

July 28, 2023

Mr. Hiralkumar Patel
Assistant Engineer
Spills Response Program, Region 2
Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Investigation Summary Report, Spill #2300395 and #2300786
Halletts Point Buildings 40 and 50
27-02 and 27-50 1st Street, Astoria, New York

Dear Mr. Patel:

Roux Environmental Engineering and Geology, D.P.C. (Roux), on behalf of Halletts Building 4 SPE LLC and Halletts Building 5 SPE LLC (Property Owner), has prepared this Investigation Summary Report (Report) for the property located at 27-02 (Block 490 Lot 1) and 27-50 (Block 490 Lot 11) 1st Street, Astoria, New York, referred to herein as Halletts Point Buildings 40 and 50, respectively (aka HLP 4/5, or "the Site"; see Figure 1). The purpose of this Report is to summarize the scope completed and the results of the investigation performed to assess the environmental conditions associated with NYSDEC Spill #2300395 and #2300786, in accordance with Roux's Investigation Letter Work Plan (Work Plan) dated May 15, 2023 and approved by New York State Department of Environmental Conservation (NYSDEC) via letter on May 19, 2023. The Work Plan was prepared in general accordance with NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10) Section 3.3 requirements for a focused investigation. This Report provides a summary of the historical and current environmental conditions at the Site, outlines the scope of work conducted, and presents the data collected during the investigation.

Property Description and Environmental Conditions

The approximately 2.5-acre Site is located on the west side of 1st Street, immediately south of 27th Avenue in the Halletts Point Section of the Borough of Queens, New York. The Site is bounded by Halletts Point Playground to the south; the East River to the west; the Halletts Point Building 20 and 30 (HLP 20/30) Brownfield Cleanup Program (BCP) remediation site to the north (BCP Site No. C241192); and 1st Street to the east. Building 40 (Lot 1, the northern lot), was recently demolished, with the exception of the building foundation, and is currently used for staging of materials for the adjacent BCP site. Building 50 (Lot 11, the southern lot) is paved and utilized as an outdoor event space. The Site Location Map is included as Figure 1.

Based on historical environmental documents, Building 40 was historically occupied by various commercial, industrial, and utility establishments, including an apparent coal gasification plant, a coal-fired electric generating station, several stone cutting and polishing establishments, machine works, a lumber yard, a manufacturer of masonry building blocks, a manufacturer of hampers, and a scaffold manufacturer. Building 50 was occupied by an iron works operation, machine works, and lumber facility. Both properties are identified as having Environmental Designations for hazardous materials, noise, and air quality with the New York City Office of Environmental Remediation.

The below sections discuss historical and current environmental conditions at the Site based on data collected prior to the investigation.

Historical Environmental Conditions

As provided to NYSDEC via e-mail on April 17, 2023 and as noted in Roux's Investigation Work Plan, historical environmental data exists for the Site, including but not limited to, a Phase II Subsurface Investigation Report (Property Solutions, 2008) a due diligence Remedial Investigation Report (Roux, 2015), and an updated Phase I Environmental Site Assessment (Roux, 2016). These historical reports and associated data indicated that the Site is impacted from historical property use/operations (gas works, coal-fired electric generating station, machine works, lumber operations) and historical urban filling. A summary of the investigation data is provided below and detailed in their respective reports referenced above.

Soil data from the Roux investigation indicated that semi-volatile organic compounds (SVOCs) and metals are present at concentrations exceeding NYSDEC Restricted Residential Soil Cleanup Objectives (RRUSCOs), and are typical of historical fill and urban/industrial areas. No volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), or pesticides were detected in soil at concentrations exceeding RRUSCOs. Petroleum-related VOCs were detected in groundwater samples at concentrations exceeding NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs). VOCs were detected in several soil-vapor samples.

Ultimately, these data indicated that the observed environmental conditions are related to historical impacts and are unlikely related to any new releases at the Site. The Site is capped (asphalt cover and concrete former building foundation), and, therefore, there is no current exposure to soils, groundwater, or soil vapor.

It should be noted this Site is being evaluated for participation and remediation under the BCP, as currently being performed at the Property Owner's neighboring Site.

Recent Environmental Conditions

In April 2023, a limited geotechnical investigation was performed by the Property Owner's geotechnical engineer Langan Engineering and Environmental Services, Inc. (Langan), which involved advancing borings over 20 feet into bedrock across the HLP 40/50 footprint. During drilling, evidence of potential contamination was identified via soil staining in the drilling cuttings and sheens on the drilling water. Impacted drilling cuttings and water were drummed by the geotechnical engineer and their driller, characterized for disposal by Roux, and are currently pending pick-up and offsite disposal. In addition, six observation wells were installed by the geotechnical engineer. Table 2 contains the construction information and depths for the geotechnical wells.

