/7	Method Blank	Total/NA	Water	8260D	
LCS 460-870628/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-870628/4	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 870989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	8260D	
MB 460-870989/8	Method Blank	Total/NA	Water	8260D	
LCS 460-870989/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-870989/18	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 870235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	3510C	
460-266752-9 - DL	TW-02_20221003	Total/NA	Water	3510C	
MB 460-870235/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870235/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870235/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 870337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	8270E	870235
460-266752-9 - DL	TW-02_20221003	Total/NA	Water	8270E	870235
MB 460-870235/1-A	Method Blank	Total/NA	Water	8270E	870235
LCS 460-870235/2-A	Lab Control Sample	Total/NA	Water	8270E	870235
LCSD 460-870235/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	870235

Filtration Batch: 870439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-870439/1-B	Method Blank	Total/NA	Water	FILTRATION	

Prep Batch: 870445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Total/NA	Water	3510C	
460-266826-6	TW-04_20221004	Total/NA	Water	3510C	
MB 460-870439/1-B	Method Blank	Total/NA	Water	3510C	870439
MB 460-870445/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870445/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870445/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 870554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	8270E	870657
MB 460-870657/1-A	Method Blank	Total/NA	Water	8270E	870657
LCS 460-870657/2-A	Lab Control Sample	Total/NA	Water	8270E	870657

GC/MS Semi VOA (Continued)

Analysis Batch: 870554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-870657/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	870657

Analysis Batch: 870558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Total/NA	Water	8270E	870445
460-266826-6	TW-04_20221004	Total/NA	Water	8270E	870445
MB 460-870439/1-B	Method Blank	Total/NA	Water	8270E	870445
MB 460-870445/1-A	Method Blank	Total/NA	Water	8270E	870445
LCS 460-870445/2-A	Lab Control Sample	Total/NA	Water	8270E	870445
LCSD 460-870445/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	870445

Prep Batch: 870657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	3510C	
MB 460-870657/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870657/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870657/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC Semi VOA

Prep Batch: 870353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	3510C	
460-266826-5	TW-03_20221004	Total/NA	Water	3510C	
460-266826-6	TW-04_20221004	Total/NA	Water	3510C	
MB 460-870353/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870353/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870353/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 870354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	3510C	
460-266826-5	TW-03_20221004	Total/NA	Water	3510C	
460-266826-6	TW-04_20221004	Total/NA	Water	3510C	
MB 460-870354/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870354/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870354/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 870370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	8081B	870354
460-266826-5	TW-03_20221004	Total/NA	Water	8081B	870354
460-266826-6	TW-04_20221004	Total/NA	Water	8081B	870354
MB 460-870354/1-A	Method Blank	Total/NA	Water	8081B	870354
LCS 460-870354/2-A	Lab Control Sample	Total/NA	Water	8081B	870354
LCSD 460-870354/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	870354

Analysis Batch: 870405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	8082A	870353
460-266826-5	TW-03_20221004	Total/NA	Water	8082A	870353

GC Semi VOA (Continued)

Analysis Batch: 870405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-6	TW-04_20221004	Total/NA	Water	8082A	870353
MB 460-870353/1-A	Method Blank	Total/NA	Water	8082A	870353
LCS 460-870353/2-A	Lab Control Sample	Total/NA	Water	8082A	870353
LCSD 460-870353/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	870353

Prep Batch: 870664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	3510C	
MB 460-870664/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870664/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870664/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 870667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	3510C	
MB 460-870667/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-870667/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-870667/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-266842-J-4-B MS	Matrix Spike	Total/NA	Water	3510C	
460-266842-J-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 871010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	8081B	870667
MB 460-870667/1-A	Method Blank	Total/NA	Water	8081B	870667
LCS 460-870667/2-A	Lab Control Sample	Total/NA	Water	8081B	870667
LCSD 460-870667/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	870667
460-266842-J-4-B MS	Matrix Spike	Total/NA	Water	8081B	870667
460-266842-J-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	8081B	870667

Analysis Batch: 871037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	8082A	870664
MB 460-870664/1-A	Method Blank	Total/NA	Water	8082A	870664
LCS 460-870664/2-A	Lab Control Sample	Total/NA	Water	8082A	870664
LCSD 460-870664/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	870664

Metals

Prep Batch: 870234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	7470A	
MB 460-870234/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-870234/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-266745-J-5-C MS	Matrix Spike	Total/NA	Water	7470A	
460-266745-J-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
460-266745-J-5-B DU	Duplicate	Total/NA	Water	7470A	

Analysis Batch: 870271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	6020B	870341

Metals (Continued)

Analysis Batch: 870271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	6020B	870341
MB 460-870341/1-A	Method Blank	Total/NA	Water	6020B	870341
MB 460-870341/1-A	Method Blank	Total/NA	Water	6020B	870341
LCS 460-870341/2-A	Lab Control Sample	Total/NA	Water	6020B	870341
LCS 460-870341/2-A	Lab Control Sample	Total/NA	Water	6020B	870341
460-266752-9 MS	TW-02_20221003	Dissolved	Water	6020B	870341
460-266752-9 MS	TW-02_20221003	Dissolved	Water	6020B	870341
460-266752-9 DU	TW-02_20221003	Dissolved	Water	6020B	870341
460-266752-9 DU	TW-02_20221003	Dissolved	Water	6020B	870341

Analysis Batch: 870295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	7470A	870234
MB 460-870234/1-A	Method Blank	Total/NA	Water	7470A	870234
LCS 460-870234/2-A	Lab Control Sample	Total/NA	Water	7470A	870234
460-266745-J-5-C MS	Matrix Spike	Total/NA	Water	7470A	870234
460-266745-J-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	870234
460-266745-J-5-B DU	Duplicate	Total/NA	Water	7470A	870234

Prep Batch: 870341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	3010A	
MB 460-870341/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-870341/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-266752-9 MS	TW-02_20221003	Dissolved	Water	3010A	
460-266752-9 DU	TW-02_20221003	Dissolved	Water	3010A	

Analysis Batch: 870468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	6020B	870341
MB 460-870341/1-A	Method Blank	Total/NA	Water	6020B	870341
LCS 460-870341/2-A	Lab Control Sample	Total/NA	Water	6020B	870341
460-266752-9 MS	TW-02_20221003	Dissolved	Water	6020B	870341
460-266752-9 DU	TW-02_20221003	Dissolved	Water	6020B	870341

Prep Batch: 870563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	3010A	
460-266826-5	TW-03_20221004	Total/NA	Water	3010A	
460-266826-6	TW-04_20221004	Total/NA	Water	3010A	
460-266877-3	TW-01_20221005	Total/NA	Water	3010A	
MB 460-870563/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-870563/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-266887-F-8-C MS	Matrix Spike	Total/NA	Water	3010A	
460-266887-F-8-B DU	Duplicate	Total/NA	Water	3010A	

Prep Batch: 870669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Total/NA	Water	7470A	
460-266826-6	TW-04_20221004	Total/NA	Water	7470A	
MB 460-870669/1-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 870669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-870669/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-266440-F-6-B MS	Matrix Spike	Total/NA	Water	7470A	
460-266440-G-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
460-266440-G-6-E DU	Duplicate	Total/NA	Water	7470A	

Filtration Batch: 870682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266440-E-6-G MS	Matrix Spike	Dissolved	Water	FILTRATION	
460-266440-E-6-H MSD	Matrix Spike Duplicate	Dissolved	Water	FILTRATION	
460-266440-E-6-F DU	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 870683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	7470A	
460-266826-5	TW-03_20221004	Dissolved	Water	7470A	
460-266826-6	TW-04_20221004	Dissolved	Water	7470A	
MB 460-870683/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-870683/3-A	Lab Control Sample	Total/NA	Water	7470A	
460-266440-E-6-G MS	Matrix Spike	Dissolved	Water	7470A	870682
460-266440-E-6-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	870682
460-266440-E-6-F DU	Duplicate	Dissolved	Water	7470A	870682

Analysis Batch: 870709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Dissolved	Water	7470A	870683
460-266826-5	TW-03_20221004	Dissolved	Water	7470A	870683
460-266826-5	TW-03_20221004	Total/NA	Water	7470A	870669
460-266826-6	TW-04_20221004	Dissolved	Water	7470A	870683
460-266826-6	TW-04_20221004	Total/NA	Water	7470A	870669
MB 460-870669/1-A	Method Blank	Total/NA	Water	7470A	870669
MB 460-870683/1-A	Method Blank	Total/NA	Water	7470A	870683
LCS 460-870669/2-A	Lab Control Sample	Total/NA	Water	7470A	870669
LCS 460-870683/3-A	Lab Control Sample	Total/NA	Water	7470A	870683
460-266440-E-6-G MS	Matrix Spike	Dissolved	Water	7470A	870683
460-266440-E-6-H MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	870683
460-266440-F-6-B MS	Matrix Spike	Total/NA	Water	7470A	870669
460-266440-G-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	870669
460-266440-E-6-F DU	Duplicate	Dissolved	Water	7470A	870683
460-266440-G-6-E DU	Duplicate	Total/NA	Water	7470A	870669

Analysis Batch: 870930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266752-9	TW-02_20221003	Total/NA	Water	6020B	870563
460-266826-5	TW-03_20221004	Total/NA	Water	6020B	870563
460-266826-6	TW-04_20221004	Total/NA	Water	6020B	870563
460-266877-3	TW-01_20221005	Total/NA	Water	6020B	870563
460-266877-3	TW-01_20221005	Total/NA	Water	6020B	870563
MB 460-870563/1-A	Method Blank	Total/NA	Water	6020B	870563
LCS 460-870563/2-A	Lab Control Sample	Total/NA	Water	6020B	870563
460-266887-F-8-C MS	Matrix Spike	Total/NA	Water	6020B	870563
460-266887-F-8-B DU	Duplicate	Total/NA	Water	6020B	870563

Metals

Analysis Batch: 871052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Dissolved	Water	6020B	871155
460-266826-6	TW-04_20221004	Dissolved	Water	6020B	871155
460-266877-3	TW-01_20221005	Dissolved	Water	6020B	871155
MB 460-871155/19-A	Method Blank	Total/NA	Water	6020B	871155
LCS 460-871155/20-A	Lab Control Sample	Total/NA	Water	6020B	871155
460-266466-F-1-C MS	Matrix Spike	Dissolved	Water	6020B	871155
460-266466-F-1-B DU	Duplicate	Dissolved	Water	6020B	871155

Filtration Batch: 871154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Dissolved	Water	FILTRATION	

Prep Batch: 871155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Dissolved	Water	3010A	
460-266826-6	TW-04_20221004	Dissolved	Water	3010A	
460-266877-3	TW-01_20221005	Dissolved	Water	3010A	871154
MB 460-871155/19-A	Method Blank	Total/NA	Water	3010A	
LCS 460-871155/20-A	Lab Control Sample	Total/NA	Water	3010A	
460-266466-F-1-C MS	Matrix Spike	Dissolved	Water	3010A	
460-266466-F-1-B DU	Duplicate	Dissolved	Water	3010A	

Analysis Batch: 871269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266826-5	TW-03_20221004	Dissolved	Water	6020B	871155
460-266826-6	TW-04_20221004	Dissolved	Water	6020B	871155
MB 460-871155/19-A	Method Blank	Total/NA	Water	6020B	871155
LCS 460-871155/20-A	Lab Control Sample	Total/NA	Water	6020B	871155
460-266466-F-1-B DU	Duplicate	Dissolved	Water	6020B	871155

Prep Batch: 871270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Total/NA	Water	7470A	
MB 460-871270/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-871270/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-266968-D-3-G MS	Matrix Spike	Total/NA	Water	7470A	
460-266968-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
460-266968-D-3-F DU	Duplicate	Total/NA	Water	7470A	

Filtration Batch: 871296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Dissolved	Water	FILTRATION	
MB 460-871296/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-266972-D-1-F MS	Matrix Spike	Dissolved	Water	FILTRATION	
460-266972-D-1-E DU	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 871301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Dissolved	Water	7470A	871296
MB 460-871296/1-B	Method Blank	Dissolved	Water	7470A	871296
LCS 460-871301/3-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 871301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266972-D-1-F MS	Matrix Spike	Dissolved	Water	7470A	871296
460-266972-D-1-E DU	Duplicate	Dissolved	Water	7470A	871296

Analysis Batch: 871337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266877-3	TW-01_20221005	Dissolved	Water	7470A	871301
460-266877-3	TW-01_20221005	Total/NA	Water	7470A	871270
MB 460-871270/1-A	Method Blank	Total/NA	Water	7470A	871270
MB 460-871296/1-B	Method Blank	Dissolved	Water	7470A	871301
LCS 460-871270/2-A	Lab Control Sample	Total/NA	Water	7470A	871270
LCS 460-871301/3-A	Lab Control Sample	Total/NA	Water	7470A	871301
460-266968-D-3-G MS	Matrix Spike	Total/NA	Water	7470A	871270
460-266968-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	871270
460-266972-D-1-F MS	Matrix Spike	Dissolved	Water	7470A	871301
460-266968-D-3-F DU	Duplicate	Total/NA	Water	7470A	871270
460-266972-D-1-E DU	Duplicate	Dissolved	Water	7470A	871301

Analysis Batch: 871758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-266466-F-1-C MS	Matrix Spike	Dissolved	Water	6020B	871155

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-02_20221003

Lab Sample ID: 460-266752-9

Date Collected: 10/03/22 11:30

Matrix: Water

Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	870628	SZD	EET EDI	10/07/22 15:12
Total/NA	Prep	3510C			870235	ZEH	EET EDI	10/05/22 10:48
Total/NA	Analysis	8270E		1	870337	MME	EET EDI	10/06/22 05:09
Total/NA	Prep	3510C	DL		870235	ZEH	EET EDI	10/05/22 10:48
Total/NA	Analysis	8270E	DL	5	870337	MME	EET EDI	10/06/22 07:37
Total/NA	Prep	3510C			870354	JMS	EET EDI	10/05/22 23:06
Total/NA	Analysis	8081B		1	870370	FAM	EET EDI	10/06/22 07:27
Total/NA	Prep	3510C			870353	JMS	EET EDI	10/05/22 22:53
Total/NA	Analysis	8082A		1	870405	JHP	EET EDI	10/06/22 11:30
Dissolved	Prep	3010A			870341	VAD	EET EDI	10/05/22 21:01
Dissolved	Analysis	6020B		1	870271	YZH	EET EDI	10/05/22 23:30
Dissolved	Prep	3010A			870341	VAD	EET EDI	10/05/22 21:01
Dissolved	Analysis	6020B		1	870271	YZH	EET EDI	10/06/22 01:45
Dissolved	Prep	3010A			870341	VAD	EET EDI	10/05/22 21:01
Dissolved	Analysis	6020B		1	870468	MDC	EET EDI	10/06/22 20:55
Total/NA	Prep	3010A			870563	GAE	EET EDI	10/06/22 19:16
Total/NA	Analysis	6020B		1	870930	MDC	EET EDI	10/09/22 14:29
Dissolved	Prep	7470A			870683	RBS	EET EDI	10/07/22 14:18
Dissolved	Analysis	7470A		1	870709	RBS	EET EDI	10/07/22 15:41
Total/NA	Prep	7470A			870234	RBS	EET EDI	10/05/22 10:46
Total/NA	Analysis	7470A		1	870295	RBS	EET EDI	10/05/22 14:07

Client Sample ID: TB_20221003

Lab Sample ID: 460-266752-10

Date Collected: 10/03/22 14:30

Matrix: Water

Date Received: 10/03/22 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	870628	SZD	EET EDI	10/07/22 15:33

Client Sample ID: TW-03_20221004

Lab Sample ID: 460-266826-5

Date Collected: 10/04/22 00:00

Matrix: Water

Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	870628	SZD	EET EDI	10/07/22 15:54
Total/NA	Prep	3510C			870445	NMP	EET EDI	10/06/22 10:27
Total/NA	Analysis	8270E		1	870558	MME	EET EDI	10/07/22 03:03
Total/NA	Prep	3510C			870354	JMS	EET EDI	10/05/22 23:06
Total/NA	Analysis	8081B		1	870370	FAM	EET EDI	10/06/22 06:55
Total/NA	Prep	3510C			870353	JMS	EET EDI	10/05/22 22:53
Total/NA	Analysis	8082A		1	870405	JHP	EET EDI	10/06/22 10:57
Dissolved	Prep	3010A			871155	VAD	EET EDI	10/10/22 20:34
Dissolved	Analysis	6020B		1	871052	MDC	EET EDI	10/10/22 22:33
Dissolved	Prep	3010A			871155	VAD	EET EDI	10/10/22 20:34
Dissolved	Analysis	6020B		1	871269	MDC	EET EDI	10/11/22 20:10

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-03_20221004

Lab Sample ID: 460-266826-5

Date Collected: 10/04/22 00:00
Matrix: Water
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			870563	GAE	EET EDI	10/06/22 19:16
Total/NA	Analysis	6020B		1	870930	MDC	EET EDI	10/09/22 14:32
Dissolved	Prep	7470A			870683	RBS	EET EDI	10/07/22 14:18
Dissolved	Analysis	7470A		1	870709	RBS	EET EDI	10/07/22 15:42
Total/NA	Prep	7470A			870669	RBS	EET EDI	10/07/22 11:23
Total/NA	Analysis	7470A		1	870709	RBS	EET EDI	10/07/22 14:25

Client Sample ID: TW-04_20221004

Lab Sample ID: 460-266826-6

Date Collected: 10/04/22 00:00
Matrix: Water
Date Received: 10/04/22 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	870628	SZD	EET EDI	10/07/22 16:16
Total/NA	Prep	3510C			870445	NMP	EET EDI	10/06/22 10:27
Total/NA	Analysis	8270E		1	870558	MME	EET EDI	10/07/22 03:24
Total/NA	Prep	3510C			870354	JMS	EET EDI	10/05/22 23:06
Total/NA	Analysis	8081B		1	870370	FAM	EET EDI	10/06/22 07:11
Total/NA	Prep	3510C			870353	JMS	EET EDI	10/05/22 22:53
Total/NA	Analysis	8082A		1	870405	JHP	EET EDI	10/06/22 11:14
Dissolved	Prep	3010A			871155	VAD	EET EDI	10/10/22 20:34
Dissolved	Analysis	6020B		1	871052	MDC	EET EDI	10/10/22 22:35
Dissolved	Prep	3010A			871155	VAD	EET EDI	10/10/22 20:34
Dissolved	Analysis	6020B		1	871269	MDC	EET EDI	10/11/22 20:13
Total/NA	Prep	3010A			870563	GAE	EET EDI	10/06/22 19:16
Total/NA	Analysis	6020B		1	870930	MDC	EET EDI	10/09/22 14:34
Dissolved	Prep	7470A			870683	RBS	EET EDI	10/07/22 14:18
Dissolved	Analysis	7470A		1	870709	RBS	EET EDI	10/07/22 15:44
Total/NA	Prep	7470A			870669	RBS	EET EDI	10/07/22 11:23
Total/NA	Analysis	7470A		1	870709	RBS	EET EDI	10/07/22 14:30

Client Sample ID: TW-01_20221005

Lab Sample ID: 460-266877-3

Date Collected: 10/05/22 10:30
Matrix: Water
Date Received: 10/05/22 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	870989	SZD	EET EDI	10/10/22 11:01
Total/NA	Prep	3510C			870657	NMP	EET EDI	10/07/22 10:38
Total/NA	Analysis	8270E		1	870554	YAH	EET EDI	10/08/22 07:05
Total/NA	Prep	3510C			870667	OTS	EET EDI	10/07/22 11:20
Total/NA	Analysis	8081B		1	871010	JHP	EET EDI	10/10/22 12:11
Total/NA	Prep	3510C			870664	OTS	EET EDI	10/07/22 11:11
Total/NA	Analysis	8082A		1	871037	JHP	EET EDI	10/10/22 11:40
Dissolved	Filtration	FILTRATION			871154	VAD	EET EDI	10/10/22 20:26
Dissolved	Prep	3010A			871155	VAD	EET EDI	10/10/22 20:34
Dissolved	Analysis	6020B		1	871052	MDC	EET EDI	10/10/22 23:21

Lab Chronicle

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Client Sample ID: TW-01_20221005

Date Collected: 10/05/22 10:30
Date Received: 10/05/22 18:00

Lab Sample ID: 460-266877-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			870563	GAE	EET EDI	10/06/22 19:16
Total/NA	Analysis	6020B		1	870930	MDC	EET EDI	10/09/22 14:37
Total/NA	Prep	3010A			870563	GAE	EET EDI	10/06/22 19:16
Total/NA	Analysis	6020B		5	870930	MDC	EET EDI	10/09/22 14:44
Dissolved	Filtration	FILTRATION			871296	RBS	EET EDI	10/11/22 14:30
Dissolved	Prep	7470A			871301	RBS	EET EDI	10/11/22 14:45
Dissolved	Analysis	7470A		1	871337	RBS	EET EDI	10/11/22 15:31
Total/NA	Prep	7470A			871270	RBS	EET EDI	10/11/22 11:10
Total/NA	Analysis	7470A		1	871337	RBS	EET EDI	10/11/22 14:36

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: AKRF Inc
Job ID: 460-266752-2
Project/Site: Ikos Senior Living

Laboratory: Eurofins Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270E	3510C	Water	3 & 4 Methylphenol

Method Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET EDI
8081B	Organochlorine Pesticides (GC)	SW846	EET EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
7470A	Mercury (CVAA)	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET EDI
5030C	Purge and Trap	SW846	EET EDI
7470A	Preparation, Mercury	SW846	EET EDI
FILTRATION	Sample Filtration	None	EET EDI

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: AKRF Inc
Project/Site: Ikos Senior Living

Job ID: 460-266752-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-266752-9	TW-02_20221003	Water	10/03/22 11:30	10/03/22 19:00
460-266752-10	TB_20221003	Water	10/03/22 14:30	10/03/22 19:00
460-266826-5	TW-03_20221004	Water	10/04/22 00:00	10/04/22 18:30
460-266826-6	TW-04_20221004	Water	10/04/22 00:00	10/04/22 18:30
460-266877-3	TW-01_20221005	Water	10/05/22 10:30	10/05/22 18:00

Chain of Custody Record

611419

eurofins | Environment Testing America

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

266 877

TAL-8210

Client Contact	Project Manager: Alyssa Brzychkowski	Site Contact: T. Gordon	Date: 10/5/2022	COC No: 1 of 2 COCs
Company Name: AKRF, Inc.	Tel/Email: abrzychkowski@akrf.com	Lab Contact: M. Thea	Carrier:	Sampler:
Address: 440 Park Avenue South 7th Fl	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: New York, NY 10016	☐ CALENDAR DAYS ☒ WORKING DAYS			Walk-in Client:
Phone: 646 388 9533	TAT if different from Below Standard			Lab Sampling:
Fax:	☐ 2 weeks			Job / SDG No.:
Project Name: IHOP	☒ 1 week			
Site: Astoria Queens, NY	☐ 2 days			
PO # 216174	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260-TCL/Nat 2ml vials	8082A - PCBs	7471B - mercury	6010B - TAL metals	8270E - TCL/Nat 125 ml jars	8270E - TCL/Nat 375 ml/Bottle + 1,4-Dioxane	7196A - Hex Chrom 31%	Sample Specific Notes:
SB-01_0-2_20221005	10/5/22	0810	G	S	6	N	N	X	X	X	X	X	X	X	1
SB-01_31-33_20221005	↓	0815	G	S	6	N	N	X	X	X	X	X	X	X	2

SHORT HOLD

2 2 2 C

460-266877 Chain of Custody

Page 101 of 106

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Category A Deliverable - EQuIS EDD

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

	Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
1	Tom Gordon	AKRF, Inc	10/5/2022		FedEx	10/6/1145
2		FedEx	10/6/1600		FedEx	10/7/1200
3			10/7/1800	Received in Laboratory by:	TAL	10/8/22 1800

266271 EG 232

10/14/2022

Chain of Custody Record

611418

eurofins | Environment Testing America

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

266817

TAL-8210

Client Contact	Project Manager: Asya Rychkov	Site Contact: T. Gordon	Date: 10/5/2022	COC No: 8 of 2 COCs
Company Name: AKRF Inc.	Tel/Email: arychkov@akrf.com	Lab Contact: M-Hua	Carrier:	Sampler:
Address: 440 Park Avenue South 7th Fl	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: New York, NY 10016	☐ CALENDAR DAYS ☒ WORKING DAYS			Walk-in Client:
Phone: 646-388-9533	TAT if different from Below: Standard			Lab Sampling:
Fax:	☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day			Job / SDG No.:
Project Name: Illos				
Site: Astoria, Queens, NY				
P O # 210124				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8081B - TCL/Nat 375 Auto	8082A - PCB	8270E - TCL/Nat 375 ONLY + 1,4-Dioxane	8260B - TAL Metals	7470A - Mercury	6020B - Dissolved TAL EE	7470A - Dissolved mercury EE	8260D - TCL/Nat 375 VOC	Sample Specific Notes:
TW-01_20221005	10/5/22	1030	G	GW	11	Y	N	X	X	X	X	X	X	X	X	3

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Category A Deliverables / EQUIS EDD

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Tom Gordon	AKRF Inc	10/5/22			10/6/22 1045
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	AKRF	10/5/22		AKRF	10/6/22 1320
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	AKRF	10/5/22 1800		TAL	10/6/22 1800

26 27 28 29

10/14/2022

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 266877

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
3				<2											

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: [signature] Date: 10/5/22

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-2

Login Number: 266752
List Number: 1
Creator: Narinkhum, Nudjarin 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-2

Login Number: 266826
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-266752-2

Login Number: 266877
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

IKOS Senior Living
31-07 31st Street
QUEENS, NEW YORK

Remedial Investigation Report

OER Project Number: 24TMP1507Q

E-Designation: E-1001

Prepared For:

Ikos Senior Living LLC
48-02 25th Avenue, Suite 400
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JANUARY 2025

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
FID	Flame Ionization Detector
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYC VCP	New York City Voluntary Cleanup Program
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
RIR	Remedial Investigation Report
SCO	Soil Cleanup Objective
SPEED	Searchable Property Environmental Electronic Database

CERTIFICATION

I, Deborah Shapiro, am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the 31-07 31st Street Site, (NYC VCP Site No. site number). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

Qualified Environmental Professional Date Signature

EXECUTIVE SUMMARY

The Remedial Investigation Report (RIR) provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy pursuant to RCNY§ 43-1407(f). The Remedial Investigation (RI) described in this document is consistent with applicable guidance.