Fluid levels in the observation wells were measured by Roux on April 13, 2023. The results of the fluid level gauging indicated that trace, yet measurable oil (i.e., free-product) was observed in four of the six observation wells (LB-1A[OW], LB-1B[OW], LB-9B[OW], and LB-10A[OW]), ranging in thickness from 0.02 feet to 0.19 feet. Depth to groundwater ranged from 6.21 feet to 17.87 feet. The remaining two observation wells, LB-4B(OW) and LB-12B(OW) were inaccessible the day of measurement and, therefore, it was not confirmed at that time whether these observation wells contained free-product. Roux notified NYSDEC of these conditions on April 14, 2023, and NYSDEC assigned Spill #2300395 and #2300786 associated with the conditions. Following notification to NYSDEC, Roux measured the observation wells a second time on May 1, 2023. A summary table with the measurement data collected to date is provided below. Based on historical environmental data collected, local groundwater flow direction is west to northwest towards the East River.

Table 1. Pre-Investigation - Observation Well Fluid-Level Measurement Data

Well ID	DTP (ft)	DTW (ft)	Apparent Thickness (ft)	DTP (ft)	DTW (ft)	Apparent Thickness (ft)
Date	4/13/2023			5/1/2023		
LB-1B (OW)	6.71	6.73	0.02	NA	NA	NA
LB-9B (OW)	6.19	6.21	0.02	3.61	3.62	0.01

Well ID	DTP (ft)	DTW (ft)	Apparent Thickness (ft)	DTP (ft)	DTW (ft)	Apparent Thickness (ft)
Date	4/13/2023			5/1/2023		
LB-4B (OW)	NA	NA	NA	6.95	7.36	0.41
LB-12B (OW)	NA	NA	NA	--	4.70	0.00
LB-10A (OW)	7.23	7.42	0.19	5.04	5.05	0.01
LB-1A (OW)	17.85	17.87	0.02	14.34	14.35	0.01

Notes:

DTP - Depth to Product

DTW - Depth to Water

NA – Observation well was Not Accessible during measurement event

It should be noted that similar free-product conditions were observed in some areas during advancement of rock anchor casings and excavation of decomposed bedrock at the adjacent HLP 20/30 BCP site. Hydrocarbon analysis of the free-product and free-product-impacted soils at HLP 20/30 indicated that the free-product was characterized as middle distillate to heavier distillate range material, and was indicative of historical contamination. The contamination at HLP 20/30 was addressed under the BCP Track 1 cleanup and in accordance with a Best Management Plan, and impacted soils and decomposed rock were excavated and disposed offsite.

Investigation Scope of Work

As noted in the Work Plan, the investigation was designed to further evaluate the free-product identified in the observation wells. Roux implemented the field investigation scope of work outlined in the Work Plan between May 25, 2023 and June 21, 2023. The Scope of Work at the Site consisted of:

- Initial fluid level monitoring and product recovery including the collection of two product samples;
- An additional two fluid monitoring events and recovery;
- Advancement of six soil borings;
- Collection of 11 soil samples;
- Installation of six monitoring wells from soil boring locations;
- Collection of eight groundwater samples; two collected from wells previously installed by Langan during their geotechnical investigation and six from wells installed by Roux; and
- A final product recovery.

The following sections describe the investigation scope of work completed. A figure presenting the Site plan, existing observation well locations, and new soil boring/monitoring well locations is provided as Figure 2.

Fluid Level Monitoring and Product Recovery

An initial fluid level monitoring event occurred on May 25, 2023 to assess the presence of potential free-product in the six existing observation wells. Fluid levels were measured with an electronic oil-water interface probe capable of measuring fluid elevation with an accuracy of 0.01 feet and were recorded in Roux's field book. All initial measurements were collected on the same day to provide a snapshot of the Site-wide conditions. As noted in the Work Plan, free-product was recovered using either disposable polyethylene bailers or absorbent socks if it was encountered. A summary table presenting the fluid level measurements and recovery is provided as Table 2. A narrative of the various fluid level monitoring and recovery events is discussed below.

In previous fluid monitoring events, LNAPL was observed in all geotechnical observation wells (OW) except LB-12B (OW). For the fluid monitoring event on May 25, 2023, LNAPL was only identified in

LB-4B (OW) and LB-10A (OW). During the initial fluid level gauging, dense nonaqueous phase liquid (DNAPL) was identified in existing observation wells LB-9B (OW) and LB-10A (OW). NYSDEC was immediately notified via e-mail of the new DNAPL condition and Roux collected a DNAPL sample. Since LNAPL was identified in LB-4B (OW) and LB-10A (OW), a LNAPL sample was collected from LB-4B (OW). Both samples were sent to Alpha Analytical, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory, for hydrocarbon fingerprint analysis via Method 8015D(M). Dense product was manually bailed from LB-9B (OW) utilizing poly bailers and recovered in a 55-gallon drum. Approximately 1.5 gallons of dense product were recovered. Absorbent socks were placed in LB-4B (OW) and LB-10A (OW) in an effort to recover any trace LNAPL following manual bailing.