Site Location and Current Usage

The Site is located at 31-07 31st Street in the Astoria section of Queens, New York and is identified as Block 611 and Lot 25 on the New York City Tax Map. Figure 1 shows the Site location. The Site is approximately 20,880-square feet and is bounded by commercial uses to the north, residential and institutional uses to the south, commercial uses, residential uses, and 32nd Street to the east, and 31st Street and an elevated subway station to the west. A map of the Site boundary is shown in Figure 2. Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of the construction of two new buildings: a 13-story mixed-use building with approximately 167 affordable senior residential units and partial cellar level is proposed along 31st Street, and a three-story community facility building with slab-on-grade is proposed on 32nd Street. The two buildings will be connected through a one-story community room. Excavation will be required to approximately 12 feet below grade for the cellar level, to approximately 6 feet below grade for the crawl space, and to approximately 2 feet below grade for the slab-on-grade portion and outside the building footprint. Layout of the proposed site development is presented in Figure 2. The Site will be rezoned from a R5 with a C1-2 overlay to a C4-5 district along 31st Street and from R5 to C4-2A along 32nd Street.

Summary of Past Uses of Site and Areas of Concern

Historical maps were reviewed for indications of uses (or other evidence) suggesting hazardous materials generation, usage or disposal on or near the Site, specifically Sanborn Fire Insurance Maps in multiple years between 1898 and 2006. In 1898 and 1915, the Site was depicted as multiple vacant lots with one dwelling and associated shed located on the northern portion of the Site. In 1936, the Site remained mostly unchanged except for the addition of a one-car garage to the east of the previously identified dwelling. The Site continued as unchanged until 1979-1896, when the identified dwelling was no longer depicted on the Site, while the one-car garage remained. The western portion of the Site was now identified as parking. In 1988-1989 the Site was developed in its current configuration, as the one-car garage was no longer identified on the Site, and the entirety of the Site was labeled as parking.

The following environmental issues are considered Areas of Concern (AOCs) for the Site:

1. Elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) exceeding the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs) in soil. The samples exhibiting the highest concentrations were generally encountered in the northeastern portion of the Site.
2. Elevated concentrations of chlorinated solvents in groundwater and soil vapor samples. The samples exhibiting the highest concentrations in groundwater were generally encountered in the central portions of the Site and the highest concentration in soil vapor was detected in the southern portion of the Site.

Summary of the Work Performed under the Remedial Investigation

On behalf of Ikos Senior Living LLC, AKRF performed the following scope of work in general accordance with the OER-approved Phase II Work Plan, dated November 2024:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed nine soil borings across the Site, and collected 23 soil samples for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected three groundwater samples for chemical analysis to evaluate groundwater quality; and
4. Installed three soil vapor probes and collected three soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. Based on the U.S. Geological Survey, Central Park, New York 2013 Quadrangle map, the Site lies at approximately 50 feet above mean sea level, with the general surrounding area topography gently sloping down in a westerly direction towards the East River. Based on an architectural survey dated September 2021, elevation of the property ranges from 49 to 57 feet above mean sea level.
2. The depth to groundwater was measured using a Solinst® oil/water interface probe. Depth to groundwater beneath the Site ranged from approximately 31.40 feet below grade in the eastern portion of the Site at temporary well TW-08 to 35.06 feet below grade in the southwestern portion of the Site at temporary well TW-10.
3. Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River; however, actual groundwater flow at the Site can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Site. Groundwater in this portion of Queens is not used as a source of potable water.
4. Based on USGS mapping, bedrock is expected at approximately 50 to 60 feet below grade in this area of Queens.
5. The stratigraphy of the Site consists of fill (consisting of brown sand, silt, and gravel, with varying amounts of brick, asphalt, and concrete) down to approximately 3 to 11 feet below grade, underlain by apparent native sand with trace to little amounts of gravel to the boring terminus.
6. Twenty-three soil samples were collected for laboratory analysis during this investigation. The analytical results for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides and metals were compared to the NYSDEC UUSCOs and RRSCOs. One sample (SB-08_0-2_20241213) was also analyzed for PFAS, and the analytical results were compared to the Unrestricted Use Guidance Values (UUGVs) and the Restricted Residential Guidance Values (RRGVs) as outlined in NYSDEC's *Sampling, Analysis and Assessment of PFAS* guidance dated April 2023. The results are summarized below:
    - VOCs were detected at concentrations up to 0.087 milligrams per kilogram (mg/kg), below the UUSCOs and RRSCOs.
    - Six SVOCs [benzo(a)anthracene (max. 2.8 mg/kg), benzo(a)pyrene (max. 2.7 mg/kg), benzo(b)fluoranthene (max. 3.8 mg/kg), benzo(k)fluoranthene (max. 1.4 mg/kg), chrysene (max. 2.8 mg/kg), and indeno(1,2,3-c,d)pyrene (max. 1.4 mg/kg)] were detected above the UUSCOs and/or RRSCOs in five soil samples.

- The following four metals were detected above their respective UUSCOs in one or more of the soil samples: copper (max. 62.3 mg/kg), lead (max. 379 mg/kg), mercury (max. 0.27 mg/kg), and zinc (max. 173 mg/kg). No metals were detected above the RRSCOs.
- PCBs were not detected above laboratory reporting limits in any of the soil samples analyzed during the investigation.
- The pesticides P,P'-DDE and P,P'-DDT were detected in one sample at concentrations of 0.004 mg/kg and 0.008 mg/kg, respectively, above the UUSCO of 0.0033 mg/kg, but below their respective RRSCOs.
- Perfluorooctanesulfonic acid (PFOS) was detected in the soil sample analyzed (SB-08_0-2_20241213) at a concentration of 2.17 parts per billion (ppb), above the UUSCO guidance value of 0.88 ppb, but below the RRSCO guidance value of 44 ppb. Perfluorooctanoic acid (PFOA) and 1,4-dioxane were not detected above laboratory reporting limits.

7. Three groundwater samples were collected during the RI for laboratory analysis from the three temporary monitoring wells (TW-08 through TW-10). Groundwater sample analytical results for VOCs, SVOCs, PCBs, pesticides, metals (total and dissolved), and 1,4-dioxane were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs), which were developed based on use as a source of drinking water, although groundwater in this portion of Queens is not used as a source of potable water. The results are summarized below:
    - Six VOCs [bromodichloromethane, chloroform, cis-1,2-dichloroethylene, dibromochloromethane, tetrachloroethylene (PCE), and trichloroethylene (TCE)] were detected in one or more groundwater samples at concentrations ranging from 0.34 micrograms per liter (µg/L) of bromodichloromethane to 310 µg/L of PCE. PCE was detected in all three groundwater samples at concentrations ranging from 60 to 310 µg/L, above the AWQSGV of 5 µg/L.
    - Three SVOCs, 1,4-dioxane, caprolactam, and di-n-butyl phthalate, were detected in one or more of the groundwater samples at concentrations up to 21 µg/L, below their respective AWQSGVs.
    - The following 14 metals were detected above the AWQSGVs in one or more of the total (unfiltered) samples: arsenic (max. 73.3 µg/L), barium (max. 4,580 µg/L), beryllium (max. 14 µg/L), total chromium (max. 1,350 µg/L), copper (max. 1,000 µg/L), iron (max. 667,000 µg/L), lead (max. 707 µg/L), magnesium (max. 370,000 µg/L), manganese (max. 18,400 µg/L), mercury (max. 1.1 µg/L), nickel (max. 814 µg/L), sodium (max. 123,000 µg/L), thallium (max. 1.6 µg/L), and zinc (max. 2,040 µg/L). Manganese and sodium were also detected above the AWQSGVs in the dissolved (filtered) groundwater samples.
    - No PCBs or pesticides were detected above laboratory reporting limits in any of the groundwater samples.
    - 1,4-Dioxane was detected in two groundwater samples at concentrations up to 0.13 µg/L, below the AWQSGV of 0.35 µg/L.
8. Three soil vapor samples were collected for laboratory analysis during the RI from the three temporary soil vapor points. Soil vapor samples were analyzed by EPA Method TO-15 for VOCs and results were compared to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion matrices dated October 2006 (updated May 2017 and February 2024). The results are as follows.
    - Petroleum-related VOCs were detected at concentrations ranging from 2.3 micrograms per cubic meter (µg/m^3) to 66 µg/m^3.

- Solvent-related VOCs were detected at concentrations ranging from 1.4 µg/m^3 to 25 µg/m^3.
- No compounds were detected above the NYSDOH Soil Vapor/Indoor Air Matrices requiring mitigation, regardless of indoor air concentration.

REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

The 31-07 31st Street Site has been assigned an E-Designation to investigate and remediate an approximately 0.48-acre site located in the Astoria section of Queens, New York. Residential use is proposed for the property. The Remedial Investigation (RI) work was performed between December 11 and 13, 2024 in accordance with the November 2024 Phase II Work Plan (Work Plan). This RIR summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the use of the property pursuant to RCNY§ 43-1407(f).

1.1 Site Location and Current Usage

The Site is located at 31-07 31st Street in the Astoria section of Queens, New York and is identified as Block 611 and Lot 25 on the New York City Tax Map. Figure 1 shows the Site location. The Site is approximately 20,880-square feet and is bounded by commercial uses to the north, residential and institutional uses to the south, commercial uses, residential uses, and 32nd Street to the east, and 31st Street and an elevated subway station to the west. A map of the site boundary is shown in Figure 2. Currently, the Site is used as a municipal, asphalt-paved parking lot and is not developed with any permanent structures.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of the construction of two new buildings: a 13-story residential building with approximately 167 affordable senior residential units and partial cellar level is proposed along 31st Street, and a three-story community facility building with full cellar level is proposed on 32nd Street. The two buildings will be connected through a one-story community room. Excavation will be required to approximately 12 feet below grade for the cellar level, to approximately 6 feet below grade for the crawl space, and to approximately 2 feet below grade for the slab-on-grade portion and outside the building footprint. Layout of the proposed site development is presented in Figure 2. The Site will be rezoned from R5 with a C1-2 overlay to a C4-5 district along 31st Street and from R5 to C4-2A along 32nd Street.

1.3 Description of Surrounding Property

The Site is abutted to the north by commercial/retail units, followed by Broadway; to the west by 31st Street and an elevated subway station, followed by commercial/retail and residential units; to the south by residential units and the Cretans Association Omonia, Inc. Cultural Facility, followed by retail and commercial units; and to the east by residential units and 32nd Street. The greater surrounding area was primarily commercial/retail, residential, and transit uses.

One sensitive receptor is located within 500 feet of the Site: The Learning Experience daycare located at 31-57 31st Street is approximately 330 feet north-northeast of the Site.

Figure 3 shows the surrounding land usage.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

Historical maps were reviewed for indications of uses (or other evidence) suggesting hazardous materials generation, usage or disposal on or near the Site, specifically Sanborn Fire Insurance Maps in multiple years between 1898 and 2006. In 1898 and 1915, the Site was depicted as multiple vacant lots with one dwelling and associated shed located on the northern portion of the Site. In 1936, the Site remained mostly unchanged except for the addition of a one-car garage to the east of the previously identified dwelling. The Site continued as unchanged until 1979-1896, when the identified dwelling was no longer depicted on the Site, while the one-car garage remained. The western portion of the Site was now identified as parking. In 1988-1989 the Site was developed in its current configuration, as the one-car garage was no longer identified on the Site, and the entirety of the Site was labeled as parking.

Sanborn maps identified primarily residential and commercial historical uses, adjacent to the Site and surrounding area. Some of the pertinent commercial listings between circa 1936 and 2006 included a filling station located north-northeast of the Site; a garage and auto repair shop with gasoline tanks located northwest of the Site; a dry cleaners located northeast of the Site; and a machine shop and warehouse located southwest of the Site.

2.2 Previous Investigations

Previous reports prepared for the Site are included in Appendix A and summarized below.

Phase I Environmental Site Assessment – 31-07 31st Street, Astoria, NY, AKRF, Inc., June 2021

AKRF prepared a Phase I Environmental Site Assessment (ESA) for the Site in June 2021 in accordance with the requirements of American Society for Testing and Materials (ASTM) Standard E1527-13 (the applicable standard at that time). At the time of AKRF's assessment, the Site was occupied by a municipal parking lot with no structures. The Phase I ESA included a review of current and historical Sanborn Fire Insurance maps; state and federal environmental regulatory databases; local records; and reconnaissance of the Site and its surroundings. Based on the findings of the Phase I ESA, the following Recognized Environmental Conditions (RECs) and De Minimus conditions were identified:

- One groundwater monitoring well was observed on the 31st Street sidewalk west-adjacent of the Site.
- Sanborn maps, city directories, and the environmental databases reviewed identified automotive and dry-cleaning uses in the surrounding area.

AKRF identified the following Business Environmental Risks (BERs) outside the scope of ASTM E1527-13:

- Buried demolition debris from former on-site structures could contain asbestos-containing materials (ACM), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and/or underground storage tanks.
- Three five-gallon containers of orphan waste were located on the southeastern-most corner of the Site. Two of the three containers were labeled as kerosene and lacquer; the third container was unmarked.

Subsurface (Phase II) Investigation Report – 31-07 31st Street, Astoria, NY, AKRF, Inc., January 2024

AKRF conducted a Phase II investigation at the Site in October 2022 in accordance with a New York City Department of Environmental Protection (NYCDEP)-approved Phase II Work Plan, dated June 2022. Field activities included a geophysical survey, the advancement of seven soil borings, and the installation of four temporary wells and five soil vapor probes, with the collection of 14 soil samples, 4 groundwater samples, and 5 soil vapor samples for laboratory analysis. A summary of the findings is provided below:

- Fill material was encountered at depths ranging from just below surface grade down to approximately 5 to 14 feet below grade. The fill material was underlain by apparent native material consisting of sand and gravel. Groundwater, as measured from the temporary wells, was encountered between approximately 30.3 and 36.6 feet below grade. No field evidence of contamination was noted in the soil borings or groundwater samples.
- Two soil samples were collected from each boring and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and metals. The 14 soil samples were compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Use Soil Cleanup Objectives (RRSCOs). Acetone was detected above the UUSCO in two samples; no VOCs were detected above the RRSCOs. Seven SVOCs were detected above the UUSCOs and/or RRSCOs, including benzo(a)anthracene [max. 25 milligrams per kilogram (mg/kg)], benzo(a)pyrene (max. 23 mg/kg), benzo(b)fluoranthene (max. 29 mg/kg), benzo(k)fluoranthene (max. 7.6 mg/kg), chrysene (max. 23 mg/kg), dibenz(a,h)anthracene (max 2.7 mg/kg), and indeno(1,2,3-c-d)pyrene (max. 17 mg/kg). Four metals were detected in up to four samples above their UUSCOs, but below the RRSCOs, including copper (max. 63.1 mg/kg), lead (max. 283 mg/kg), mercury (max. 0.59 mg/kg), and zinc (max. 149 mg/kg). The pesticide P,P'-DDT was detected in sample SB-05_0-2_20221004 at a concentration of 0.0063 mg/kg above the UUSCO of 0.0033 mg/kg, but below the RRSCO.
- Four groundwater samples were collected from temporary wells TW-01 through TW-04 (installed in borings SB-01 through SB-04) and analyzed for VOCs, SVOCs, PCBs, pesticides, and metals (total and dissolved). Three VOCs [tetrachloroethylene (PCE) (max. 330 micrograms per liter (µg/L)], cis-1,2-dichloroethene (max. 14 µg/L), and chloroform (max. 9.2 µg/L)] were detected in at least one of the four samples above the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs). Six SVOCs, including benzo(a)anthracene (max. 2.1 µg/L), benzo(a)pyrene (max. 1.6 µg/L), benzo(b)fluoranthene (max. 2.2 µg/L), bis(2-ethylhexyl) phthalate (max. 6.2 µg/L), chrysene (max 2 µg/L), and indeno(1,2,3-c-d)pyrene (max. 1.6 µg/L), were detected in sample TW-01_20221005 at concentrations above the AWQSGVs. In the unfiltered (total) metals analysis, 14 metals were detected at concentrations above the AWQSGVs, including arsenic (max. 62.9 µg/L), barium (max. 3,540 µg/L), beryllium (max. 14.2 µg/L), chromium, total (max. 3,390 µg/L), copper (max. 1,340 µg/L), iron (max. 971,000 µg/L), lead (max. 857 µg/L), magnesium (max. 355,000 µg/L), manganese (max. 24,600 µg/L), mercury (max. 1.7 µg/L), nickel (max. 922 µg/L), sodium (max. 140,000 µg/L), thallium (max. 5.1 µg/L), and zinc (max. 2,640 µg/L). In the filtered (dissolved) metals analysis, four metals, including iron (max. 1,630 µg/L), magnesium (max. 45,900 µg/L), manganese (max. 450 µg/L), and sodium (max. 141,000 µg/L) were detected at concentrations above the AWQSGVs. No PCBs or pesticides were detected above laboratory reporting limits in the groundwater samples.

- Several solvent-related VOCs [including PCE (max 1,900 µg/L), trichloroethylene (TCE) (max. 45 µg/L), and cis-1,2-dichloroethylene (max. 200 µg/L)] were detected in the soil vapor samples. Petroleum-related VOCs benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) were detected in up to all five soil vapor samples at concentrations up to 29 µg/m^3 (toluene in SV-04_20221003).

2.3 Site Inspection

On December 12, 2024, Mr. Stephen Schmid and Mr. Jonas Peters of AKRF conducted a reconnaissance of the Site as part of the RI. The weather was rainy and approximately 56 °F, with generally good visibility. Some of the parking spaces were occupied by vehicles. As a result, surface conditions of the Site were not fully visible during inspection.

At the time of the inspection, the Site consisted of a municipal parking lot for short-term parking and was generally bounded by commercial/retail units to the north, residential/commercial units to the south, residential units and 32nd Street to the east, and 31st Street/an elevated subway station to the west.

The asphalt pavement of the lot was in fair condition, with some surficial cracking and patches observed. Several pole lights and traffic barriers were observed on Site. No other above-grade structures were observed on the Site. Three apparent storm drains were observed and were connected to the municipal sewer system. Utility manholes were observed along 31st Street and 32nd Street.

No pits, ponds, or lagoons exhibiting evidence (e.g., discolored water, distressed vegetation, obvious wastewater discharge) of holding liquids or sludge containing hazardous substances or petroleum products were observed on the Site.

2.4 Areas of Concern

The following environmental issues discussed in Section 2.2 are considered Areas of Concern (AOCs) for the Site:

1. Elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) exceeding the UUSCOs and RRSCOs in soil samples. The samples exhibiting the highest concentrations were generally encountered in the northeastern portion of the Site.
2. Elevated concentrations of chlorinated solvents in groundwater and soil vapor samples. The samples exhibiting the highest concentrations in groundwater were generally encountered in the central portions of the Site and the highest concentration in soil vapor was detected in the southern portion of the Site.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Profession (QEP) responsible for preparation of this RIR is Deborah Shapiro.

3.2 Health and Safety

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and Occupational Safety and Health Administration (OSHA) worker safety requirements and Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements. The work described in this RIR was also performed in accordance with a site-specific Health and Safety Plan (HASP).

3.3 Materials Management

All material encountered during the RI was managed in accordance with applicable laws and regulations.

4.0 REMEDIAL INVESTIGATION ACTIVITIES

On behalf of Ikos Senior Living LLC, AKRF performed the following scope of work in general accordance with the OER-approved Phase II Work Plan, dated November 2024:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed nine soil borings across the Site, and collected 23 soil samples for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected three groundwater samples for chemical analysis to evaluate groundwater quality; and
4. Installed three soil vapor probes and collected three soil vapor samples for chemical analysis.

4.1 Geophysical Investigation

On December 11, 2024, a geophysical survey was conducted by Coastal Environmental Solutions, Inc (Coastal) of Long Beach, New York across accessible areas of the Site, to clear the proposed soil boring locations for subsurface utilities and/or structures. The geophysical survey included electromagnetic (EM) and ground penetrating radar (GPR) methods. During the geophysical survey, multiple shallow electrical lines associated with on-site lighting and parking meters were located and marked with spray paint. Several manholes connected to the municipal sewer system were also identified. The geophysical investigation report is attached as Appendix B. In addition to the geophysical survey, Coastal, the drilling contractor, notified Dig Safely New York at least 3 days prior to the start of the intrusive investigation work.

4.2 Borings and Monitoring Wells

4.2.1 Drilling and Soil Logging

On December 11 through 13, 2024, Coastal advanced eight soil borings (SB-04, and SB-08 through SB-15). The borings were advanced continuously using a track-mounted Geoprobe® Direct Push Probe (DPP) drill rig at the locations shown on Figure 2.

The borings were advanced to enable collection of soil samples from the proposed excavation depths and delineate contamination identified during the previous Phase II investigation. Soil borings SB-04 and SB-13 through SB-15 were advanced to approximately 5 feet below grade (bg), soil boring SB-11 was advanced to approximately 10 feet bg, soil boring SB-12 was advanced to approximately 15 feet bg, and soil borings SB-08 through SB-10 were advanced to approximately 40 feet bg (approximately 5 to 7 feet below the groundwater interface) to facilitate installation of temporary wells and collection of groundwater samples. During sampling at each boring location, soil samples were collected in five-foot long, two-inch diameter, stainless steel macrocore piston rod samplers fitted with dedicated internal acetate liners. Each core was split lengthwise and field-screened by AKRF personnel for organic vapors using a photoionization detector (PID), which measures relative concentrations of VOCs. The PID was calibrated at the start of each workday with 100 parts per million (ppm) isobutylene gas and fresh air in accordance with the manufacturer's specifications. Soil cores were also screened for visual and olfactory impacts (e.g., staining, sheen, or odor) prior to the collection of environmental samples, and logged using the modified Burmeister Classification System. All field work activities were recorded in a field book and on soil boring logs.

Soil boring locations are shown on Figure 2. Boring logs are included in Appendix C.

4.2.2 Groundwater Monitoring Well Construction

Three temporary monitoring wells (TW-08 through TW-10) were installed by Coastal on December 12 and 13, 2024. Soil borings advanced at the Site were retrofitted with 1-inch-diameter temporary wells constructed of polyvinyl chloride (PVC). Each temporary well consisted of 10-feet of 0.020-slotted well screen which extended approximately 5 feet into the groundwater table and a solid riser to grade. The annular space between the well screen and borehole was backfilled with No.2 Morie sand.

The temporary monitoring wells were sampled using dedicated high-density polyethylene (HDPE) tubing and a submersible pump. The wells were purged of a minimum of three well volumes prior to sampling. Prior to collecting groundwater samples, the temporary monitoring wells were gauged with an oil/water interface probe prior to sampling to record depth to groundwater and depth to bottom readings (to 1/100 of a foot), and to confirm or deny the presence of any non-aqueous phase liquid (NAPL). The purged groundwater was field screened for evidence of contamination (i.e., elevated PID readings, odor, or sheen) and water quality parameters including temperature, dissolved oxygen, pH, turbidity, conductivity, and oxidation reduction potential were recorded using a YSI ProDSS multiparameter digital water quality meter. Sampling was conducted in accordance with NYSDEC *Draft DER-10 Technical Guidance for Site Investigation and Remediation,* dated May 2010, and *Sampling Guidelines and Protocols,* dated March 1991.

Temporary groundwater monitoring well locations are shown on Figure 2. Groundwater monitoring well construction logs are included in Appendix C and groundwater sampling logs are included in Appendix D.

4.2.3 Survey

At each soil boring, temporary well, and soil vapor point distances were recorded using a measuring wheel to determine the location in respect to fixed object reference points (the Site boundary or permanent on-site structures).

4.2.4 Water Level Measurement

Prior to the collection of groundwater samples, each temporary well was gauged with an oil/water interface probe attached to a measuring tape accurate to 0.01 feet, to measure depth to water and total well depth. During gauging activities, groundwater levels ranged from 31.40 to 35.06 feet bg. No evidence of non-aqueous phase liquid (NAPL) was detected in the temporary wells or on the purge water. Depth to water measurements are summarized in Table 1.

4.3 Sample Collection and Chemical Analysis

Sampling performed as part of the field investigation was conducted for all Areas of Concern and also considered other means for bias of sampling based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators. All media including soil, groundwater, and soil vapor have been sampled and evaluated in the RIR. Discrete (grab) samples have been used for final delineation of the nature and extent of contamination and to determine the impact of contaminants on public health and the environment. The sampling performed and presented in this RIR provides sufficient basis for evaluation of remedial action alternatives, establishment of a qualitative human health exposure assessment, and selection of a final remedy.

4.3.1 Soil Sampling

During this investigation, 23 soil samples were collected for chemical analysis from the soil boring locations indicated on Figure 2. In accordance with the Work Plan, samples were collected from 0 to 2 feet at each boring location and a second sample was collected from the 2-foot interval at the bottom of the proposed excavation depth of either 4 feet, 6 feet, or 12 feet. A third sample was collected from select borings within the fill layer to delineate previously identified contamination.

All equipment was properly decontaminated between each sampling event and after each use to prevent the cross-contamination of samples. Non-disposable equipment was field decontaminated by scrubbing with a non-phosphate detergent (i.e., Alconox® or Simple Green®) and rinsing with distilled water prior to use at each sample location. Soil samples were placed in laboratory-supplied containers in ice-filled coolers and submitted to the laboratory via courier with appropriate chain-of-custody documentation. Soil samples were submitted to Eurofins Edison (Eurofins) of Edison, New Jersey, a New York State Department of Health (NYSDOH)-certified laboratory for analysis of Target Compound List (TCL) VOCs by U.S. Environmental Protection Agency (EPA) Method 8260, TCL SVOCs by EPA Method 8270, TCL pesticides by EPA Method 8081, PCBs by EPA Method 8082, and Target Analyte List (TAL) metals by EPA 6000/7000 series. One sample (SB-08_0-2_20241213) was additionally analyzed for the per- and polyfluoroalkyl substances (PFAS) by EPA Method 1633 and 1,4-dioxane by EPA Method 8270D. One aqueous trip blank was included with sample shipment for Quality Assurance/Quality Control (QA/QC) purposes and was analyzed for VOCs only.

Data on soil sample collection, including chemical analyses, dates of collection, and sample depths, are reported in Tables 3 through 8. Laboratory analytical methods are discussed in Section 4.3.4 below.

4.3.2 Groundwater Sampling

During this investigation, three groundwater samples were collected for chemical analysis from three temporary groundwater monitoring wells.

Groundwater samples were collected using a peristaltic pump and dedicated tubing. Groundwater samples were placed in laboratory-supplied containers in ice-filled coolers and submitted to Eurofins via courier with appropriate chain-of-custody documentation. Groundwater samples were analyzed for TCL VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, TCL pesticides by EPA Method 8081, PCBs by EPA Method 8082, per- and polyfluoroalkyl substances (PFAS) by EPA Method 1633, 1,4-dioxane by EPA Method 8270, and TAL metals by EPA 6000/7000 series. The groundwater analysis for metals were conducted on both filtered (total) and unfiltered (dissolved) samples. Filtering occurred in the field using dedicated 0.45 micron field filters. One aqueous trip blank was included with sample shipment for QA/QC purposes and was analyzed for VOCs only.

The groundwater sample jars for PFAS analysis were handed off to the lab courier; however, the cooler was lost during transit to the Eurofins Cleveland laboratory in Barberton, Ohio.

Data on groundwater sample collection, including chemical analyses and dates of collection, are reported in Tables 9 through 14. Laboratory analytical methods are discussed in Section 4.3.4 below.

4.3.3 Soil Vapor Sampling

Three soil vapor probes were installed at the locations shown on Figure 2 and three soil vapor samples were collected for chemical analysis. The soil vapor probes were installed using a track-mounted Geoprobe® DPP unit to advance a 0.75-inch-diameter hollow probe rod fitted with a 6-inch-long stainless steel screened implant. As specified in the Phase II Work Plan, the soil vapor points were set at the proposed excavation depths. Soil vapor points SV-06 and SV-07 were installed to approximately 2 feet bg and soil vapor point SV-11 was installed to approximately 6 feet bg.

At each location, a 6-inch long, 0.5-inch diameter stainless steel vapor screen implant was installed at the target depth, and dedicated Teflon™-lined tubing extending above grade was threaded into the drive point. The probe was then retracted approximately six inches to create a void. No. 2 Morie sand was used to fill the annular space around the vapor point to 6 to 12 inches above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to the ground surface.

Prior to sampling the soil vapor points, approximately three sampler volumes were purged using a Gilair Plus low flow sampling pump. During purging, an inverted bucket was placed over each sampling point and tubing and sealed with hydrated bentonite. Helium was introduced to saturate the atmosphere through a small hole in the bucket. Purged vapors were collected in dedicated 1-liter Tedlar® bags and field-screened with a portable helium detector to check for short-circuiting by ambient air (i.e., to verify the adequacy of the bentonite seal above the probe so that samples would be representative of soil vapor conditions). Helium concentrations less than the NYSDOH guideline of 10 percent were considered sufficient to verify the integrity of the seal. The Tedlar® bags were also screened for organic vapors using the PID. The flow rate did not exceed 0.2 liters per minute during purging. After purging, the tubing was connected to a laboratory-supplied batch-certified clean 1-liter SUMMA canister equipped with a flow regulator to collect a sample over approximately two hours. Immediately after opening the flow control valve, the initial SUMMA® canister vacuum (inches of mercury) was noted. After approximately two hours, the flow controller valve was closed, the final vacuum noted, and the canister placed in a shipping carton for delivery with appropriate chain-of-custody documentation to Eurofins, a NYSDOH ELAP-certified laboratory for analysis of VOCs be EPA Method TO-15. After sampling, the soil vapor points were removed, the boreholes were backfilled, and the surface was restored to pre-sampling conditions.

Soil vapor sample collection data is reported in Table 15. Soil vapor sampling logs are included in Appendix E.

Soil vapor sampling logs are included in Appendix E. Methodologies used for soil vapor assessment conform to the *NYSDOH Final Guidance on Soil Vapor Intrusion, October 2006.*

4.3.4 Chemical Analysis

Chemical analytical work presented in this RIR has been performed in the following manner:

Factor	Description
Quality Assurance Officer	The chemical analytical quality assurance was directed by Carl Armbruster of Eurofins.
Chemical Analytical Laboratory	Chemical analytical laboratory used in the RI was Eurofins, a NYS ELAP-certified laboratory.

Chemical Analytical Methods	Soil analytical methods: • TAL Metals by EPA Method 6010 and 7471 (rev. 2007); • VOCs by EPA Method 8260 (rev. 2006); • SVOCs by EPA Method 8270 (rev. 2007); • Pesticides by EPA Method 8081 (rev. 2000); • PCBs by EPA Method 8082 (rev. 2000); • Per- and Polyfluroalkyl Substances (PFAS) by EPA Method 1633 and 1,4-dioxane by EPA Method 8270D Groundwater analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007); • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • Pesticides by EPA Method 8081B (rev. 2000); • PCBs by EPA Method 8082A (rev. 2000); • 1,4-dioxane by EPA Method 8270D SIM Soil vapor analytical methods: • VOCs by TO-15 VOC parameters.

4.3.5 Results of Chemical Analyses

Laboratory data for soil, groundwater and soil vapor are summarized in Table 3 through 8, 9 through 14, and 15, respectively. Laboratory data deliverables for all samples evaluated in this RIR are provided in digital form in Appendix F.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

The Site is relatively level, with the topography of the general surrounding area gently sloping down in a westerly direction. Based on an architectural survey dated September 2021, elevation of the Site ranges from 49 to 57 feet above mean sea level.

5.1.1 Stratigraphy

The stratigraphy of the Site consists of fill material (consisting of brown sand, silt, and gravel, with varying amounts of brick, asphalt, and concrete) down to approximately 3 to 11 feet below grade, underlain by apparent native sand with trace to little amounts of gravel to the boring terminus. Bedrock was not encountered in any of the borings during this investigation.

5.1.2 Hydrogeology

The depth to groundwater was measured using a Solinst® oil/water interface probe. Depth to groundwater beneath the Site ranged from approximately 31.40 feet below grade in the eastern portion of the Site at temporary well TW-08 to 35.06 feet below grade in the southwestern portion of the Site at temporary well TW-10. Based upon a review of topographical data, groundwater is assumed to flow in a westerly direction toward the East River, approximately 1 mile west of the Site; however, actual groundwater flow at the Site can be affected by many factors, including past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Site. Groundwater in this portion of Queens is not used as a source of potable water.

A summary of water level data for all temporary monitoring wells is included in Table 1. The average depth to groundwater is 33.04 and the range in depth is 31.4 to 35.06.

5.2 Soil Chemistry

Twenty-three soil samples were collected for laboratory analysis during the RI from soil borings SB-04, and SB-08 through SB-15. The analytical results for VOCs, SVOCs, PCBs, pesticides and metals were compared to the NYSDEC 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 UUSCOs and RRSCOs. One sample (SB-08_0-2_20241213) was also analyzed for PFAS, and the analytical results were compared to the Unrestricted Use Guidance Values (UUGVs) and the Restricted Residential Guidance Values (RRGVs) as outlined in NYSDEC's *Sampling, Analysis and Assessment of PFAS* guidance dated April 2023. One aqueous trip blank was included with the sample shipment for QA/QC purposes and was analyzed for VOCs only. Soil sample analytical results are presented in Tables 3 through 8. Figure 4 shows the location and posts the values for soil/fill that exceed the NYSDEC UUSCOs, RRSCOs, and PFAS guidance values. The complete soil laboratory analytical data reports from the RI are included in Appendix F.

Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site. A summary table of data for chemical analyses performed on soil samples is included in Table 2.

Volatile Organic Compounds (VOCs)

The VOCs acetone, methyl ethyl ketone, methylene chloride, PCE, and toluene were detected in up to 19 of the 23 soil samples analyzed during the RI at concentrations up to 0.087 mg/kg. No VOCs were detected above their respective UUSCOs or RRSCOs.

Soil analytical results for VOCs are presented in Table 3.

Semi-volatile Organic Compounds (SVOCs)

SVOCs were detected in each of the 23 soil samples analyzed during the investigation at concentrations up to 5.1 mg/kg. Six SVOCs [benzo(a)anthracene (max. 2.8 mg/kg), benzo(a)pyrene (max. 2.7 mg/kg), benzo(b)fluoranthene (max. 3.8 mg/kg), benzo(k)fluoranthene (max. 1.4 mg/kg), chrysene (max. 2.8 mg/kg), and indeno(1,2,3-c,d)pyrene (max. 1.4 mg/kg)] were detected above the UUSCOs in one or more of the following samples: SB-11_2-4_20241212, SB-13_0-2_20241211, SB-14_0-2_2024121, SB-14_2-4_20241211, and SB-15_2-4_20241211.

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-c,d)pyrene were additionally detected above the RRSCOs in samples SB-13_0-2_20241211, SB-14_0-2_20241211, SB-14_2-4_20241211, and SB-15_2-4_20241211. Benzo(b)fluoranthene was also detected above the RRSCO in sample SB-11_2-4_20241212.

The SVOCs that exceeded their respective UUSCOs and/or RRSCOs are polycyclic aromatic hydrocarbons (PAHs), a class of compounds found in some petroleum products, coal tar, coal ash, and other combustion products commonly found in historic fill. Therefore, the detected PAH concentrations in the soil samples can be generally attributed to historic fill material in the soil borings.

Soil analytical results for SVOCs are presented in Table 4.

Metals

Twenty-three metals were detected in one or more of the soil samples analyzed. The following four metals were detected above their respective UUSCOs in one or more of the soil samples: copper (max. 62.3 mg/kg), lead (max. 379 mg/kg), mercury (max. 0.27 mg/kg), and zinc (max. 173 mg/kg). No metals were detected above the RRSCOs. The detected concentrations in the soil samples are most likely attributable some combination of historic fill, which often contains variable concentrations of metals, and prior Site uses.

Soil analytical results for metals are presented in Table 5.

PCBs and Pesticides

PCBs were not detected above laboratory reporting limits in any of the soil samples analyzed during the investigation.

The pesticides P,P'-DDE and P,P'-DDT were detected in the sample SB-08_0-2_20241213 at concentrations of 0.004 mg/kg and 0.008 mg/kg, respectively. These values are above the UUSCO of 0.0033 mg/kg, but below their RRSCOs. The pesticide cis-chlordane was also detected in the sample SB-15_2-4_20241211, but below its UUSCO and RRSCO.

Soil analytical results for PCBs are presented in Table 6, and results for pesticides are presented in Table 7.

Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane in Soil

Perfluorooctanesulfonic acid (PFOS) was detected in the soil sample analyzed (SB-08_0-2_20241213) at a concentration of 2.17 parts per billion (ppb), above the UUSCO guidance value of 0.88 ppb, but below the RRSCO guidance value of 44 ppb. Perfluorooctanoic acid (PFOA) was

not detected above laboratory reporting limits. The compound 1,4-dioxane, analyzed as an SVOC, was not detected above laboratory reporting limits in any of the soil samples.

Soil analytical results for PFAS are presented in Table 8. Soil analytical results for 1,4-dioxane are presented in Table 4.

Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site. A summary table of data for chemical analyses performed on soil samples is included in Table 2. Figure 4 shows the location and posts the values for soil/fill that exceed the 6NYCRR Part 375-6.8 Track 2 Soil Cleanup Objectives for Unrestricted Use and Restricted Residential Use.

5.3 Groundwater Chemistry

Three groundwater samples were collected during the RI for laboratory analysis from the three temporary monitoring wells (TW-08 through TW-10). Groundwater sample analytical results for VOCs, SVOCs, PCBs, pesticides, metals (total and dissolved), and 1,4-dioxane were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs), which were developed based on use as a source of drinking water, although groundwater in this portion of Queens is not used as a source of potable water. One aqueous trip blank was included with the sample shipment for QA/QC purposes and was analyzed for VOCs only. Analytical results are presented in Tables 9 through 14. Figure 5 shows the location and posts the values for groundwater that exceeded the AWQSGVs. Groundwater laboratory analytical data reports for the RI are included in Appendix F.

The groundwater samples were additionally submitted for analysis of PFAS; however, after the sample jars were handed off to the lab courier, the cooler was lost during transit to the Eurofins Cleveland laboratory in Barberton, Ohio.

Data collected during the RI is sufficient to delineate the distribution of contaminants in groundwater at the Site. A summary table of data for chemical analyses performed on groundwater samples is included in Table 2.

Volatile Organic Compounds (VOCs) in Groundwater

Six VOCs (bromodichloromethane, chloroform, cis-1,2-dichloroethylene, dibromochloromethane, PCE, and TCE) were detected in one or more groundwater samples at concentrations ranging from 0.34 micrograms per liter (µg/L) of bromodichloromethane to 310 µg/L of PCE. PCE was detected in all three groundwater samples at concentrations ranging from 60 to 310 µg/L, above the AWQSGV of 5 µg/L. The highest concentration was detected in sample TW-10_20241212, collected from the southern portion of the Site. No other VOCs were detected in the groundwater samples above the AWQSGVs. No VOCs were detected above laboratory reporting limits in the aqueous trip blank samples. Groundwater analytical results for VOCs are presented in Table 9.

Semi-volatile Organic Compounds (SVOCs) in Groundwater

Three SVOCs, 1,4-dioxane, caprolactam, and di-n-butyl phthalate, were detected in one or more of the groundwater samples at concentrations up to 21 µg/L. Caprolactam and di-n-butyl phthalate were detected in all three groundwater samples; however, 1,4-dioxane was only detected in groundwater samples TW-08_20241213 and TW-10_20241213. No SVOCs were detected above their respective AWQSGVs.

Groundwater analytical results for SVOCs are presented in Table 10.

Metals in Groundwater

Twenty-two metals were detected in the total (unfiltered) groundwater samples. The following fourteen metals were detected above the AWQSGVs in one or more of the samples: arsenic (max. 73.3_µg/L), barium (max. 4,580 µg/L), beryllium (max. 14 µg/L), total chromium (max. 1,350 µg/L), copper (max. 1,000 µg/L), iron (max. 667,000 µg/L), lead (max. 707 µg/L), magnesium (max. 370,000 µg/L), manganese (max. 18,400 µg/L), mercury (max. 1.1 µg/L), nickel (max. 814 µg/L), sodium (max. 123,000 µg/L), thallium (max. 1.6 µg/L), and zinc (max. 2,040 µg/L).

Thirteen metals were detected in the dissolved (filtered) groundwater samples. The following two metals were detected above the AWQSGVs in one or more samples: manganese (max. 412 µg/L), and sodium (max. 134,000 µg/L)

The metal detections are likely related to regional groundwater conditions and not due to an on-site source. Groundwater analytical results for total metals are presented in Table 11 and results for dissolved metals are presented in Table 12.

Polychlorinated Biphenyls (PCBs) and Pesticides in Groundwater

No PCBs or pesticides were detected above laboratory reporting limits in any of the groundwater samples.

Groundwater analytical results for PCBs are presented in Table 13 and results for pesticides are presented in Table 14.

Data collected during the RI is sufficient to delineate the distribution of contaminants in groundwater at the Site. A summary table of data for chemical analyses performed on groundwater samples is included in Table 2. Exceedances of applicable groundwater standards are shown.

Figure 5 shows the location and posts the values for groundwater that exceed the New York State 6NYCRR Part 703.5 Class GA groundwater standards.

5.4 Soil Vapor Chemistry

Soil vapor samples collected during the RI were compared to the Soil Vapor/Indoor Air Decision Matrices A through F, as detailed in the May 2017 and February 2024 updates to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion. Since indoor air samples were not collected as part of the RI (and could not be collected since there are no structures on-site), the results were conservatively compared to the soil vapor matrix concentrations that correspond to a recommended action of "Mitigate," regardless of the corresponding indoor air concentrations.

Petroleum-related VOCs, including 1,3-butadiene, 2,2,4-trimethylpentane, benzene, butane, cyclohexane, methyl ethyl ketone, n-heptane, n-hexane, styrene, and toluene were detected at concentrations ranging from 2.3 µg/m^3 (2,2,4-trimethylpentane in sample SV-06_20241213) to 66 µg/m^3 (butane in sample SV-07_20241213). Solvent-related VOCs, including carbon disulfide, chloroform, cis-1,2-dichloroethylene, PCE, and TCE were detected at concentrations ranging from 1.4 µg/m^3 (PCE in sample SV-07_20241213) to 25 µg/m^3 (PCE in sample SV-11_20241213).

TCE was detected in soil vapor sample SV-11_20241213, at a concentration of 4.4 µg/m^3, below the Matrix Value of 60 µg/m^3. According to Matrix A, the applicable matrix for TCE, soil vapor concentrations greater than 60 µg/m^3 result in a recommendation for mitigation, regardless of the indoor air concentration.

PCE was detected in soil vapor samples SV-07_20241213 and SV-11_20241213, at concentrations of 1.4 µg/m^3 and 25 µg/m^3 respectively, below Matrix Value of 1,000 µg/m^3. According to Matrix B, the applicable matrix for PCE, soil vapor concentrations greater than 1,000 µg/m^3 result in a recommendation for mitigation, regardless of the indoor air concentration.

Based on the distribution of elevated chlorinated solvent-related VOCs, and previous soil vapor results from the 2021 Phase II investigation, the soil vapor detections are likely attributable to an on-site source.

Data collected during the RI is sufficient to delineate the distribution of contaminants in soil vapor at the Site. A summary table of data for chemical analyses performed on soil vapor samples is included in Table 15. Figure 6 shows the location and posts the values for soil vapor samples with detected concentrations.

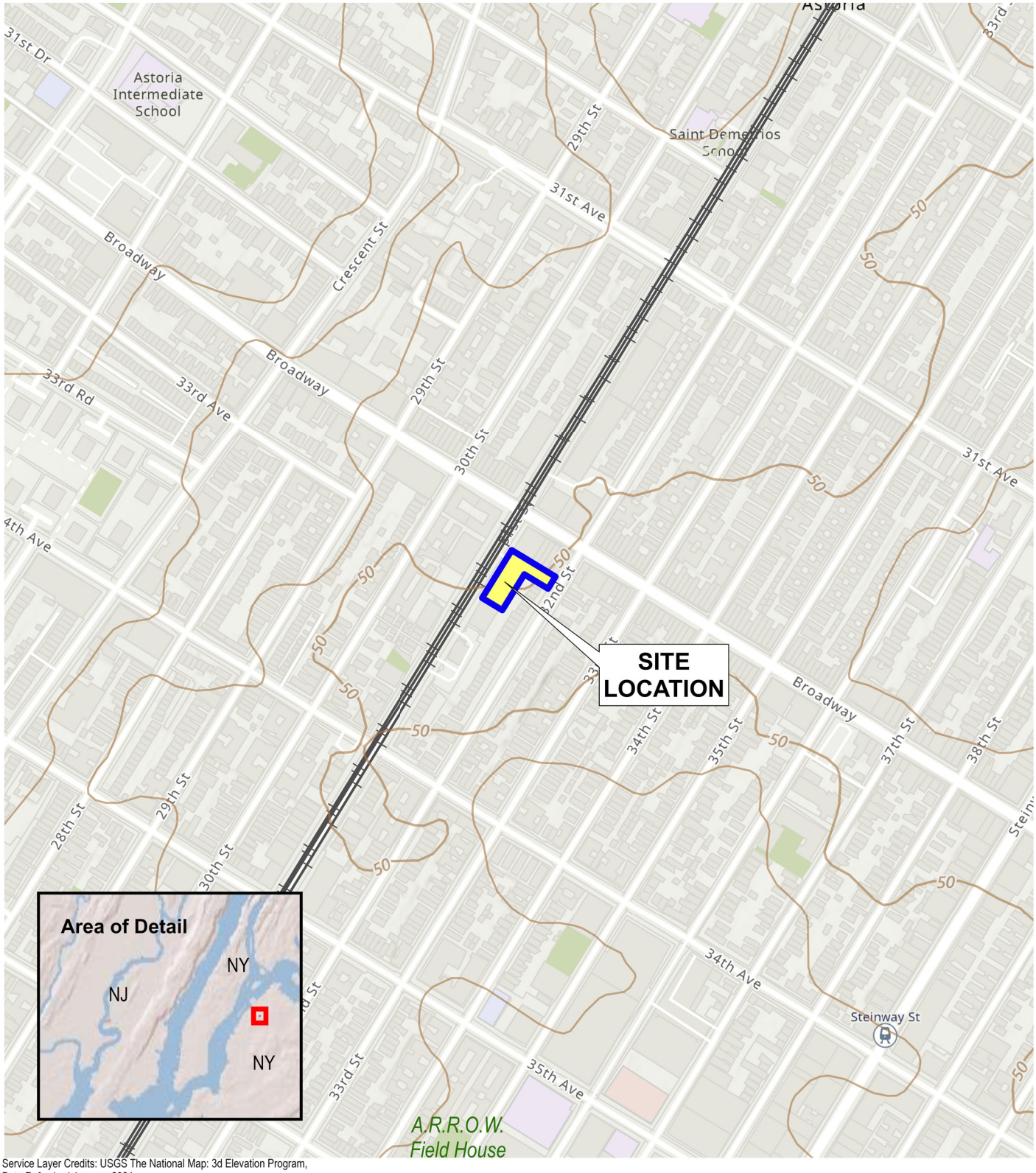
5.5 Prior Activity

Based on an evaluation of the data and information from the RIR, disposal of significant amounts of hazardous waste is not suspected at this site.

5.6 Impediments to Remedial Action

There are no known impediments to remedial action at this property.

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed January, 2024

0 500 1,000

SCALE IN FEET

N

akrf

440 Park Avenue South, New York, NY 10016

31-07 31st Street
Queens, New York

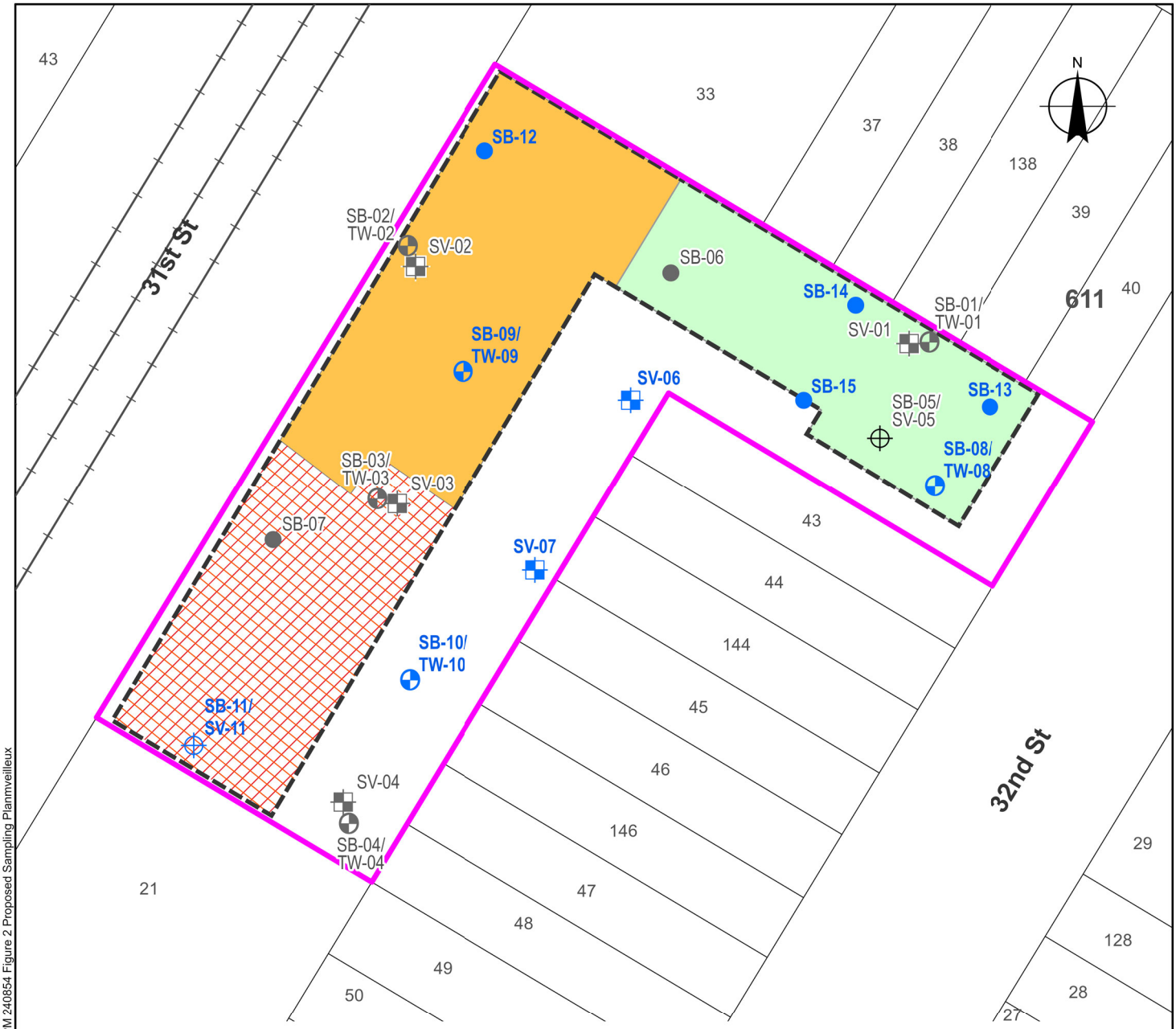
SITE LOCATION

DATE
1/10/2025

PROJECT NO.
240854

FIGURE
1

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARIS\AR\Phase II Figures_DCEDITS.aprx8/2/2024 11:48 AM240854 Fig 1 Site Locationmveilleux



LEGEND

PROJECT SITE BOUNDARY	2022 PHASE II SOIL BORING
25 LOT BOUNDARY AND TAX LOT NUMBER	2022 PHASE II SOIL BORING/SOIL VAPOR POINT
611 BLOCK NUMBER	2022 PHASE II SOIL VAPOR POINT
PROPOSED CRAWLSPACE	2022 PHASE II SOIL BORING/TEMPORARY WELL
PROPOSED BUILDING	2024 PHASE II SOIL BORING
PROPOSED CELLAR	2024 PHASE II SOIL BORING/SOIL VAPOR POINT
PROPOSED SLAB-ON-GRADE	2024 PHASE II SOIL BORING/TEMPORARY WELL
	2024 PHASE II SOIL VAPOR POINT

0 20 40
SCALE IN FEET

Aerial Source:
2022 New York State ITS GIS Orthoimagery

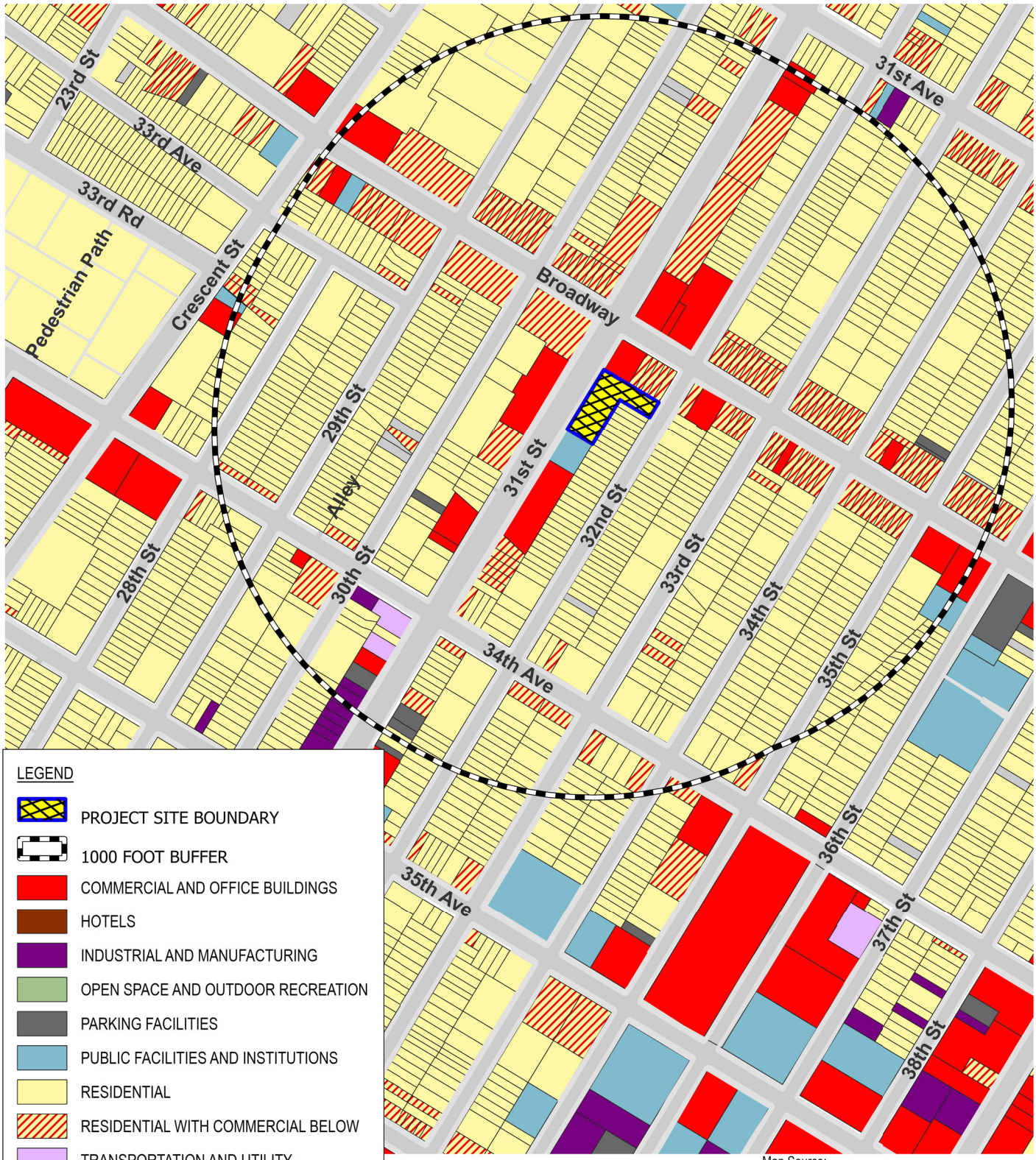
akrf
440 Park Avenue South, New York, NY 10016

31-07 31st Street
Queens, New York

SITE PLAN AND SAMPLING LOCATIONS

DATE
1/10/2025
PROJECT NO.
240854
FIGURE
2

AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARISAR\Phase II Figures_DCEDITS.aprx1/8/2025 4:47 PM 240854 Figure 2 Proposed Sampling Plannveilleux



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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SCALE IN FEET

N

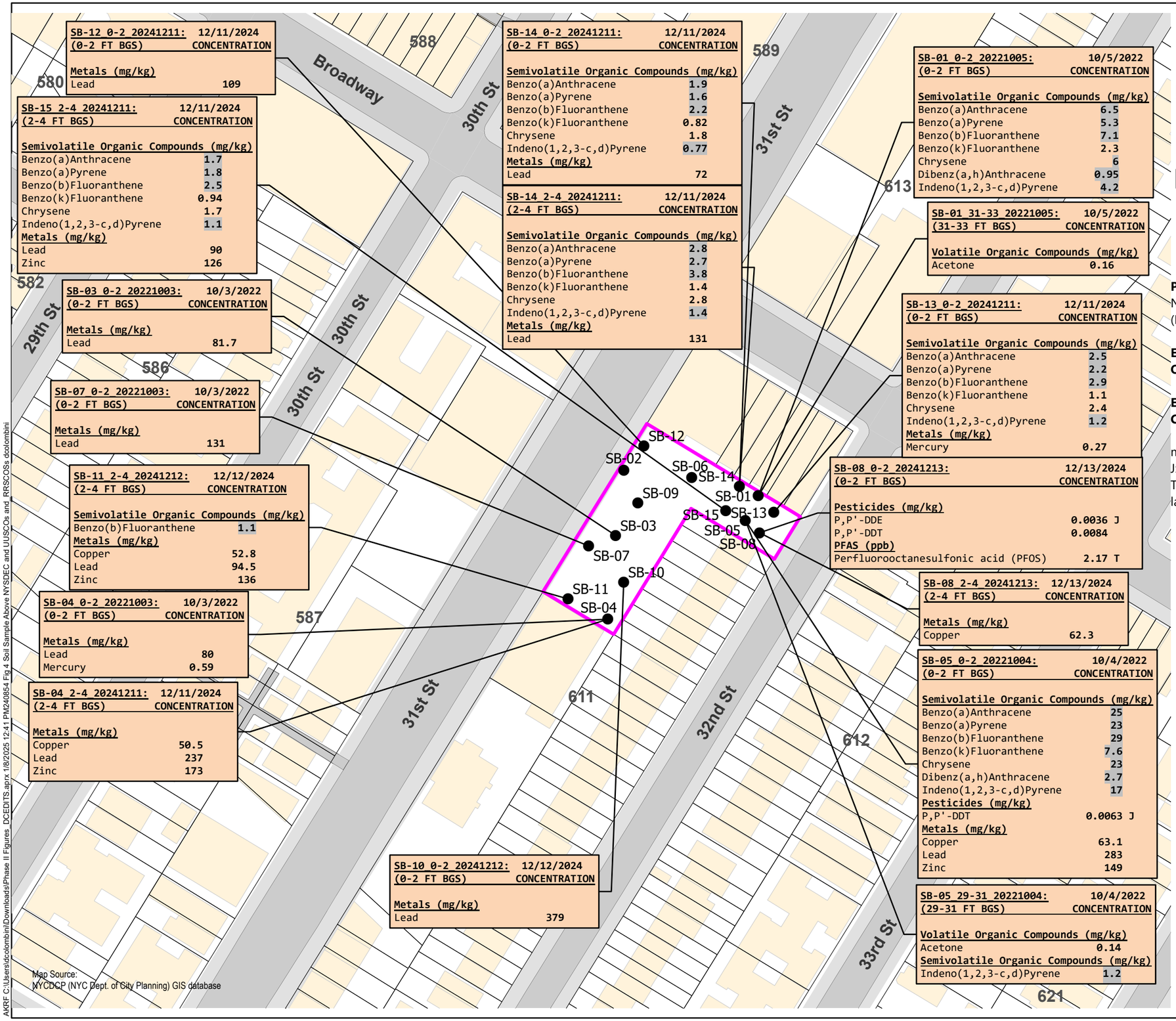
AKRF O:\Projects\240854 - IKOS SENIOR LIVING-SARISAR\Phase II Surrounding Land Use Figure.aprx1/26/2022 9:52 AMFig 3 Surrounding Land Usemveilleux

akrf
440 Park Avenue South, New York, NY 10016

31-07 31st Street
Queens, New York

SURROUNDING LAND USE

DATE
1/10/2025
PROJECT NO.
240854
FIGURE
3



AKRF C:\Users\dcolombini\Downloads\Phase II Figures_DCED\TS.aprx 1/8/2025 12:41 PM240854 Fig 4 Soil Sample Above NYSDEC and UUSCOs and RRSCOs dcolombini

N

LEGEND

- SOIL SAMPLE LOCATION
- PROJECT SITE BOUNDARY
- 20 LOT BOUNDARY AND TAX LOT NUMBER
- 2389 BLOCK NUMBER

Part 375 Soil Cleanup Objectives (SCOs): SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are shaded

mg/kg: milligrams per kilogram = parts per million (ppm)
J: The concentration given is an estimated value.
T: Indicates that a quality control parameter has exceeded laboratory limits

	UUGVs ppb	RRGVs ppb	RRSCO mg/kg	UUSCO mg/kg
Volatile Organic Compounds				
Acetone			100	0.05
Semivolatile Organic Compounds				
Benzo(a)Anthracene			1	1
Benzo(a)Pyrene			1	1
Benzo(b)Fluoranthene			1	1
Benzo(k)Fluoranthene			3.9	0.8
Chrysene			3.9	1
Dibenz(a,h)Anthracene			0.33	0.33
Indeno(1,2,3-c,d)Pyrene			0.5	0.5
Metals				
Copper			270	50
Lead			400	63
Mercury			0.81	0.18
Zinc			10,000	109
Pesticides				
P,P'-DDE			8.9	0.0033
P,P'-DDT			7.9	0.0033
PFAS				
Perfluorooctanesulfonic acid (PFOS)	0.88	44		

0 50 100 200
SCALE IN FEET

Sample ID — Sample Date

SB-12 0-2 20241211: 12/11/2024
(0-2 FT BGS) CONCENTRATION
Metals (mg/kg)
Lead 109

Analyte/Compound — Concentration

akrf
440 Park Avenue South, New York, NY 10016

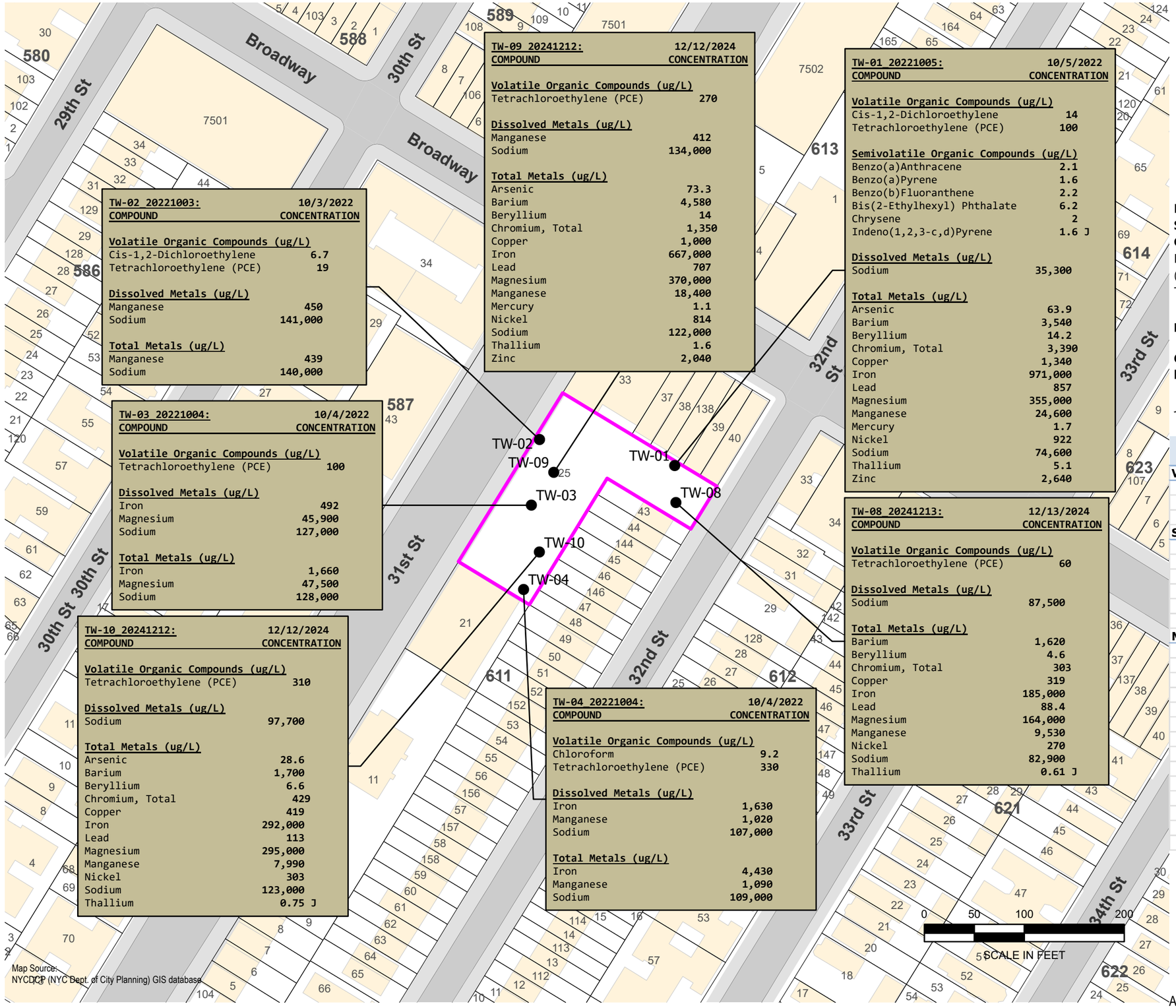
SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC UUSCOS AND RRSCOS

31-07 31st Street
Queens, New York

DATE
1/8/2025

PROJECT NO.
240854

FIGURE
4



LEGEND

- 2389 BLOCK NUMBER
- 20 LOT BOUNDARY AND TAX LOT NUMBER
- PROJECT SITE BOUNDARY
- GROUNDWATER SAMPLE LOCATION

NYSDEC TOGS Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs):
New York State Department of Environmental Conservation (NYSDEC)
Technical and Operational Guidance Series (TOGS) (1.1.1):

µg/L: micrograms per Liter = parts per billion (ppb)

Only Exceedances of NYSDEC AWQSGVs are shown in bold font.

J: The reported value is estimated.

	NYSDEC AWQSGVs ug/l
Volatile Organic Compounds	
Chloroform	7
Cis-1,2-Dichloroethylene	5
Tetrachloroethylene (PCE)	5
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.002
Benzo(a)Pyrene	0
Benzo(b)Fluoranthene	0.002
Bis(2-Ethylhexyl) Phthalate	5
Chrysene	0.002
Indeno(1,2,3-c,d)Pyrene	0.002
Metals	
Arsenic	25
Barium	1,000
Beryllium	3
Chromium, Total	50
Copper	200
Iron	300
Lead	25
Magnesium	35,000
Manganese	300
Mercury	0.7
Nickel	100
Sodium	20,000
Thallium	0.5
Zinc	2,000

Sample ID — Sample Date

TW-02 20221003: 10/3/2022
COMPOUND CONCENTRATION
Volatile Organic Compounds (ug/L)
Cis-1,2-Dichloroethylene 6.7
Tetrachloroethylene (PCE) 19

Analyte/Compound — Concentration

akrf
440 Park Avenue South, New York, NY 10016

GROUNDWATER SAMPLE CONCENTRATIONS ABOVE NYSDEC AWQSGVS

31-07 31st Street
Queens, New York

DATE 1/8/2025
PROJECT NO. 240854
FIGURE 5

AKRF C:\Users\dcolombini\Downloads\Phase II Figures_DCEDITS.aprx 1/8/2025 12:42 PM240854 Fig 5 Groundwater Sample Above AWQSGVs dcolombini



LEGEND

- PROJECT_SITE_BOUNDARY
- SOIL VAPOR SAMPLE LOCATION
- 2389 BLOCK NUMBER
- 20 LOT BOUNDARY AND TAX LOT NUMBER

N

SOIL VAPOR

µg/m³- micrograms per cubic meter

J: The reported value is estimated.
D: Analyte concentration obtained from dilution.

0 75 150 300
SCALE IN FEET

Sample ID — Sample Date

SV-11_20241213:	12/13/2024
COMPOUND	CONC. (ug/m3)
Volatile Organic Compounds	
Chloroform	3.1 J
Cis-1,2-Dichloroethylene	7.9

Analyte/Compound — Concentration

akrf
440 Park Avenue South, New York, NY 10016

31-07 31ST STREET
Queens, New York

SOIL VAPOR DETECTIONS

DATE 1/8/2025
PROJECT NO. 240854
FIGURE 2

AKRF C:\Users\dcolombini\Documents\ArcGIS\Projects\Fig6_240854\Fig6_240854.aprx 1/8/2025 4:51 PM xxx Fig x Soil Sample Above NYSDEC and UUSCOs and_RRSCOSs dcolombini

TABLES

Table 1
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Depth to Water in Temporary Wells

Well ID	Total Depth of Well (ft. bgs)	Screen Interval (ft. bgs)	Depth to Groundwater (ft. below TOC)
TW-08	37.9	30 to 40	31.40
TW-09	39.98	30 to 40	32.67
TW-10	40.18	30 to 40	35.06

Notes:
ft. bgs = feet below ground surface
TOC = top of casing
NA = not applicable

Table 2
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Sample Collection Summary

Matrix	Sample ID	Date of Collection	Sample Depth (ft. bgs)	Analysis
Soil	SB-04_0-2_20241211	12/11/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-04_2-4_20241211	12/11/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-08_0-2_20241213	12/13/2024	0-2	VOCs, SVOCs, Metals, PCBs, Pesticides, and PFAS
	SB-08_2-4_20241213	12/13/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-08_9-11_20241213	12/13/2024	9-11	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-09_0-2_20241212	12/12/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-09_8-10_20241212	12/12/2024	8-10	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-09_10-12_20241212	12/12/2024	10-12	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-10_0-2_20241212	12/12/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-10_2-4_20241212	12/12/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-10_8-10_20241212	12/12/2024	8-10	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-11_0-2_20241212	12/12/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-11_2-4_20241212	12/12/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-11_4-6_20241212	12/12/2024	4-6	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-12_0-2_20241211	12/11/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-12_8-10_20241211	12/11/2024	8-10	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-12_10-12_20241211	12/11/2024	10-12	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-13_0-2_20241211	12/11/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-13_2-4_20241211	12/11/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-14_0-2_20241211	12/11/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-14_2-4_20241211	12/11/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-15_0-2_20241211	12/11/2024	0-2	VOCs, SVOCs, Metals, PCBs, and Pesticides
	SB-15_2-4_20241211	12/11/2024	2-4	VOCs, SVOCs, Metals, PCBs, and Pesticides
Groundwater	TW-08_20241213	12/13/2024	NA	VOCs, SVOCs, Metals (total and dissolved), PCBs, and Pesticides
	TW-09_20241212	12/12/2024	NA	VOCs, SVOCs, Metals (total and dissolved), PCBs, and Pesticides
	TW-10_20241212	12/12/2024	NA	VOCs, SVOCs, Metals (total and dissolved), PCBs, and Pesticides
Soil Vapor	SV-06_20241213	12/13/2024	2	VOCs
	SV-07_20241213	12/13/2024	2	VOCs
	SV-11_20241213	12/13/2024	6	VOCs

Notes:
ft. bg: feet below grade surface
VOCs: Volatile Organic Compounds
SVOCs: Semi-volatile Organic Compounds
PCBs: Polychlorinated Biphenyls
PFAS: Per- and Polyfluoroalkyl Substances

Table 3
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-04_0-2_20241211	SB-04_2-4_20241211	SB-08_0-2_20241213	SB-08_2-4_20241213	SB-08_9-11_20241213
		Laboratory Sample ID	460-317091-1	460-317091-2	460-317270-1	460-317270-2	460-317270-3
		Date Sampled	12/11/2024	12/11/2024	12/13/2024	12/13/2024	12/13/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.001 U	0.0011 U	0.00096 UT	0.00098 UT	0.0011 UT
1,1,2,2-Tetrachloroethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.001 U	0.0011 U	0.00096 UT	0.00098 UT	0.0011 UT
1,1,2-Trichloroethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,2-Dichloropropane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
1,4-Dichlorobenzene	1.8	13	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
2-Hexanone	NS	NS	0.005 U	0.0055 U	0.0048 U	0.0049 U	0.0055 U
Acetone	0.05	100	0.006 U	0.0066 U	0.0058 U	0.0059 U	0.0066 U
Benzene	0.06	4.8	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Bromochloromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Bromodichloromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Bromoform	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Bromomethane	NS	NS	0.002 U	0.0022 U	0.0019 U	0.002 U	0.0022 U
Carbon Disulfide	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.001 U	0.0011 U	0.00096 UT	0.00098 UT	0.0011 UT
Chlorobenzene	1.1	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Chloroethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Chloroform	0.37	49	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Chloromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Cyclohexane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Dibromochloromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Dichlorodifluoromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Ethylbenzene	1	41	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
M,P-Xylenes	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Methyl Acetate	NS	NS	0.005 U	0.0055 U	0.0048 U	0.0049 U	0.0055 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.005 U	0.0055 U	0.0048 U	0.0049 U	0.0055 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.005 UT	0.0055 UT	0.0048 U	0.0049 U	0.0055 U
Methylcyclohexane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Methylene Chloride	0.05	100	0.002 U	0.0022 U	0.0019 U	0.002 U	0.0022 U
N-Butylbenzene	12	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
N-Propylbenzene	3.9	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Sec-Butylbenzene	11	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Styrene	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
T-Butylbenzene	5.9	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	0.001 U	0.0016	0.0027	0.0088	0.0011 U
Toluene	0.7	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Trichlorofluoromethane	NS	NS	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.001 U	0.0011 U	0.00096 U	0.00098 U	0.0011 U
Xylenes, Total	0.26	100	0.002 U	0.0022 U	0.0019 U	0.002 U	0.0022 U

Table 3
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-09_0-2_20241212	SB-09_8-10_20241212	SB-09_10-12_20241212	SB-10_0-2_20241212	SB-10_2-4_20241212
		Laboratory Sample ID	460-317182-1	460-317182-2	460-317182-3	460-317182-4	460-317182-5
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,1,2,2-Tetrachloroethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,1,2-Trichloroethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,1-Dichloroethane	0.27	26	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,1-Dichloroethene	0.33	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2,3-Trichlorobenzene	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2,4-Trichlorobenzene	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2,4-Trimethylbenzene	3.6	52	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2-Dichlorobenzene	1.1	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2-Dichloroethane	0.02	3.1	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,2-Dichloropropane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,3-Dichlorobenzene	2.4	49	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
1,4-Dichlorobenzene	1.8	13	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
2-Hexanone	NS	NS	0.005 U	0.0055 U	0.0056 U	0.0053 U	0.0047 U
Acetone	0.05	100	0.006 U	0.0066 U	0.0067 U	0.0064 U	0.018
Benzene	0.06	4.8	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Bromochloromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Bromodichloromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Bromoform	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Bromomethane	NS	NS	0.002 U	0.0022 U	0.0022 U	0.0021 U	0.0019 U
Carbon Disulfide	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00075 J
Carbon Tetrachloride	0.76	2.4	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Chlorobenzene	1.1	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Chloroethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Chloroform	0.37	49	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Chloromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Cis-1,2-Dichloroethylene	0.25	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Cis-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Cyclohexane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Dibromochloromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Dichlorodifluoromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Ethylbenzene	1	41	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Isopropylbenzene (Cumene)	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
M,P-Xylenes	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Methyl Acetate	NS	NS	0.005 U	0.0055 U	0.0056 U	0.0053 U	0.0047 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.005 U	0.0055 U	0.0056 U	0.0053 U	0.0065
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.005 UT	0.0055 UT	0.0056 UT	0.0053 UT	0.0047 UT
Methylcyclohexane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Methylene Chloride	0.05	100	0.002 U	0.0022 U	0.0022 U	0.0021 U	0.0011 J
N-Butylbenzene	12	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
N-Propylbenzene	3.9	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Sec-Butylbenzene	11	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Styrene	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
T-Butylbenzene	5.9	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Tert-Butyl Methyl Ether	0.93	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Tetrachloroethylene (PCE)	1.3	19	0.0036	0.0026	0.001 J	0.00077 J	0.0059
Toluene	0.7	100	0.001 U	0.0011 U	0.0011 U	0.00035 J	0.00023 J
Trans-1,2-Dichloroethene	0.19	100	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Trans-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Trichloroethylene (TCE)	0.47	21	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Trichlorofluoromethane	NS	NS	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Vinyl Chloride	0.02	0.9	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U
Xylenes, Total	0.26	100	0.002 U	0.0022 U	0.0022 U	0.0021 U	0.0019 U

Table 3
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-10_8-10_20241212	SB-11_0-2_20241212	SB-11_2-4_20241212	SB-11_4-6_20241212	SB-12_0-2_20241211
		Laboratory Sample ID	460-317182-6	460-317182-7	460-317182-8	460-317182-9	460-317091-3
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,1-Dichloroethane	0.27	26	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,1-Dichloroethene	0.33	100	0.0012 U	0.0014 U	0.0011 UT	0.0012 UT	0.001 U
1,2,3-Trichlorobenzene	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2,4-Trichlorobenzene	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2,4-Trimethylbenzene	3.6	52	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichlorobenzene	1.1	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,3-Dichlorobenzene	2.4	49	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
1,4-Dichlorobenzene	1.8	13	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
2-Hexanone	NS	NS	0.006 U	0.0069 U	0.0053 U	0.0059 U	0.005 U
Acetone	0.05	100	0.0072 U	0.0083 U	0.0063 U	0.0071 U	0.006 U
Benzene	0.06	4.8	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Bromochloromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Bromodichloromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Bromoform	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Bromomethane	NS	NS	0.0024 U	0.0028 U	0.0021 U	0.0024 U	0.002 U
Carbon Disulfide	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Chlorobenzene	1.1	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Chloroethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Chloroform	0.37	49	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Chloromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Cis-1,2-Dichloroethylene	0.25	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Cis-1,3-Dichloropropene	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Cyclohexane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Dibromochloromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Ethylbenzene	1	41	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
M,P-Xylenes	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Methyl Acetate	NS	NS	0.006 U	0.0069 U	0.0053 U	0.0059 U	0.005 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.006 U	0.0069 U	0.0053 U	0.0059 U	0.005 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.006 UT	0.0069 UT	0.0053 U	0.0059 U	0.005 UT
Methylcyclohexane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Methylene Chloride	0.05	100	0.0024 U	0.0028 U	0.0021 U	0.0024 U	0.002 U
N-Butylbenzene	12	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
N-Propylbenzene	3.9	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Sec-Butylbenzene	11	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Styrene	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
T-Butylbenzene	5.9	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Tert-Butyl Methyl Ether	0.93	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	0.00076 J	0.0043	0.087	0.0023	0.0057
Toluene	0.7	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Trans-1,2-Dichloroethene	0.19	100	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.0012 U	0.0014 U	0.00038 J	0.0012 U	0.001 U
Trichlorofluoromethane	NS	NS	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Vinyl Chloride	0.02	0.9	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.001 U
Xylenes, Total	0.26	100	0.0024 U	0.0028 U	0.0021 U	0.0024 U	0.002 U

Table 3
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-12_8-10_20241211	SB-12_10-12_20241211	SB-13_0-2_20241211	SB-13_2-4_20241211	SB-14_0-2_20241211
		Laboratory Sample ID	460-317091-4	460-317091-5	460-317091-10	460-317091-11	460-317091-8
		Date Sampled	12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2,4-Trichlorobenzene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2,4-Trimethylbenzene	3.6	52	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2-Dichlorobenzene	1.1	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,3-Dichlorobenzene	2.4	49	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
1,4-Dichlorobenzene	1.8	13	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
2-Hexanone	NS	NS	0.0053 U	0.0055 U	0.0053 U	0.0055 U	0.005 U
Acetone	0.05	100	0.0063 U	0.0066 U	0.0063 U	0.0066 U	0.006 U
Benzene	0.06	4.8	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Bromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Bromodichloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Bromoform	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Bromomethane	NS	NS	0.0021 U	0.0022 U	0.0021 U	0.0022 U	0.002 U
Carbon Disulfide	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Chlorobenzene	1.1	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Chloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Chloroform	0.37	49	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Cyclohexane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Dibromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Ethylbenzene	1	41	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
M,P-Xylenes	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Methyl Acetate	NS	NS	0.0053 U	0.0055 U	0.0053 U	0.0055 U	0.005 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0053 U	0.0055 U	0.0053 U	0.0055 U	0.005 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0053 UT	0.0055 UT	0.0053 UT	0.0055 UT	0.005 UT
Methylcyclohexane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Methylene Chloride	0.05	100	0.0021 U	0.0022 U	0.0021 U	0.0022 U	0.002 U
N-Butylbenzene	12	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
N-Propylbenzene	3.9	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Sec-Butylbenzene	11	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Styrene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
T-Butylbenzene	5.9	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	0.00051 J	0.00073 J	0.0011 U	0.0011 U	0.002
Toluene	0.7	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Trans-1,2-Dichloroethene	0.19	100	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.001 U
Xylenes, Total	0.26	100	0.0021 U	0.0022 U	0.0021 U	0.0022 U	0.002 U

Table 3
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	SB-14_2-4_20241211	SB-15_0-2_20241211	SB-15_2-4_20241211
		Laboratory Sample ID	460-317091-9	460-317091-6	460-317091-7
		Date Sampled	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0011 U	0.00097 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0011 U	0.00097 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0011 U	0.00097 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,2,4-Trichlorobenzene	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,2,4-Trimethylbenzene	3.6	52	0.0011 U	0.0011 U	0.00097 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,2-Dichlorobenzene	1.1	100	0.0011 U	0.0011 U	0.00097 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0011 U	0.00097 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.00097 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0011 U	0.0011 U	0.00097 U
1,3-Dichlorobenzene	2.4	49	0.0011 U	0.0011 U	0.00097 U
1,4-Dichlorobenzene	1.8	13	0.0011 U	0.0011 U	0.00097 U
2-Hexanone	NS	NS	0.0055 U	0.0053 U	0.0049 U
Acetone	0.05	100	0.0066 U	0.0063 U	0.0058 U
Benzene	0.06	4.8	0.0011 U	0.0011 U	0.00097 U
Bromochloromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Bromodichloromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Bromoform	NS	NS	0.0011 U	0.0011 U	0.00097 U
Bromomethane	NS	NS	0.0022 U	0.0021 U	0.0019 U
Carbon Disulfide	NS	NS	0.0011 U	0.0011 U	0.00097 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0011 U	0.00097 U
Chlorobenzene	1.1	100	0.0011 U	0.0011 U	0.00097 U
Chloroethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Chloroform	0.37	49	0.0011 U	0.0011 U	0.00097 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0011 U	0.00097 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.00097 U
Cyclohexane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Dibromochloromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Ethylbenzene	1	41	0.0011 U	0.0011 U	0.00097 U
Isopropylbenzene (Cumene)	NS	NS	0.0011 U	0.0011 U	0.00097 U
M,P-Xylenes	NS	NS	0.0011 U	0.0011 U	0.00097 U
Methyl Acetate	NS	NS	0.0055 U	0.0053 U	0.0049 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0055 U	0.0053 U	0.0049 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0055 UT	0.0053 UT	0.0049 UT
Methylcyclohexane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Methylene Chloride	0.05	100	0.0022 U	0.0021 U	0.0019 U
N-Butylbenzene	12	100	0.0011 U	0.0011 U	0.00097 U
N-Propylbenzene	3.9	100	0.0011 U	0.0011 U	0.00097 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011 U	0.0011 U	0.00097 U
Sec-Butylbenzene	11	100	0.0011 U	0.0011 U	0.00097 U
Styrene	NS	NS	0.0011 U	0.0011 U	0.00097 U
T-Butylbenzene	5.9	100	0.0011 U	0.0011 U	0.00097 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0011 U	0.00097 U
Tetrachloroethylene (PCE)	1.3	19	0.0079	0.00088 J	0.012
Toluene	0.7	100	0.0011 U	0.0011 U	0.00097 U
Trans-1,2-Dichloroethene	0.19	100	0.0011 U	0.0011 U	0.00097 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.00097 U
Trichloroethylene (TCE)	0.47	21	0.0011 U	0.0011 U	0.00097 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.00097 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0011 U	0.00097 U
Xylenes, Total	0.26	100	0.0022 U	0.0021 U	0.0019 U

Table 4
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-04_0-2_20241211	SB-04_2-4_20241211	SB-08_0-2_20241213	SB-08_2-4_20241213	SB-08_9-11_20241213	SB-09_0-2_20241212
		Laboratory Sample ID	460-317091-1	460-317091-2	460-317270-1	460-317270-2	460-317270-3	460-317182-1
		Date Sampled	12/11/2024	12/11/2024	12/13/2024	12/13/2024	12/13/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4,5-Trichlorophenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4,6-Trichlorophenol	NS	NS	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
2,4-Dichlorophenol	NS	NS	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
2,4-Dimethylphenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4-Dinitrophenol	NS	NS	0.29 U	0.29 U	0.27 U	0.27 U	0.27 U	0.27 U
2,4-Dinitrotoluene	NS	NS	0.072 U	0.072 U	0.067 U	0.067 U	0.067 U	0.067 U
2,6-Dinitrotoluene	NS	NS	0.072 U	0.072 U	0.067 U	0.067 U	0.067 U	0.067 U
2-Chloronaphthalene	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Chlorophenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylnaphthalene	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylphenol (O-Cresol)	0.33	100	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Nitroaniline	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Nitrophenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
3- And 4- Methylphenol (Total)	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
3-Nitroaniline	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	0.29 U	0.27 U	0.27 U	0.27 U	0.27 U
4-Bromophenyl Phenyl Ether	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloro-3-Methylphenol	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloroaniline	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Methylphenol (P-Cresol)	0.33	100	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Nitroaniline	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Nitrophenol	NS	NS	0.72 U	0.72 U	0.67 U	0.67 U	0.67 U	0.67 U
Acenaphthene	20	100	0.35 U	0.021 J	0.33 U	0.33 U	0.33 U	0.33 U
Acenaphthylene	100	100	0.35 U	0.021 J	0.016 J	0.33 U	0.33 U	0.33 U
Acetophenone	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Anthracene	100	100	0.014 J	0.065 J	0.028 J	0.011 J	0.33 U	0.013 J
Atrazine	NS	NS	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
Benzaldehyde	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(a)Anthracene	**1**	1	0.081	0.32	0.17	0.074	0.033 U	0.091
Benzo(a)Pyrene	**1**	1	0.074	0.32	0.16	0.08	0.033 U	0.096
Benzo(b)Fluoranthene	**1**	1	0.097	0.41	0.21	0.11	0.033 U	0.13
Benzo(g,h,i)Perylene	100	100	0.06 J	0.2 J	0.12 J	0.059 J	0.33 U	0.067 J
Benzo(k)Fluoranthene	**0.8**	3.9	0.045	0.15	0.082	0.04	0.033 U	0.044
Benzyl Butyl Phthalate	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Biphenyl (Diphenyl)	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.35 U	0.046 J	0.33 U	0.33 U	0.33 U	0.33 U
Caprolactam	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbazole	NS	NS	0.35 U	0.026 J	0.33 U	0.33 U	0.33 U	0.33 U
Chrysene	**1**	3.9	0.079 J	0.34 J	0.18 J	0.076 J	0.33 U	0.099 J
Dibenz(a,h)Anthracene	0.33	0.33	0.035 U	0.045	0.033	0.015 J	0.033 U	0.017 J
Dibenzofuran	7	59	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Diethyl Phthalate	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Dimethyl Phthalate	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Di-N-Butyl Phthalate	NS	NS	0.35 U	0.013 J	0.33 U	0.33 U	0.33 U	0.33 U
Di-N-Octylphthalate	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Fluoranthene	100	100	0.14 J	0.61	0.23 J	0.11 J	0.33 U	0.15 J
Fluorene	30	100	0.35 U	0.017 J	0.33 U	0.33 U	0.33 U	0.33 U
Hexachlorobenzene	0.33	1.2	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
Hexachlorobutadiene	NS	NS	0.072 U	0.072 U	0.067 U	0.067 U	0.067 U	0.067 U
Hexachlorocyclopentadiene	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexachloroethane	NS	NS	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.053	0.19	0.11	0.055	0.033 U	0.064
Isophorone	NS	NS	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
Naphthalene	12	100	0.35 U	0.009 J	0.33 U	0.33 U	0.33 U	0.33 U
Nitrobenzene	NS	NS	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
N-Nitrosodi-N-Propylamine	NS	NS	0.035 U	0.035 U	0.033 U	0.033 U	0.033 U	0.033 U
N-Nitrosodiphenylamine	NS	NS	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Pentachlorophenol	0.8	6.7	0.29 U	0.29 U	0.27 U	0.27 U	0.27 U	0.27 U
Phenanthrene	100	100	0.068 J	0.32 J	0.11 J	0.052 J	0.33 U	0.065 J
Phenol	0.33	100	0.35 U	0.35 U	0.33 U	0.33 U	0.33 U	0.33 U
Pyrene	100	100	0.13 J	0.6	0.27 J	0.11 J	0.33 U	0.14 J

Table 4
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-09_8-10_20241212	SB-09_10-12_20241212	SB-10_0-2_20241212	SB-10_2-4_20241212	SB-10_8-10_20241212	SB-11_0-2_20241212
		Laboratory Sample ID	460-317182-2	460-317182-3	460-317182-4	460-317182-5	460-317182-6	460-317182-7
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2,4-Dinitrophenol	NS	NS	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2,4-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.067 U	0.068 U	0.067 U	0.067 U
2,6-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.067 U	0.068 U	0.067 U	0.067 U
2-Chloronaphthalene	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Chlorophenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylnaphthalene	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Nitroaniline	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
2-Nitrophenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
3-Nitroaniline	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chloroaniline	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Nitroaniline	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Nitrophenol	NS	NS	0.67 U	0.67 U	0.67 U	0.68 U	0.67 U	0.67 U
Acenaphthene	20	100	0.33 U	0.33 U	0.0097 J	0.0097 J	0.33 U	0.017 J
Acenaphthylene	100	100	0.33 U	0.33 U	0.012 J	0.051 J	0.33 U	0.33 U
Acetophenone	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Anthracene	100	100	0.33 U	0.33 U	0.034 J	0.086 J	0.33 U	0.028 J
Atrazine	NS	NS	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Benzaldehyde	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Benzo(a)Anthracene	**1**	1	0.033 U	0.033 U	0.19	0.61	0.033 U	0.075
Benzo(a)Pyrene	**1**	1	0.033 U	0.033 U	0.21	0.6	0.033 U	0.066
Benzo(b)Fluoranthene	**1**	1	0.033 U	0.033 U	0.25	0.67	0.033 U	0.092
Benzo(g,h,i)Perylene	100	100	0.33 U	0.33 U	0.12 J	0.39	0.33 U	0.039 J
Benzo(k)Fluoranthene	**0.8**	3.9	0.033 U	0.033 U	0.098	0.26	0.033 U	0.027 J
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Caprolactam	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbazole	NS	NS	0.33 U	0.33 U	0.014 J	0.014 J	0.33 U	0.013 J
Chrysene	**1**	3.9	0.33 U	0.33 U	0.2 J	0.61	0.33 U	0.087 J
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.033 U	0.032 J	0.097	0.033 U	0.033 U
Dibenzofuran	7	59	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Diethyl Phthalate	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dimethyl Phthalate	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Di-N-Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.024 J	0.33 U	0.33 U	0.33 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Fluoranthene	100	100	0.33 U	0.33 U	0.34	1	0.33 U	0.16 J
Fluorene	30	100	0.33 U	0.33 U	0.33 U	0.01 J	0.33 U	0.01 J
Hexachlorobenzene	0.33	1.2	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
Hexachlorobutadiene	NS	NS	0.067 U	0.067 U	0.067 U	0.068 U	0.067 U	0.067 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Hexachloroethane	NS	NS	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.033 U	0.033 U	0.12	0.36	0.033 U	0.036
Isophorone	NS	NS	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Naphthalene	12	100	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Nitrobenzene	NS	NS	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pentachlorophenol	0.8	6.7	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Phenanthrene	100	100	0.33 U	0.33 U	0.17 J	0.29 J	0.33 U	0.11 J
Phenol	0.33	100	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Pyrene	100	100	0.33 U	0.33 U	0.34	1.2	0.33 U	0.14 J

Table 4
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-11_2-4_20241212	SB-11_4-6_20241212	SB-12_0-2_20241211	SB-12_8-10_20241211	SB-12_10-12_20241211	SB-13_0-2_20241211
		Laboratory Sample ID	460-317182-8	460-317182-9	460-317091-3	460-317091-4	460-317091-5	460-317091-10
		Date Sampled	12/12/2024	12/12/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.15 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2,4-Dinitrophenol	NS	NS	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.3 U
2,4-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.07 U	0.068 U	0.069 U	0.076 U
2,6-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.07 U	0.068 U	0.069 U	0.076 U
2-Chloronaphthalene	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2-Chlorophenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2-Methylnaphthalene	NS	NS	0.034 J	0.33 U	0.35 U	0.33 U	0.34 U	0.059 J
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2-Nitroaniline	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
2-Nitrophenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.15 U
3-Nitroaniline	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.3 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Chloroaniline	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Nitroaniline	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
4-Nitrophenol	NS	NS	0.67 U	0.67 U	0.7 U	0.68 U	0.69 U	0.76 U
Acenaphthene	20	100	0.29 J	0.33 U	0.35 U	0.33 U	0.34 U	0.26 J
Acenaphthylene	100	100	0.021 J	0.33 U	0.01 J	0.33 U	0.34 U	0.11 J
Acetophenone	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Anthracene	100	100	0.35	0.33 U	0.019 J	0.33 U	0.34 U	0.9
Atrazine	NS	NS	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.15 U
Benzaldehyde	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Benzo(a)Anthracene	**1**	1	0.87	0.033 U	0.12	0.033 U	0.034 U	**2.5**
Benzo(a)Pyrene	**1**	1	0.84	0.033 U	0.13	0.033 U	0.034 U	**2.2**
Benzo(b)Fluoranthene	**1**	1	**1.1**	0.033 U	0.16	0.033 U	0.034 U	**2.9**
Benzo(g,h,i)Perylene	100	100	0.42	0.33 U	0.077 J	0.33 U	0.34 U	1.2
Benzo(k)Fluoranthene	**0.8**	3.9	0.42	0.033 U	0.06	0.033 U	0.034 U	**1.1**
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.021 J
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.05 J	0.33 U	0.023 J	0.33 U	0.34 U	0.05 J
Caprolactam	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Carbazole	NS	NS	0.15 J	0.33 U	0.35 U	0.33 U	0.34 U	0.37 J
Chrysene	**1**	3.9	0.86	0.33 U	0.13 J	0.33 U	0.34 U	**2.4**
Dibenz(a,h)Anthracene	0.33	0.33	0.11	0.033 U	0.018 J	0.033 U	0.034 U	0.31
Dibenzofuran	7	59	0.094 J	0.33 U	0.35 U	0.33 U	0.34 U	0.15 J
Diethyl Phthalate	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Dimethyl Phthalate	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Di-N-Butyl Phthalate	NS	NS	0.017 J	0.33 U	0.35 U	0.038 J	0.013 J	0.046 J
Di-N-Octylphthalate	NS	NS	0.33 U	0.33 U	0.35 U	0.6	0.19 J	0.38 U
Fluoranthene	100	100	2	0.33 U	0.22 J	0.33 U	0.34 U	5.5
Fluorene	30	100	0.17 J	0.33 U	0.35 U	0.33 U	0.34 U	0.23 J
Hexachlorobenzene	0.33	1.2	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
Hexachlorobutadiene	NS	NS	0.067 U	0.067 U	0.07 U	0.068 U	0.069 U	0.076 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Hexachloroethane	NS	NS	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.41	0.033 U	0.077	0.033 U	0.034 U	**1.2**
Isophorone	NS	NS	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.15 U
Naphthalene	12	100	0.053 J	0.33 U	0.35 U	0.33 U	0.34 U	0.074 J
Nitrobenzene	NS	NS	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.033 U	0.035 U	0.033 U	0.034 U	0.038 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Pentachlorophenol	0.8	6.7	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.3 U
Phenanthrene	100	100	1.6	0.33 U	0.1 J	0.33 U	0.017 J	4.3
Phenol	0.33	100	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U	0.38 U
Pyrene	100	100	1.7	0.33 U	0.21 J	0.33 U	0.013 J	4.7

Table 4
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	SB-13_2-4_20241211	SB-14_0-2_20241211	SB-14_2-4_20241211	SB-15_0-2_20241211	SB-15_2-4_20241211
		Laboratory Sample ID	460-317091-11	460-317091-8	460-317091-9	460-317091-6	460-317091-7
		Date Sampled	12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2,4,5-Trichlorophenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2,4,6-Trichlorophenol	NS	NS	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U
2,4-Dichlorophenol	NS	NS	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U
2,4-Dimethylphenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2,4-Dinitrophenol	NS	NS	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
2,4-Dinitrotoluene	NS	NS	0.074 U	0.074 U	0.072 U	0.071 U	0.069 U
2,6-Dinitrotoluene	NS	NS	0.074 U	0.074 U	0.072 U	0.071 U	0.069 U
2-Chloronaphthalene	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2-Chlorophenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2-Methylnaphthalene	NS	NS	0.36 U	0.084 J	0.094 J	0.35 U	0.028 J
2-Methylphenol (O-Cresol)	0.33	100	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2-Nitroaniline	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
2-Nitrophenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
3- And 4- Methylphenol (Total)	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
3,3'-Dichlorobenzidine	NS	NS	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U
3-Nitroaniline	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
4-Bromophenyl Phenyl Ether	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Chloro-3-Methylphenol	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Chloroaniline	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Methylphenol (P-Cresol)	0.33	100	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Nitroaniline	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
4-Nitrophenol	NS	NS	0.74 U	0.74 U	0.72 U	0.71 U	0.69 U
Acenaphthene	20	100	0.36 U	0.21 J	0.32 J	0.044 J	0.24 J
Acenaphthylene	100	100	0.36 U	0.18 J	0.27 J	0.023 J	0.13 J
Acetophenone	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Anthracene	100	100	0.02 J	0.93	1	0.089 J	0.47
Atrazine	NS	NS	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U
Benzaldehyde	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Benzo(a)Anthracene	**1**	1	0.06	**1.9**	**2.8**	0.42	**1.7**
Benzo(a)Pyrene	**1**	1	0.044	**1.6**	**2.7**	0.44	**1.8**
Benzo(b)Fluoranthene	**1**	1	0.055	**2.2**	**3.8**	0.58	**2.5**
Benzo(g,h,i)Perylene	100	100	0.031 J	0.69	1.3	0.22 J	0.96
Benzo(k)Fluoranthene	**0.8**	3.9	0.025 J	**0.82**	**1.4**	0.22	**0.94**
Benzyl Butyl Phthalate	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Biphenyl (Diphenyl)	NS	NS	0.36 U	0.026 J	0.028 J	0.35 U	0.34 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36 U	0.8	0.24 J	0.35 U	0.34 U
Caprolactam	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Carbazole	NS	NS	0.36 U	0.29 J	0.43	0.034 J	0.23 J
Chrysene	**1**	3.9	0.053 J	**1.8**	**2.8**	0.41	**1.7**
Dibenz(a,h)Anthracene	0.33	0.33	0.036 U	0.19	0.32	0.051	0.23
Dibenzofuran	7	59	0.36 U	0.23 J	0.21 J	0.35 U	0.078 J
Diethyl Phthalate	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Dimethyl Phthalate	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Di-N-Butyl Phthalate	NS	NS	0.36 U	0.071 J	0.032 J	0.35 U	0.036 J
Di-N-Octylphthalate	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Fluoranthene	100	100	0.11 J	4.3	5.9	0.77	3.5
Fluorene	30	100	0.36 U	0.28 J	0.31 J	0.025 J	0.16 J
Hexachlorobenzene	0.33	1.2	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
Hexachlorobutadiene	NS	NS	0.074 U	0.074 U	0.072 U	0.071 U	0.069 U
Hexachlorocyclopentadiene	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Hexachloroethane	NS	NS	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.032 J	**0.77**	**1.4**	0.23	**1.1**
Isophorone	NS	NS	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U
Naphthalene	12	100	0.36 U	0.069 J	0.12 J	0.0085 J	0.067 J
Nitrobenzene	NS	NS	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
N-Nitrosodi-N-Propylamine	NS	NS	0.036 U	0.036 U	0.036 U	0.035 U	0.034 U
N-Nitrosodiphenylamine	NS	NS	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Pentachlorophenol	0.8	6.7	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U
Phenanthrene	100	100	0.09 J	4.1	4.6	0.38	2
Phenol	0.33	100	0.36 U	0.36 U	0.36 U	0.35 U	0.34 U
Pyrene	100	100	0.11 J	3.6	5.1	0.7	2.9

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-04_2-4_20241211	SB-08_0-2_20241213	SB-08_2-4_20241213	SB-08_9-11_20241213
		Laboratory Sample ID	460-317091-1	460-317091-2	460-317270-1	460-317270-2	460-317270-3
		Date Sampled	12/11/2024	12/11/2024	12/13/2024	12/13/2024	12/13/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	5,950	5,770	8,140	2,730
Antimony	NS	NS	0.93 U	0.81 J	0.9 U	0.38 J	0.92 U
Arsenic	13	16	2.4	4.5	2.3	12.7	0.99
Barium	350	400	40.5	117	55.4	51.8	25.1
Beryllium	7.2	72	0.25 J	0.31 J	0.27 J	0.35 J	0.12 J
Cadmium	2.5	4.3	0.93 U	0.55 J	0.33 J	0.26 J	0.92 U
Calcium	NS	NS	6,550	4,010	24,400	2,100	1,380
Chromium, Total	NS	NS	12.1	16.2	10.7	14.4	3.1
Cobalt	NS	NS	4.7	5.7	3.9	5.6	0.75 J
Copper	**50**	270	18.2	**50.5**	23.4	**62.3**	5.3
Iron	NS	NS	10,800	17,100	9,120	15,700	11,100
Lead	**63**	400	57.4	**237**	44.3	62.5	1.7
Magnesium	NS	NS	3,950	3,410	5,300	2,370	422
Manganese	1,600	2,000	203	299	194	280	263
Mercury	**0.18**	0.81	0.062	0.084	0.043	0.064	0.016 U
Nickel	30	310	10.9	16.9	9.8	10.7	1.7 J
Potassium	NS	NS	968	741	800	636	896
Selenium	3.9	180	1.2 U	0.27 J	0.14 J	0.33 J	1.2 U
Silver	2	180	0.37 U	0.13 J	0.36 U	0.23 J	0.37 U
Sodium	NS	NS	88.9 J	90.8 J	192	65.9 J	256
Thallium	NS	NS	0.073 J	0.091 J	0.073 J	0.17 J	0.044 J
Vanadium	NS	NS	20.5	31.6	16	21.9	2.5
Zinc	**109**	10,000	50	**173**	63.5	48.5	44

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-09_0-2_20241212	SB-09_8-10_20241212	SB-09_10-12_20241212	SB-10_0-2_20241212
		Laboratory Sample ID	460-317091-1	460-317182-1	460-317182-2	460-317182-3	460-317182-4
		Date Sampled	12/11/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	6,190	3,520	1,980	5,680
Antimony	NS	NS	0.93 U	0.83 U	0.89 U	0.88 U	0.17 J
Arsenic	13	16	2.4	3.4	0.82 J	0.36 J	2.2
Barium	350	400	40.5	38.7	23.8	12.2	53.9
Beryllium	7.2	72	0.25 J	0.22 J	0.19 J	0.12 J	0.26 J
Cadmium	2.5	4.3	0.93 U	0.12 J	0.89 U	0.88 U	0.2 J
Calcium	NS	NS	6,550	20,300	783	18,800	5,860
Chromium, Total	NS	NS	12.1	11.4	6.9	4	14.6
Cobalt	NS	NS	4.7	5.5	3.2	1.7 J	4.9
Copper	**50**	270	18.2	18.2	12.3	4.3	23.6
Iron	NS	NS	10,800	11,700	7,520	3,700	11,400
Lead	**63**	400	57.4	44.7	4.9	1.2	**379**
Magnesium	NS	NS	3,950	4,060	1,720	9,170	5,110
Manganese	1,600	2,000	203	178	184	129	255
Mercury	**0.18**	0.81	0.062	0.059	0.015 U	0.016 U	0.067
Nickel	30	310	10.9	14.7	7.2	3.5	12.9
Potassium	NS	NS	968	853	549	316	1,090
Selenium	3.9	180	1.2 U	0.11 J	1.1 U	1.1 U	0.2 J
Silver	2	180	0.37 U	0.33 U	0.36 U	0.35 U	0.39 U
Sodium	NS	NS	88.9 J	521	234	152	371
Thallium	NS	NS	0.073 J	0.059 J	0.039 J	0.35 U	0.086 J
Vanadium	NS	NS	20.5	15.3	8.5	5	19.5
Zinc	**109**	10,000	50	43.8	16.6	10	62.8

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-10_2-4_20241212	SB-10_8-10_20241212	SB-11_0-2_20241212	SB-11_2-4_20241212
		Laboratory Sample ID	460-317091-1	460-317182-5	460-317182-6	460-317182-7	460-317182-8
		Date Sampled	12/11/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	3,470	7,110	7,140	7,800
Antimony	NS	NS	0.93 U	0.9 U	0.89 U	0.9 U	0.93 U
Arsenic	13	16	2.4	0.95	1.9	1.8	10
Barium	350	400	40.5	31.4	41	30.6	62.9
Beryllium	7.2	72	0.25 J	0.15 J	0.31 J	0.24 J	0.33 J
Cadmium	2.5	4.3	0.93 U	0.9 U	0.89 U	0.9 U	0.33 J
Calcium	NS	NS	6,550	1,240	12,900	10,000	2,070
Chromium, Total	NS	NS	12.1	9.7	25	12.2	24.5
Cobalt	NS	NS	4.7	3.1	6.6	6.1	8
Copper	**50**	270	18.2	13.4	45.5	16.6	**52.8**
Iron	NS	NS	10,800	6,230	18,000	11,300	15,300
Lead	**63**	400	57.4	23.9	3.4	10.5	**94.5**
Magnesium	NS	NS	3,950	1,820	6,260	3,730	3,730
Manganese	1,600	2,000	203	155	309	213	353
Mercury	**0.18**	0.81	0.062	0.049	0.016 U	0.054	0.1
Nickel	30	310	10.9	7.9	15.2	15.4	19.8
Potassium	NS	NS	968	585	771	810	1,140
Selenium	3.9	180	1.2 U	1.1 U	1.1 U	1.1 U	0.2 J
Silver	2	180	0.37 U	0.36 U	0.36 U	0.36 U	0.089 J
Sodium	NS	NS	88.9 J	249	862	308	289
Thallium	NS	NS	0.073 J	0.048 J	0.068 J	0.063 J	0.12 J
Vanadium	NS	NS	20.5	10.8	44.5	25.4	32
Zinc	**109**	10,000	50	39.3	30.4	27.1	**136**

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-11_4-6_20241212	SB-12_0-2_20241211	SB-12_8-10_20241211	SB-12_10-12_20241211
		Laboratory Sample ID	460-317091-1	460-317182-9	460-317091-3	460-317091-4	460-317091-5
		Date Sampled	12/11/2024	12/12/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	4,200	6,270	4,420	3,880
Antimony	NS	NS	0.93 U	0.85 U	1 U	0.97 U	0.88 U
Arsenic	13	16	2.4	0.88	3.3	4.2	0.81 J
Barium	350	400	40.5	35.3	68.1	29.8	24.9
Beryllium	7.2	72	0.25 J	0.17 J	0.28 J	0.39	0.15 J
Cadmium	2.5	4.3	0.93 U	0.85 U	0.2 J	0.12 J	0.88 U
Calcium	NS	NS	6,550	1,530	8,180	6,330	7,100
Chromium, Total	NS	NS	12.1	9.7	12.8	8.7	8.3
Cobalt	NS	NS	4.7	3.8	4.1	4	3.6
Copper	**50**	270	18.2	16.4	20.4	13.1	17.4
Iron	NS	NS	10,800	8,180	9,960	8,470	7,990
Lead	**63**	400	57.4	3	**109**	4.3	4.6
Magnesium	NS	NS	3,950	2,290	4,210	4,930	5,350
Manganese	1,600	2,000	203	224	177	219	164
Mercury	**0.18**	0.81	0.062	0.016 U	0.024	0.016 U	0.025
Nickel	30	310	10.9	9.1	11	7.5	7.4
Potassium	NS	NS	968	578	716	1,100	1,010
Selenium	3.9	180	1.2 U	1.1 U	0.24 J	0.16 J	1.1 U
Silver	2	180	0.37 U	0.34 U	0.4 U	0.39 U	0.35 U
Sodium	NS	NS	88.9 J	188	149	181	166
Thallium	NS	NS	0.073 J	0.053 J	0.077 J	0.075 J	0.061 J
Vanadium	NS	NS	20.5	12.9	21.7	12	14.2
Zinc	**109**	10,000	50	17	74.3	29.8	21.6

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-13_0-2_20241211	SB-13_2-4_20241211	SB-14_0-2_20241211	SB-14_2-4_20241211
		Laboratory Sample ID	460-317091-1	460-317091-10	460-317091-11	460-317091-8	460-317091-9
		Date Sampled	12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	6,520	8,030	4,700	5,890
Antimony	NS	NS	0.93 U	0.16 J	0.89 U	0.91 U	0.19 J
Arsenic	13	16	2.4	7.2	2.7	3.5	3.5
Barium	350	400	40.5	47.9	26.2	56	57.8
Beryllium	7.2	72	0.25 J	0.28 J	0.27 J	0.22 J	0.28 J
Cadmium	2.5	4.3	0.93 U	0.15 J	0.89 U	0.31 J	0.33 J
Calcium	NS	NS	6,550	15,400	889	4,600	5,860
Chromium, Total	NS	NS	12.1	10.7	14.9	15.9	15.1
Cobalt	NS	NS	4.7	4.2	4.9	4.6	5.8
Copper	**50**	270	18.2	30.6	15.4	25.5	41.2
Iron	NS	NS	10,800	12,000	11,300	9,250	10,900
Lead	**63**	400	57.4	41.8	6.2	**72**	**131**
Magnesium	NS	NS	3,950	4,760	2,280	4,030	3,870
Manganese	1,600	2,000	203	169	210	443	270
Mercury	**0.18**	0.81	0.062	**0.27**	0.018 U	0.079	0.11
Nickel	30	310	10.9	10.3	11.3	11.4	12.9
Potassium	NS	NS	968	580	875	746	878
Selenium	3.9	180	1.2 U	0.2 J	0.12 J	0.16 J	0.2 J
Silver	2	180	0.37 U	0.091 J	0.36 U	0.084 J	0.3 J
Sodium	NS	NS	88.9 J	67.2 J	81 J	103	151
Thallium	NS	NS	0.073 J	0.081 J	0.087 J	0.13 J	0.095 J
Vanadium	NS	NS	20.5	17.4	17.5	41.4	18.1
Zinc	**109**	10,000	50	50.2	23.8	59.2	87.7

Table 5
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	SB-04_0-2_20241211	SB-15_0-2_20241211	SB-15_2-4_20241211
		Laboratory Sample ID	460-317091-1	460-317091-6	460-317091-7
		Date Sampled	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,570	5,480	5,720
Antimony	NS	NS	0.93 U	0.93 U	0.18 J
Arsenic	13	16	2.4	2.7	3.3
Barium	350	400	40.5	43.5	57.8
Beryllium	7.2	72	0.25 J	0.25 J	0.27 J
Cadmium	2.5	4.3	0.93 U	0.2 J	0.25 J
Calcium	NS	NS	6,550	4,540	3,950
Chromium, Total	NS	NS	12.1	17	13.8
Cobalt	NS	NS	4.7	4.7	4.8
Copper	**50**	270	18.2	21.9	29.1
Iron	NS	NS	10,800	9,580	10,900
Lead	**63**	400	57.4	49.6	**90**
Magnesium	NS	NS	3,950	3,290	3,120
Manganese	1,600	2,000	203	206	239
Mercury	**0.18**	0.81	0.062	0.049	0.043
Nickel	30	310	10.9	12.2	12
Potassium	NS	NS	968	890	871
Selenium	3.9	180	1.2 U	1.2 U	0.17 J
Silver	2	180	0.37 U	0.37 U	0.087 J
Sodium	NS	NS	88.9 J	165	184
Thallium	NS	NS	0.073 J	0.067 J	0.08 J
Vanadium	NS	NS	20.5	16.2	19.5
Zinc	**109**	10,000	50	55	**126**

Table 6
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-04_0-2_20241211	SB-04_2-4_20241211	SB-08_0-2_20241213	SB-08_2-4_20241213	SB-08_9-11_20241213
		Laboratory Sample ID	460-317091-1	460-317091-2	460-317270-1	460-317270-2	460-317270-3
		Date Sampled	12/11/2024	12/11/2024	12/13/2024	12/13/2024	12/13/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1221 (Aroclor 1221)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1232 (Aroclor 1232)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1242 (Aroclor 1242)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1248 (Aroclor 1248)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1254 (Aroclor 1254)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1260 (Aroclor 1260)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1262 (Aroclor 1262)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
PCB-1268 (Aroclor 1268)	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U
Total PCBs	0.1	1	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U

Table 6
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-09_0-2_20241212	SB-09_8-10_20241212	SB-09_10-12_20241212	SB-10_0-2_20241212	SB-10_2-4_20241212
		Laboratory Sample ID	460-317182-1	460-317182-2	460-317182-3	460-317182-4	460-317182-5
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1221 (Aroclor 1221)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1232 (Aroclor 1232)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1242 (Aroclor 1242)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1248 (Aroclor 1248)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1254 (Aroclor 1254)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1260 (Aroclor 1260)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1262 (Aroclor 1262)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1268 (Aroclor 1268)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Total PCBs	0.1	1	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U

Table 6
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-10_8-10_20241212	SB-11_0-2_20241212	SB-11_2-4_20241212	SB-11_4-6_20241212	SB-12_0-2_20241211
		Laboratory Sample ID	460-317182-6	460-317182-7	460-317182-8	460-317182-9	460-317091-3
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1221 (Aroclor 1221)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1232 (Aroclor 1232)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1242 (Aroclor 1242)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1248 (Aroclor 1248)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1254 (Aroclor 1254)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1260 (Aroclor 1260)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1262 (Aroclor 1262)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
PCB-1268 (Aroclor 1268)	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U
Total PCBs	0.1	1	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U

Table 6
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-12_8-10_20241211	SB-12_10-12_20241211	SB-13_0-2_20241211	SB-13_2-4_20241211	SB-14_0-2_20241211
		Laboratory Sample ID	460-317091-4	460-317091-5	460-317091-10	460-317091-11	460-317091-8
		Date Sampled	12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1221 (Aroclor 1221)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1232 (Aroclor 1232)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1242 (Aroclor 1242)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1248 (Aroclor 1248)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1254 (Aroclor 1254)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1260 (Aroclor 1260)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1262 (Aroclor 1262)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
PCB-1268 (Aroclor 1268)	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U
Total PCBs	0.1	1	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U

Table 6
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	SB-14_2-4_20241211	SB-15_0-2_20241211	SB-15_2-4_20241211
		Laboratory Sample ID	460-317091-9	460-317091-6	460-317091-7
		Date Sampled	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1221 (Aroclor 1221)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1232 (Aroclor 1232)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1242 (Aroclor 1242)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1248 (Aroclor 1248)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1254 (Aroclor 1254)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1260 (Aroclor 1260)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1262 (Aroclor 1262)	NS	NS	0.072 U	0.071 U	0.069 U
PCB-1268 (Aroclor 1268)	NS	NS	0.072 U	0.071 U	0.069 U
Total PCBs	0.1	1	0.072 U	0.071 U	0.069 U

Table 7
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	SB-04_0-2_20241211	SB-04_2-4_20241211	SB-08_0-2_20241213	SB-08_2-4_20241213	SB-08_9-11_20241213
		Laboratory Sample ID	460-317091-1	460-317091-2	460-317270-1	460-317270-2	460-317270-3
		Date Sampled	12/11/2024	12/11/2024	12/13/2024	12/13/2024	12/13/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
cis-Chlordane	0.094	4.2	0.0071 U	0.0072 U	0.021	0.0067 U	0.0067 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Endrin Aldehyde	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Endrin Ketone	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Gamma Bhc (Lindane)	0.1	1.3	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Heptachlor Epoxide	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
Methoxychlor	NS	NS	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDD	0.0033	13	0.0071 U	0.0072 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDE	**0.0033**	8.9	0.0071 U	0.0072 U	**0.0036 J**	0.0067 U	0.0067 U
P,P'-DDT	**0.0033**	7.9	0.0071 U	0.0072 U	**0.0084**	0.0067 U	0.0067 U
Toxaphene	NS	NS	0.071 U	0.072 U	0.067 U	0.067 U	0.067 U

Table 7
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	SB-09_0-2_20241212	SB-09_8-10_20241212	SB-09_10-12_20241212	SB-10_0-2_20241212	SB-10_2-4_20241212
		Laboratory Sample ID	460-317182-1	460-317182-2	460-317182-3	460-317182-4	460-317182-5
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
cis-Chlordane	0.094	4.2	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Endrin Aldehyde	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Endrin Ketone	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Heptachlor Epoxide	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Methoxychlor	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDD	0.0033	13	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDE	**0.0033**	8.9	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDT	**0.0033**	7.9	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
Toxaphene	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U

Table 7
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	SB-10_8-10_20241212	SB-11_0-2_20241212	SB-11_2-4_20241212	SB-11_4-6_20241212	SB-12_0-2_20241211
		Laboratory Sample ID	460-317182-6	460-317182-7	460-317182-8	460-317182-9	460-317091-3
		Date Sampled	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U
Alpha Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U
Beta Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
cis-Chlordane	0.094	4.2	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U
Endosulfan Sulfate	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Endrin Aldehyde	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Endrin Ketone	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U
Heptachlor	0.042	2.1	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Heptachlor Epoxide	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Methoxychlor	NS	NS	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
P,P'-DDD	0.0033	13	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
P,P'-DDE	**0.0033**	8.9	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
P,P'-DDT	**0.0033**	7.9	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.007 U
Toxaphene	NS	NS	0.067 U	0.067 U	0.067 U	0.067 U	0.07 U

Table 7
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	SB-12_8-10_20241211	SB-12_10-12_20241211	SB-13_0-2_20241211	SB-13_2-4_20241211	SB-14_0-2_20241211
		Laboratory Sample ID	460-317091-4	460-317091-5	460-317091-10	460-317091-11	460-317091-8
		Date Sampled	12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.0021 U	0.0023 U	0.0022 U	0.0022 U
Alpha Endosulfan	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.0021 U	0.0023 U	0.0022 U	0.0022 U
Beta Endosulfan	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
cis-Chlordane	0.094	4.2	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.0021 U	0.0023 U	0.0022 U	0.0022 U
Dieldrin	0.005	0.2	0.002 U	0.0021 U	0.0023 U	0.0022 U	0.0022 U
Endosulfan Sulfate	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Endrin Aldehyde	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Endrin Ketone	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.0021 U	0.0023 U	0.0022 U	0.0022 U
Heptachlor	0.042	2.1	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Heptachlor Epoxide	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Methoxychlor	NS	NS	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
P,P'-DDD	0.0033	13	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
P,P'-DDE	**0.0033**	8.9	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
P,P'-DDT	**0.0033**	7.9	0.0068 U	0.0069 U	0.0076 U	0.0073 U	0.0074 U
Toxaphene	NS	NS	0.068 U	0.069 U	0.076 U	0.073 U	0.074 U

Table 7
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	SB-14_2-4_20241211	SB-15_0-2_20241211	SB-15_2-4_20241211
		Laboratory Sample ID	460-317091-9	460-317091-6	460-317091-7
		Date Sampled	12/11/2024	12/11/2024	12/11/2024
		Unit	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0072 U	0.0071 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0022 U	0.0021 U	0.0021 U
Alpha Endosulfan	NS	NS	0.0072 U	0.0071 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0022 U	0.0021 U	0.0021 U
Beta Endosulfan	NS	NS	0.0072 U	0.0071 U	0.0069 U
cis-Chlordane	0.094	4.2	0.0072 U	0.0071 U	0.0035 JP
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0022 U	0.0021 U	0.0021 U
Dieldrin	0.005	0.2	0.0022 U	0.0021 U	0.0021 U
Endosulfan Sulfate	NS	NS	0.0072 U	0.0071 U	0.0069 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U
Endrin	0.014	11	0.0072 U	0.0071 U	0.0069 U
Endrin Aldehyde	NS	NS	0.0072 U	0.0071 U	0.0069 U
Endrin Ketone	NS	NS	0.0072 U	0.0071 U	0.0069 U
Gamma Bhc (Lindane)	0.1	1.3	0.0022 U	0.0021 U	0.0021 U
Heptachlor	0.042	2.1	0.0072 U	0.0071 U	0.0069 U
Heptachlor Epoxide	NS	NS	0.0072 U	0.0071 U	0.0069 U
Methoxychlor	NS	NS	0.0072 U	0.0071 U	0.0069 U
P,P'-DDD	0.0033	13	0.0072 U	0.0071 U	0.0069 U
P,P'-DDE	**0.0033**	8.9	0.0072 U	0.0071 U	0.0069 U
P,P'-DDT	**0.0033**	7.9	0.0072 U	0.0071 U	0.0022 J
Toxaphene	NS	NS	0.072 U	0.071 U	0.069 U

Table 8
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

			AKRF Sample ID	SB-08_0-2_20241213
			Laboratory Sample ID	460-317268-1
			Date Sampled	12/13/2024
			Dilution Factor	1
			Unit	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC	Q
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	NS	NS	0.73	U
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	NS	0.73	U
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	NS	0.73	U
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	NS	0.73	U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	NS	4.55	U
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	NS	4.55	U
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	NS	0.91	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.73	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	NS	0.73	U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	NS	0.73	U
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	NS	0.18	U
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	NS	1.82	U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	NS	0.18	U
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	NS	0.18	U
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	1.82	U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	NS	0.18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	0.36	U
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	NS	0.36	UT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	NS	0.36	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	NS	0.36	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.18	U
Perfluorobutanoic acid (PFBA)	NS	NS	0.73	U
Perfluorodecanesulfonic acid (PFDS)	NS	NS	0.18	U
Perfluorodecanoic acid (PFDA)	NS	NS	0.18	U
Perfluorododecanesulfonic acid (PFDoS)	NS	NS	0.18	U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.18	U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.18	U
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.18	U
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	0.18	U
Perfluorohexanoic acid (PFHxA)	NS	NS	0.18	U
Perfluorononanesulfonic acid (PFNS)	NS	NS	0.18	U
Perfluorononanoic acid (PFNA)	NS	NS	0.11	J
Perfluorooctanesulfonamide (PFOSA)	NS	NS	0.18	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	**2.17**	**T**
Perfluorooctanoic acid (PFOA)	0.66	33	0.18	U
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	0.18	U
Perfluoropentanoic acid (PFPeA)	NS	NS	0.36	U
Perfluorotetradecanoic acid (PFTeDA)	NS	NS	0.18	U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.18	U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.18	U

Table 9
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of VOCs

AKRF Sample ID		TW-08_20241213	TW-09_20241212	TW-10_20241212	TB-01_20241211	TB-01_20241213
Laboratory Sample ID		460-317271-1	460-317271-2	460-317271-3	460-317091-12	460-317271-4
Date Sampled		12/13/2024	12/12/2024	12/12/2024	12/11/2024	12/13/2024
Unit		µg/L	µg/L	µg/L	µg/L	µg/L
Dilution Factor		1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	0.35 J	1 U	0.34 J	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	60	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U
Chloroform	7	2.9	3.9	1.7	1 U	1 U
Chloromethane	5	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	3.2	4.7	1 U	1 U
Cis-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U	1 U
Cyclohexane	NS	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	0.48 J	1 U	0.47 J	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U	1 U	1 U	1 U
M,P-Xylenes	5	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	NS	5 U	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U	5 U	5 UT	5 U
Methylcyclohexane	NS	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U
N-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U
N-Propylbenzene	5	1 U	1 U	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	5	1 U	1 U	1 U	1 U	1 U
Sec-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U
T-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	10	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	**5**	**60**	**270**	**310**	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1.5	2.5	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2 U	2 U	2 U	2 U	2 U

Table 10
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of SVOCs

	AKRF Sample ID	TW-08_20241213	TW-09_20241212	TW-10_20241212
	Laboratory Sample ID	460-317271-1	460-317271-2	460-317271-3
	Date Sampled	12/13/2024	12/12/2024	12/12/2024
	Unit	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	10 U
1,4-Dioxane (P-Dioxane)	0.35	0.1 J	0.2 U	0.13 J
2,3,4,6-Tetrachlorophenol	NS	10 U	10 U	10 U
2,4,5-Trichlorophenol	NS	10 U	10 U	10 U
2,4,6-Trichlorophenol	NS	10 U	10 U	10 U
2,4-Dichlorophenol	5	10 U	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U	10 U
2,4-Dinitrophenol	10	40 U	40 U	40 U
2,4-Dinitrotoluene	5	10 U	10 U	10 U
2,6-Dinitrotoluene	5	2 U	2 U	2 U
2-Chloronaphthalene	10	10 U	10 U	10 U
2-Chlorophenol	NS	10 U	10 U	10 U
2-Methylnaphthalene	NS	10 U	10 U	10 U
2-Methylphenol (O-Cresol)	NS	10 U	10 U	10 U
2-Nitroaniline	5	10 U	10 U	10 U
2-Nitrophenol	NS	10 U	10 U	10 U
3- And 4- Methylphenol (Total)	NS	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	10 U	10 U	10 U
3-Nitroaniline	5	10 U	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	20 U	20 U	20 U
4-Bromophenyl Phenyl Ether	NS	10 U	10 U	10 U
4-Chloro-3-Methylphenol	NS	10 U	10 U	10 U
4-Chloroaniline	5	10 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	10 U	10 U	10 U
4-Methylphenol (P-Cresol)	NS	10 U	10 U	10 U
4-Nitroaniline	5	10 U	10 U	10 U
4-Nitrophenol	NS	20 U	20 U	20 U
Acenaphthene	20	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U
Acetophenone	NS	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U
Atrazine	7.5	2 U	2 U	2 U
Benzaldehyde	NS	10 U	10 U	10 U
Benzo(a)Anthracene	0.002	1 U	1 U	1 U
Benzo(a)Pyrene	ND	1 U	1 U	1 U
Benzo(b)Fluoranthene	0.002	2 U	2 U	2 U
Benzo(g,h,i)Perylene	NS	10 U	10 U	10 U
Benzo(k)Fluoranthene	0.002	1 U	1 U	1 U
Benzyl Butyl Phthalate	50	10 U	10 U	10 U
Biphenyl (Diphenyl)	5	10 U	10 U	10 U
Bis(2-Chloroethoxy) Methane	5	10 U	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1 U	1 U	1 U
Bis(2-Chloroisopropyl) Ether	5	10 U	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	5	2 U	2 U	2 U
Caprolactam	NS	18	21	16
Carbazole	NS	10 U	10 U	10 U
Chrysene	0.002	2 U	2 U	2 U
Dibenz(a,h)Anthracene	NS	1 U	1 U	1 U
Dibenzofuran	NS	10 U	10 U	10 U
Diethyl Phthalate	50	10 U	10 U	10 U
Dimethyl Phthalate	50	10 U	10 U	10 U
Di-N-Butyl Phthalate	50	8.9 J	6.5 J	4.4 J
Di-N-Octylphthalate	50	10 U	10 U	10 U
Fluoranthene	50	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	1 U
Hexachlorobutadiene	0.5	1 U	1 U	1 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U
Hexachloroethane	5	2 U	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.002	2 U	2 U	2 U
Isophorone	50	10 U	10 U	10 U
Naphthalene	10	2 U	2 U	2 U
Nitrobenzene	0.4	1 U	1 U	1 U
N-Nitrosodi-N-Propylamine	NS	1 U	1 U	1 U
N-Nitrosodiphenylamine	50	10 U	10 U	10 U
Pentachlorophenol	NS	20 U	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U
Phenol	1	10 U	10 U	10 U
Pyrene	50	10 U	10 U	10 U

Table 11
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of Total Metals

AKRF Sample ID		TW-08_20241213	TW-09_20241212	TW-10_20241212
Laboratory Sample ID		460-317271-1	460-317271-2	460-317271-3
Date Sampled		12/13/2024	12/12/2024	12/12/2024
Unit		µg/L	µg/L	µg/L
Dilution Factor		1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q
Aluminum	NS	98,100	311,000	134,000
Antimony	3	0.69 J	2.2 J	0.71 J
Arsenic	**25**	23	**73.3**	**28.6**
Barium	**1,000**	**1,620**	**4,580**	**1,700**
Beryllium	**3**	**4.6**	**14**	**6.6**
Cadmium	5	1.9 J	4	2.9
Calcium	NS	532,000	585,000	780,000
Chromium, Total	**50**	**303**	**1,350**	**429**
Cobalt	NS	162	311	175
Copper	**200**	**319**	**1,000**	**419**
Iron	**300**	**185,000**	**667,000**	**292,000**
Lead	**25**	**88.4**	**707**	**113**
Magnesium	**35,000**	**164,000**	**370,000**	**295,000**
Manganese	**300**	**9,530**	**18,400**	**7,990**
Mercury	**0.7**	0.35	**1.1**	0.11 J
Nickel	**100**	**270**	**814**	**303**
Potassium	NS	34,900	111,000	40,300
Selenium	10	2.5	4 J	2.6
Silver	50	2 U	4 U	2 U
Sodium	**20,000**	**82,900**	**122,000**	**123,000**
Thallium	**0.5**	**0.61 J**	**1.6**	**0.75 J**
Vanadium	NS	304	913	427
Zinc	**2,000**	596	**2,040**	826

Table 12
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of Dissolved Metals

AKRF Sample ID		TW-08_20241213	TW-09_20241212	TW-10_20241212
Laboratory Sample ID		460-317271-1	460-317271-2	460-317271-3
Date Sampled		12/13/2024	12/12/2024	12/12/2024
Unit		µg/L	µg/L	µg/L
Dilution Factor		1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q
Aluminum	NS	40 U	29.7 J	40 U
Antimony	3	2 U	2 U	2 U
Arsenic	25	2 U	2 U	2 U
Barium	1,000	57.6	62.9	65.3
Beryllium	3	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U
Calcium	NS	57,900	92,700	47,500
Chromium, Total	50	4 U	4 U	4 U
Cobalt	NS	2.4 J	4.8	1.5 J
Copper	200	4.6	2.6 J	5.1
Iron	300	120 U	69.7 J	120 U
Lead	25	1.2 U	1.2 U	1.2 U
Magnesium	35,000	22,700	33,900	11,000
Manganese	**300**	69	**412**	44.9
Mercury	0.7	0.2 U	0.2 U	0.2 U
Nickel	100	1.7 J	4.8	3.1 J
Potassium	NS	5,100	4,910	4,780
Selenium	10	1.6 J	2.2 J	1.3 J
Silver	50	2 U	2 U	2 U
Sodium	**20,000**	**87,500**	**134,000**	**97,700**
Thallium	0.5	0.8 U	0.8 U	0.8 U
Vanadium	NS	4 U	4 U	4 U
Zinc	2,000	16 U	16 U	11.3 J

Table 13
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of PCBs

AKRF Sample ID		TW-08_20241213	TW-09_20241212	TW-10_20241212
Laboratory Sample ID		460-317271-1	460-317271-2	460-317271-3
Date Sampled		12/13/2024	12/12/2024	12/12/2024
Unit		µg/L	µg/L	µg/L
Dilution Factor		1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	0.4 U	0.4 U	0.4 U
Total PCBs	0.09	0.4 U	0.4 U	0.4 U

Table 14
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Groundwater Analytical Results of Pesticides

AKRF Sample ID		TW-08_20241213	TW-09_20241212	TW-10_20241212
Laboratory Sample ID		460-317271-1	460-317271-2	460-317271-3
Date Sampled		12/13/2024	12/12/2024	12/12/2024
Unit		µg/L	µg/L	µg/L
Dilution Factor		1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q
Aldrin	ND	0.02 U	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	NS	0.02 U	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U
Beta Endosulfan	NS	0.02 U	0.02 U	0.02 U
cis-Chlordane	NS	0.02 U	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U
Dieldrin	0.004	0.02 U	0.02 U	0.02 U
Endosulfan Sulfate	NS	0.02 U	0.02 U	0.02 U
Endosulfans ABS	NS	0 U	0 U	0 U
Endrin	ND	0.02 U	0.02 U	0.02 U
Endrin Aldehyde	5	0.02 U	0.02 U	0.02 U
Endrin Ketone	5	0.02 U	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.05	0.02 U	0.02 U	0.02 U
Heptachlor	0.04	0.02 U	0.02 U	0.02 U
Heptachlor Epoxide	0.03	0.02 U	0.02 U	0.02 U
Methoxychlor	35	0.02 U	0.02 U	0.02 U
P,P'-DDD	0.3	0.02 U	0.02 U	0.02 U
P,P'-DDE	0.2	0.02 U	0.02 U	0.02 U
P,P'-DDT	0.2	0.02 U	0.02 U	0.02 U
Toxaphene	0.06	0.5 U	0.5 U	0.5 U

Table 15
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Soil Vapor Analytical Results of VOCs

AKRF Sample ID	SV-06_20241213		SV-07_20241213		SV-11_20241213	
Laboratory Sample ID	200-76306-1		200-76306-2		200-76306-3	
Date Sampled	12/13/2024		12/13/2024		12/13/2024	
Unit	µg/m^3		µg/m^3		µg/m^3	
Dilution Factor	10		10		10	
Compound	CONC	Q	CONC	Q	CONC	Q
1,3-Butadiene	13		5.6		4.4	U
2,2,4-Trimethylpentane	2.3	J	3.5	J	9.3	U
Acetone	54	J	78	J	120	U
Benzene	5	J	3.7	J	6.4	U
Butane	45		66		12	U
Carbon Disulfide	21		12	J	16	U
Chloroform	9.8	U	9.8	U	3.1	J
Cis-1,2-Dichloroethylene	2	U	2	U	7.9	
Cyclohexane	5.9	J	13		6.9	U
Methyl Ethyl Ketone (2-Butanone)	14	J	18		15	U
N-Heptane	3.6	J	9.4		8.2	U
N-Hexane	11	J	25		18	U
Styrene	8.5	U	8.5	U	3.1	J
Tetrachloroethylene (PCE)	14	U	1.4	J	25	
Toluene	5.5	J	2.6	J	7.5	U
Trichloroethylene (TCE)	2	U	2	U	4.4	

Tables 3-15
31-07 31st St
Queens, NY
Subsurface (Phase II) Investigation
Notes

DEFINITIONS

J	:	The concentration given is an estimated value.
ND	:	The standard is a non-detectable concentration by the approved analytical method.
NS	:	No standard.
P	:	Indicates a pesticide/aroclor target analyte had a percent difference greater than 25% between the two gc columns. The lower of the two results is reported.
T	:	Indicates that a quality control parameter has exceeded laboratory limits.
U	:	The analyte was not detected at the indicated concentration.
mg/kg	:	milligrams per kilogram
ppb	:	parts per billion
µg/L	:	micrograms per liter
µg/m^3	:	micrograms per cubic meter of air

STANDARDS

Part 375 Soil Cleanup Objectives	:	Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

Note: Endosulfans ABS represents the detected sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray shading.

NYSDEC Class GA AWQSGVs	:	New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

Exceedances of NYSDEC Class GA AWQSGVs are highlighted in bold font.

APPENDIX A
PREVIOUS REPORTS

APPENDIX B
GEOPHYSICAL REPORT

Coastal Environmental Solutions, Inc.

GEOPHYSICAL INVESTIGATION REPORT

31-07 31st Street, Astoria, NY
Date of Investigation: 12/11/2024

Prepared for:

AKRF, Inc.
440 Park Avenue South
New York, New York 10016

Prepared By:

Dennis Berthold
Director of Geophysical Operations
Coastal Environmental Solutions, Inc.
PO Box 342
Medford, New York 11763

1.0 INTRODUCTION

On 12/11/2024, Coastal Environmental Solutions, Inc (Coastal) personnel performed a limited Geophysical Investigation at the site located at 31-07 31st Street, Astoria, NY. The areas of interest include multiple locations across the asphalt parking lot as indicated by the client. Surface conditions consisted of asphalt.

2.0 SCOPE OF WORK

1. Locate and mark detectable underground utilities and other subsurface anomalies in close proximity to client proposed soil boring locations.

3.0 EQUIPMENT

ImpulseRadar PinPointR Ultra-Wide Band (UWB) Penetrating Radar System

Ground Penetrating RADAR (GPR) is a non-destructive geophysical method that produces a continuous cross-sectional profile of subsurface features in real time. GPR operates by transmitting both high and low frequency electromagnetic wave pulses down into the ground through a transmitter in the antenna. The transmitted electromagnetic waves reflect off materials with contrasting dielectric properties from surrounding medium such as underground storage tanks, utilities, distinct contacts between different earth materials, and other various subsurface objects. The antenna receiver collects the reflected electromagnetic waves which are then interpreted by the operator.

The ImpulseRadar PinPointR UWB GPR utilizes a dual band 400/800 MHz HS antenna mounted to a stroller frame which rolls over the surface. The total depth of penetration achieved with the antenna can be up to 10 feet but widely varies based on site-specific subsurface conditions. Conductive materials in the soil attenuate the GPR signal causing a decrease in effective depth of penetration and clarity.

Vivax-Metrotech vLoc3-Pro Receiver/Transmitter

The vLoc3-Pro Receiver is a hand-operated antenna capable of detecting electromagnetic (EM) fields emitted from a source. The EM antenna can detect pipes and cables in the ground at depths of up to 20 feet using active or passive tracing techniques. Passive tracing is the act of locating an underground utility through the detection of electrical or radio signals travelling along conductive utilities. Active tracing is used in conjunction with the Transmitter that is directly connected to the target utility or to a conductive rodder within a non-conductive line. A signal is sent through the utility at a specific frequency that can be detected by the Receiver. The detectability of a target utility depends on many factors including access to the target utility, grounding, depth of utility, conductivity, and other site-specific factors.

TW-6 Pipe and Cable Locator

The TW-6 Pipe and Cable locator is a handheld magnetometer which utilizes a transmitter-receiver pair attached to opposite ends of a handle and carried approximately 1-2ft from the surface. The magnetometer induces an electromagnetic (EM) field into the ground that is generated by the transmitter. Once the induced EM field passes through a buried metallic object, it generates a

secondary EM field which is detected by the receiver, generating an audible tone. Based on the calibration of the magnetometer, the audible tone reflects the strongest response as the highest pitched sound, trailing off on all sides of the peak. This piece of technology can be used to detect subsurface features such as metallic USTs, large diameter conductive pipes, and buried manholes, especially in areas in which traditional GPR methods cannot be utilized, such as overgrown or uneven surfaces.

4.0 METHODOLOGY

1. A subsurface investigation was performed in close proximity to the client proposed soil boring locations. Active and passive detection methods were utilized with the VLoc3-Pro receiver/transmitter. Coastal personnel direct connected to all accessible and traceable pipes, conduits, valve covers, and any other surface feature throughout the site. A passive scan was performed throughout the site to detect any potential underground utilities that could not be located with active scan.
2. The TW-6 was utilized (if applicable) to sweep any accessible areas for suspected UST locations in 3-to-5-foot spacings for readings that may represent a buried metallic anomaly. Upon detection of a reading, the approximate size and shape of the anomalous area was marked on the surface to be investigated further with GPR.
3. GPR was utilized to further characterize the approximate dimensions, depth, and shape of the anomalies located with the TW-6. The remainder of the areas around suspected detections were scanned with GPR in 3-to-5-foot spacing to locate any anomalous features not previously detected such as non-conductive piping and former excavations.
4. All findings were marked on the surface utilizing the American Public Works Association (APWA) recommended color code, seen below:

WHITE	Proposed Excavation
PINK	Temporary Survey Markings (Approximate UST Locations, Soil Boring Locations)
RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit
BLUE	Water (Domestic and Fire Lines)
PURPLE	Irrigation, Slurry Lines, Reclaimed Water
GREEN	Sewers and Drain Lines

5.0 SUMMARY OF FINDINGS

Subsurface Investigation

Coastal personnel conducted a subsurface investigation on all accessible locations within the areas of concern. The site was first investigated with AKRF and Coastal personnel to identify the limit of the scope of work and identify any surface features identifying utilities. Upon visual inspection of the site, a large portion of the center of the parking lot was occupied by materials and equipment staged by another contractor working in the adjacent roadway. Coastal investigated the site for any surface and subsurface features related to utilities and after a thorough search with GPR and EM antennas, multiple features were detected. Multiple shallow electrical lines were located and

marked leading to the site lighting and parking meters within the lot. Also identified was a series of interconnected storm drains and a partially marked unknown line. Coastal proceeded to clear the proposed boring locations prior to drilling activities.

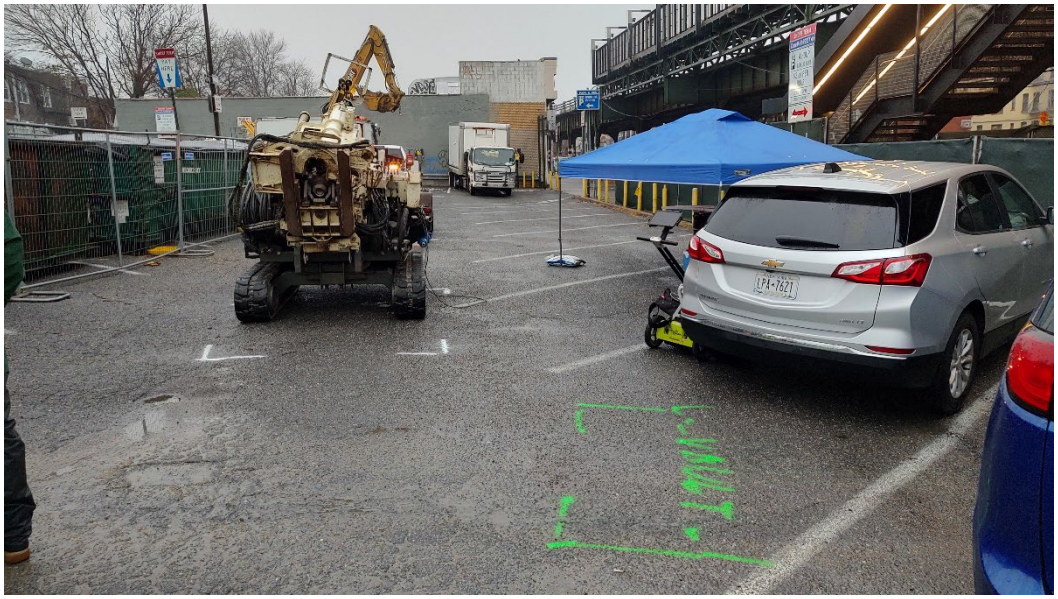
Limitations

The effective depth of GPR penetration was limited to 4.5 feet beneath the asphalt surface. The limiting factor was likely due to soil conductivity attenuating the GPR signal. The GPR and TW-6 is unable to be utilized within close proximity to parked vehicles, metallic fences and exterior walls. The fenced off area in the center of the lot as well as the areas beneath the staged equipment were not able to be fully investigated with GPR, which may have blocked access to additional significant findings.

Disclaimer

The subsurface investigation was performed by Coastal after considering the limits of the scope of work and the time constraint for the investigation. The investigation that is described in this report was undertaken in accordance with current accepted standards and practices of the geophysical survey industry. The results and interpretations that are presented are based on professional judgment and are as accurate as can reasonably be achieved. However, no geophysical equipment can accurately depict all subsurface features due to the geology and environmental conditions of the subsurface. Any intrusive work in proximity to identified anomalies should be carefully considered and cross-referenced with all available site-specific documentation. Coastal is not liable for the use, interpretation, or application of the data and information in this report.

PHOTOS & GPR SCREENSHOTS



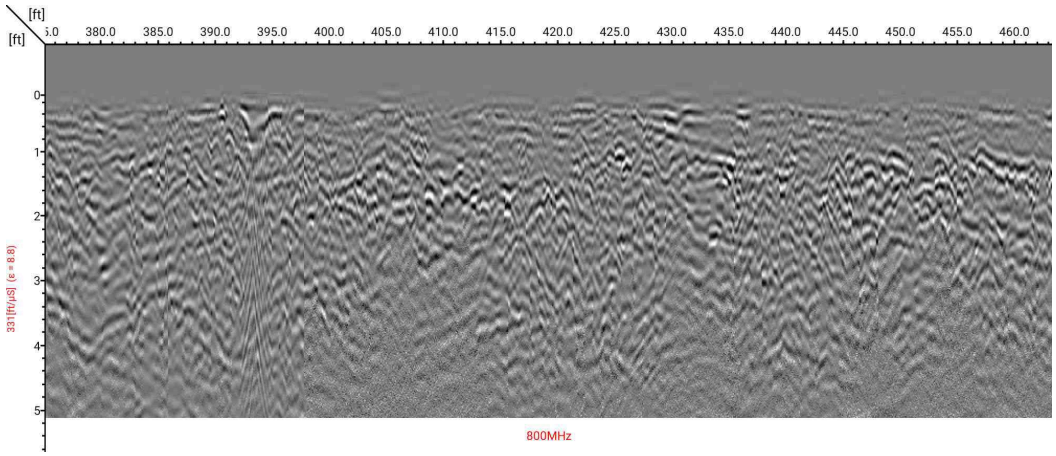
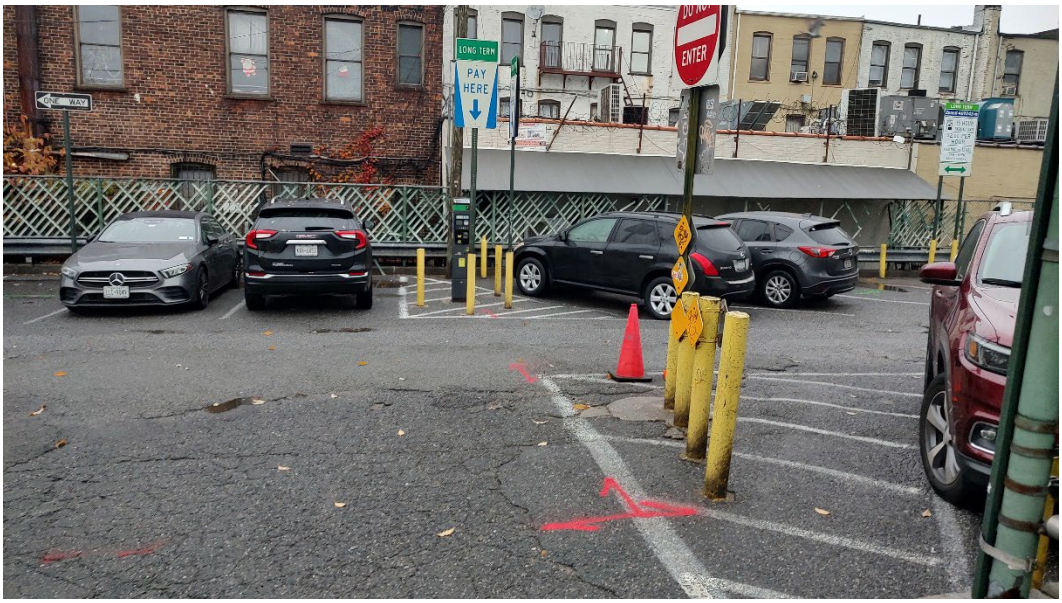


Photo 1 and GPR Screenshot 1 – Photo of the site with a storm vault and related lines leading out of it. Also visible are the fences and staged vehicles by another contractor. All proposed boring locations were cleared and marked as white boxes as seen above. The GPR screenshot shows a detection at approximately 3 feet deep which was determined to be the storm drain lines.



Photos 2 & 3 – Location of the northeastern side of the parking lot containing the storm drain line marked in green and the partial markings of the unknown line marked in pink.





Photos 4 & 5 – Location of the center of the parking lot with the detected electrical lines leading to the parking meters and site lighting, marked in red.



APPENDIX C
SOIL BORING AND TEMPORARY WELL CONSTRUCTION LOGS

Soil Boring Log

31-07 31st St, Queens, NY
AKRF Project Number: 240854

Soil Boring ID: **SB-04**

akrf
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	56 - 61 °F, Rainy
Logged By:	J.Peters, AKRF

Drilling
Start Time: 10:50 **Finish Time:** 11:00
Date: 12/11/2024

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	32	Top 2": ASPHALT.	ND	Dry	ND	ND	SB-04_0-2_20241211
2		Next 30": Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3							SB-04_2-4_20241211
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Boring Log	31-07 31st St, Queens, NY AKRF Project Number: 240854		Soil Boring ID:	SB-11
akrf 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822DT	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 07:40	Finish Time: 07:55
	Driller:	Coastal Environmental Solutions		
	Weather:	~35 °F, Sunny	Date: 12/12/2024	
	Logged By:	J.Peters, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	45	Top 3": ASPHALT.	ND	Dry	ND	ND	SB-11_0-2_20241212
2		Next 32": Brown SAND, little Brick, Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3		Bottom 10": Brown SAND, little fine Gravel	ND	Dry	ND	ND	SB-11_2-4_20241212
4							
5							
6	43	Brown SAND, little fine Gravel	ND	Dry	ND	ND	SB-11_4-6_20241212
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 10 feet below grade.

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Boring Log	31-07 31st St, Queens, NY AKRF Project Number: 240854		Soil Boring ID:	SB-12
akrf 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822DT	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 09:55	Finish Time: 10:10
	Driller:	Coastal Environmental Solutions		
	Weather:	56 - 61 °F, Rainy	Date: 12/11/2024	
	Logged By:	J.Peters, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 3": ASPHALT.	ND	Dry	ND	ND	SB-12_0-2_20241211
2		Bottom 37": Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3							
4							
5							
6	60	Top 50": Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
7		Bottom 10": CONCRETE (Fill).	ND	Dry	ND	ND	
8							
9							SB-12_8-10_20241211
10							
11	42	Top 19": Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	SB-12_10-12_20241211
12		Bottom 23": Light Brown SAND, trace fine Gravel (Native).	ND	Dry	ND	ND	
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Boring Log	31-07 31st St, Queens, NY AKRF Project Number: 240854		Soil Boring ID:	SB-13
akrf 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822DT	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 08:45	Finish Time: 09:10
	Driller:	Coastal Environmental Solutions		
	Weather:	56 - 61 °F, Rainy	Date: 12/11/2024	
	Logged By:	J.Peters, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	35	Top 1": ASPHALT.	ND	Dry	ND	ND	SB-13_0-2_20241211
2		Next 5": Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3		Bottom 29": Brown SANDY SILT, trace fine Gravel (Fill).	ND	Dry	ND	ND	SB-13_2-4_20241211
4							
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19							
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Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Boring Log	31-07 31st St, Queens, NY AKRF Project Number: 240854		Soil Boring ID:	SB-14
akrf 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822DT	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 09:10	Finish Time: 09:35
	Driller:	Coastal Environmental Solutions		
	Weather:	56 - 61 °F, Rainy	Date: 12/11/2024	
	Logged By:	J.Peters, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	33	Top 2": ASPHALT.	ND	Dry	ND	ND	SB-14_0-2_20241211
2		Next 31": Brown SAND, little Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3							SB-14_2-4_20241211
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Soil Boring Log	31-07 31st St, Queens, NY AKRF Project Number: 240854		Soil Boring ID:	SB-15
akrf 440 Park Avenue South, 7th Floor New York, NY 10016	Drilling Method:	Geoprobe 7822DT	Drilling	
	Sampling Method:	5' Macrocore	Start Time: 09:15	Finish Time: 09:25
	Driller:	Coastal Environmental Solutions		
	Weather:	56 - 61 °F, Rainy	Date: 12/11/2024	
	Logged By:	J.Peters, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	38	Top 4": ASPHALT.	ND	Dry	ND	ND	SB-15_0-2_20241211
2		Next 30": Brown to Dark Brown SAND, some Gravel, trace Silt (Fill).	ND	Dry	ND	ND	
3		Bottom 4": CONCRETE (Fill).	ND	Dry	ND	ND	SB-15_2-4_20241211
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.
Groundwater not encountered during soil boring installation.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 1 of 3	TW-08	Soil Boring ID:	SB-08

akrf
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	30 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 08:15 | Finish Time: 09:30

Date: 12/13/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4 5		1" PVC well casing: 0 to 28' below surface grade.	38	Top 2": ASPHALT. Next 36": Brown SAND, some Gravel, trace Silt (Fill).	ND ND	Dry Dry	ND ND	ND ND	SB-08_0-2_20241213 SB-08_2-4_20241213
6 7 8 9 10			29	Top 20": Brown SAND, little Gravel, trace Silt (Fill). Bottom 9": Brown SAND, trace Gravel.	ND ND	Dry Dry	ND ND	ND ND	SB-08_9-11_20241213
11 12 13 14 15			14	Brown SAND, trace Gravel.	ND	Dry	ND	ND	

Notes: ▽ **Groundwater Depth Indicator**

Groundwater measured at 31.4 feet below grade in TW-08.

Groundwater monitoring well installed to 38 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series. Sample SB-08_0-2_20241213 was analyzed for PFAS by EPA Method 1633.

Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 2 of 3	TW-08	Soil Boring ID:	SB-08

akrf
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	30 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 08:15 | Finish Time: 09:30

Date: 12/13/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
16		1" PVC well casing: 0 to 28' below surface grade.	27	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
17									
18									
19									
20									
21			24	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
22									
23									
24									
25									
26			37	Brown SAND, trace Gravel.	ND	Moist @ 28'	ND	ND	
27									
28		1" PVC well screen: 28' to 38' below grade.							
29									
30		Sandpack: 26' to 38' below grade.							

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 31.4 feet below grade in TW-08.

Groundwater monitoring well installed to 38 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series. Sample SB-08_0-2_20241213 was analyzed for PFAS by EPA Method 1633.

Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

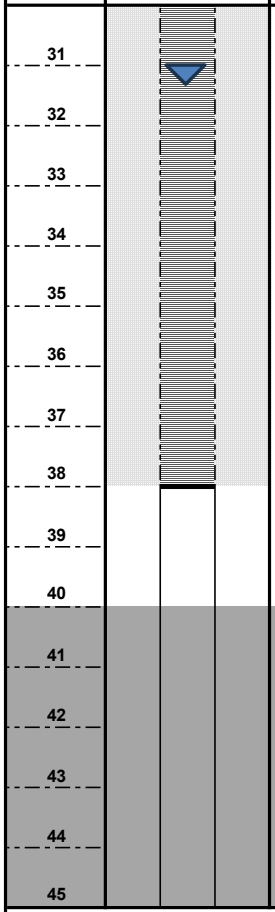
Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 3 of 3	TW-08	Soil Boring ID:	SB-08

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440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	30 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling
Start Time: 08:15 | Finish Time: 09:30
Date: 12/13/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
31–40		Sandpack: 26' to 38' below grade. 1" PVC well screen: 28' to 38' below grade.	5	Brown SAND, trace Gravel.	ND	Moist	ND	ND	
			40	Brown SAND, trace Gravel.	ND	Wet @ 35'	ND	ND	
41–45									

Notes:
Groundwater Depth Indicator
Groundwater measured at 31.4 feet below grade in TW-08.
Groundwater monitoring well installed to 38 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series. Sample SB-08_0-2_20241213 was analyzed for PFAS by EPA Method 1633.
Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.
End of soil boring at 40 feet below surface grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 1 of 3	TW-09	Soil Boring ID:	SB-09

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440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 10:40 | Finish Time: 11:15

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1		1" PVC well casing: 0 to 30' below surface grade.	32	Top 2": ASPHALT. Bottom 30": Brown SAND, little Gravel, trace Silt (Fill).	ND ND	Dry Dry	ND ND	ND ND	SB-09_0-2_20241212
2									
3									
4									
5									
6			37	Brown SAND, little Gravel, trace Silt (Fill).	ND	Dry	ND	ND	SB-09_8-10_20241212
7									
8									
9									
10									
11			32	Brown SAND, trace Gravel.	ND	Dry	ND	ND	SB-09_10-12_20241212
12									
13									
14									
15									

Notes: ▽ **Groundwater Depth Indicator**

Groundwater measured at 32.67 feet below grade in TW-09.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 33 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 2 of 3	TW-09	Soil Boring ID:	SB-09

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440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 10:40 | Finish Time: 11:15

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
16		1" PVC well casing: 0 to 30' below surface grade.	33	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
17									
18									
19									
20									
21			32	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
22									
23									
24									
25									
26			37	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
27									
28									
29		Sandpack: 28' to 40' below grade.							
30									

Notes: ▽ **Groundwater Depth Indicator**

Groundwater measured at 32.67 feet below grade in TW-09.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 33 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 3 of 3	TW-09	Soil Boring ID:	SB-09

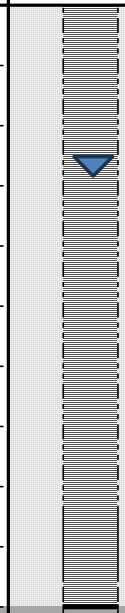
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New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 10:40 | Finish Time: 11:15

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
31–45		1" PVC well screen: 30' to 40' below grade. Sandpack: 28' to 40' below grade.	45	Brown SAND.	ND	Moist @ 31' Wet @ 33'	ND	ND	
			40	Brown SAND.	ND	Wet	ND	ND	

Notes:

Groundwater Depth Indicator

Groundwater measured at 32.67 feet below grade in TW-09.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 33 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 1 of 3	TW-10	Soil Boring ID:	SB-10

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440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	~35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 08:10 | Finish Time: 09:00

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4 5		1" PVC well casing: 0 to 30' below surface grade.	22	Top 4": ASPHALT. Bottom 18": Brown SAND, little Gravel, trace Silt (Fill).	ND ND	Dry Dry	ND ND	ND ND	SB-10_0-2_20241212 SB-10_2-4_20241212
6 7 8 9 10			30	Top 22": Brown SAND, little Gravel, trace Silt (Fill). Bottom 8": Brown SAND, trace Gravel.	ND ND	Dry Dry	ND ND	ND ND	SB-10_8-10_20241212
11 12 13 14 15			30	Brown SAND, trace Gravel.	ND	Dry	ND	ND	

Notes: ▼ **Groundwater Depth Indicator**

Groundwater measured at 35.06 feet below grade in TW-10.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 2 of 3	TW-10	Soil Boring ID:	SB-10

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New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	~35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 08:10 | Finish Time: 09:00

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
16		1" PVC well casing: 0 to 30' below surface grade.	19	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
17									
18									
19									
20									
21			35	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
22									
23									
24									
25									
26			30	Brown SAND, trace Gravel.	ND	Dry	ND	ND	
27									
28									
29		Sandpack: 28' to 40' below grade.							
30									

Notes: ▽ Groundwater Depth Indicator

Groundwater measured at 35.06 feet below grade in TW-10.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

TEMPORARY SOIL BORING AND WELL INSTALLATION LOG	31-07 31st St, Queens, NY AKRF Project Number: 240854	Groundwater Monitoring Well ID: Sheet 3 of 3	TW-10	Soil Boring ID:	SB-10

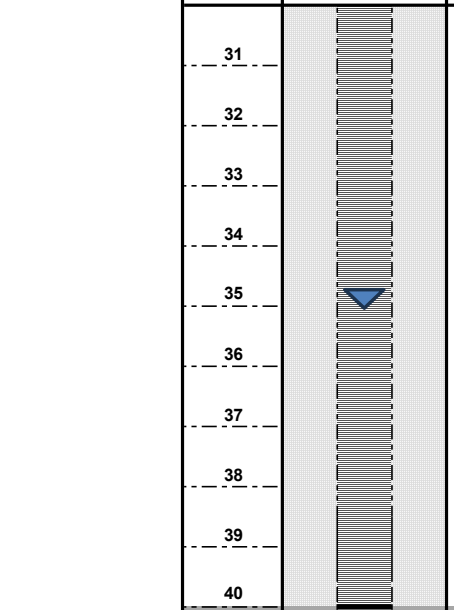
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New York, NY 10016

Drilling Method:	Geoprobe 7822DT
Sampling Method:	5' Macrocore
Driller:	Coastal Environmental Solutions
Weather:	~35 °F, Sunny
Logged by:	J.Peters, AKRF

Drilling

Start Time: 08:10 | Finish Time: 09:00

Date: 12/12/2024

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
31 32 33 34 35 36 37 38 39 40		1" PVC well screen: 30' to 40' below grade. Sandpack: 28' to 40' below grade.	34	Brown SAND, trace Gravel.	ND	Moist @ 34'	ND	ND	
			53	Brown SAND, trace Gravel.	ND	Wet @ 35'	ND	ND	
41 42 43 44 45									

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 35.06 feet below grade in TW-10.

Groundwater monitoring well installed to 40 feet below surface grade.

Soil samples analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, Pesticides by EPA Method 8081, and TAL Metals by EPA Method 6000/7000 series.

Groundwater encountered at approximately 35 feet below surface grade during soil boring advancement.

End of soil boring at 40 feet below surface grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

APPENDIX D
GROUNDWATER SAMPLING LOGS

APPENDIX E
SOIL VAPOR SAMPLING LOGS

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440 Park Avenue South, 7th Floor
New York, NY 10016

Soil Vapor Sample Log

Project Name:	Ikos Senior Living		**Point Installed By:**	Coastal Environmental Solutions	
Project Location:	31-07 31st St, Queens, NY		**Installation Method:**	Geoprobe 7822DT	
Project Number:	240854		**Sampled By:**	S. Schmid, J. Peters	
Client:	Ikos Senior Living LLC		**Date:**	12/13/2024	
			Weather:	30°F, Sunny	
Sample Setup					
Vapor Point Depth:	24	Inches	**Purge Time:**	9.5 Minutes	
Purging Pump:	GilAir		**Purged Vapor PID:**	0.4	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0	%
Sample Identification					
Soil Vapor Point ID:	SV-06		**SUMMA® Canister ID:**	4658	
Flow Controller ID:	3943		**Soil Vapor Sample ID:**	SV-06_20241213	

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	9:21	-29	ND	None
Time Halfway:	10:21	-19	ND	None
Time Stopped:	11:21	-5	ND	None

Notes:	ND = non-detect	ppm = parts per million	L/min = Liters per minute	in/Hg = inches of mercury
	Soil vapor sample SV-06_20241213 collected in a 1-L SUMMA® canister using a 2-hour flow controller.			

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Soil Vapor Sample Log

Project Name:	Ikos Senior Living	**Point Installed By:**	Coastal Environmental Solutions
Project Location:	31-07 31st St, Queens, NY	**Installation Method:**	Geoprobe 7822DT
Project Number:	240854	**Sampled By:**	S. Schmid, J. Peters
Client:	Ikos Senior Living LLC	**Date:**	12/13/2024
		Weather:	30°F, Sunny

Sample Setup

Vapor Point Depth:	24	Inches	**Purge Time:**	9.5 Minutes	
Purging Pump:	GilAir		**Purged Vapor PID:**	0.9	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0	%

Sample Identification

Soil Vapor Point ID:	SV-07	**SUMMA® Canister ID:**	4968
Flow Controller ID:	6549	**Soil Vapor Sample ID:**	SV-07_20241213

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	9:27	-28	ND	None
Time Halfway:	10:27	-20	ND	None
Time Stopped:	11:27	-6	ND	None

Notes:

ND = non-detect ppm = parts per million L/min = Liters per minute in/Hg = inches of mercury

Soil vapor sample SV-07_20241213 collected in a 1-L SUMMA® canister using a 2-hour flow controller.

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New York, NY 10016

Soil Vapor Sample Log

Project Name:	Ikos Senior Living		**Point Installed By:**	Coastal Environmental Solutions	
Project Location:	31-07 31st St, Queens, NY		**Installation Method:**	Geoprobe 7822DT	
Project Number:	240854		**Sampled By:**	S. Schmid, J. Peters	
Client:	Ikos Senior Living LLC		**Date:**	12/13/2024	
			Weather:	30°F, Sunny	
Sample Setup					
Vapor Point Depth:	72	Inches	**Purge Time:**	10 Minutes	
Purging Pump:	GilAir		**Purged Vapor PID:**	1.8	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0	%
Sample Identification					
Soil Vapor Point ID:	SV-11		**SUMMA® Canister ID:**	6805	
Flow Controller ID:	6554		**Soil Vapor Sample ID:**	SV-11_20241213	

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	9:19	-28	ND	None
Time Halfway:	10:20	-15	ND	None
Time Stopped:	11:19	-5	ND	None

Notes:	ND = non-detect	ppm = parts per million	L/min = Liters per minute	in/Hg = inches of mercury
	Soil vapor sample SV-11_20241213 collected in a 1-L SUMMA® canister using a 2-hour flow controller.			

APPENDIX F
LABORATORY DATA DELIVERABLES