On May 26, 2023, Roux continued DNAPL recovery from LB-9B (OW) and LB-10A (OW). Dense product was manually bailed from LB-9B (OW) and LB-10A (OW) utilizing poly bailers and recovered in a 55-gallon drum. Approximately 2.75 gallons of dense product were recovered. No LNAPL could be recovered by bailers in the wells due to it being in trace amounts. Absorbent socks were placed in all remaining observation wells in an effort to recover any trace LNAPL.

On May 31, 2023, a third round of groundwater gauging all wells and product recovery for DNAPL at LB-9B (OW) and LB-10A (OW) occurred. During this recovery event, less than 0.1 gallons of DNAPL was recovered from each well via manual bailing. While gauging no LNAPL was present in the wells so manual recovery was not necessary. Absorbent socks were replaced in LB-10A, LB-1A, LB-4B, LB-9B due to LNAPL presence on existing socks. The next product recovery event was not until after groundwater sampling and is summarized in the final product recovery section of this report.

Soil Investigation

Following the initial fluid level monitoring and recovery event, a soil investigation was conducted to delineate and evaluate the horizontal and vertical extent of the free-product in the subsurface. As described in the Work Plan, six soil borings were advanced in the general vicinity of the observation wells that contained free-product, as well as locations downgradient and upgradient of the observation wells.

Locations of the soil borings (and associated monitoring wells) are presented in Figure 2. Soil boring RMW-1 was advanced in the southeast portion of the Building 50 lot as an upgradient location. Both RMW-2 and RMW-3 were advanced along the western extent of the Site as downgradient locations (one in the Building 40 lot and one in the Building 50 lot). RMW-4 and RMW-5 were advanced to fill a data gap in the central portion of the Site, and will also allow for an understanding of potential contaminant migration from the upgradient portions of the Site. RMW-6 was advanced on the northeast portion of the HLP 40 lot and downgradient of existing observation well LB-10A(OW) to understand downgradient conditions.

Prior to boring advancement, Roux's drilling subcontractor, AARCO Environmental Services (AARCO), pre-cleared each boring location to five feet below land surface (ft-bls) utilizing vacuum clearance and hand tools. No utilities or refusals were encountered in the first five feet at any of the six locations.

Following utility clearance, soil borings were advanced by AARCO utilizing a Sonic drill rig. Each soil boring was advanced in five-foot continuous cores until bedrock refusal (either decomposed or competent bedrock), to depths ranging from 10 to 16 feet ft-bls. Soil from each location was visually inspected for evidence of impacts and screened for organic vapors in the field using a photoionization detector (PID). Soil lithology was recorded according to the Unified Soils Classification System (USCS). Soil boring logs for each of the six locations are included in Attachment 1.

In accordance with the Work Plan, one soil sample was collected from a two-foot soil interval if evidence of contamination was observed in the boring (i.e., interval exhibiting elevated PID measurements, staining, odors). If evidence of impacts were not encountered, a soil sample was collected from the two-foot interval above the observed groundwater table. The observed groundwater table was encountered from depths ranging from 7 to 11.5 ft-bls during soil boring advancement. A total of eleven

samples (not including quality assurance/quality control samples) were collected from the six borings and were sent to Alpha Analytical for the following analyses:

- Target Compound List (TCL) VOCs via United States Environmental Protection Agency (USEPA) Method 8260D;
- TCL SVOCs via USEPA Method 8270E;
- PCBs via USEPA Method 8082A;
- Pesticides and herbicides via USEPA Method 8081B; and
- Target Analyte List (TAL) metals via USEPA Method 6010D.

Note the above analyte suite deviates from the Work Plan. The Work Plan indicated that only VOCs and SVOCs would be analyzed in soil; however, Roux included additional analysis in an effort to collect additional Site characterization data.

Monitoring Well Installation, Development, and Survey

Permanent groundwater monitoring wells were installed at the six soil boring locations to investigate the presence of free-product and dissolved phase groundwater quality. The monitoring wells were constructed of two-inch diameter polyvinyl chloride (PVC) riser pipe and 0.02-inch slot PVC well screen. The screened interval was determined by the field geologist during installation activities, but in each location, was installed to straddle the observed water table and capture intervals of observed contamination, where identified.

At monitoring wells RMW-1 through RMW-3, groundwater was encountered in the soil located above any decomposed or competent bedrock. Groundwater was encountered at greater depths at monitoring wells RMW-4 through RMW-6, and as such, were screened within rock to ensure groundwater capture as described below.

- At RMW-4, groundwater was encountered at 6 ft-bls at the interface between the overlying soil and decomposed bedrock. As such, the boring was advanced through the decomposed bedrock and terminated 0.5 ft into competent bedrock at 10 ft-bls.
- At RMW-5, groundwater was encountered at 8.5 ft-bls in the weathered bedrock interval, and, therefore, the boring was advanced 1.5 ft into competent bedrock at terminated at 10.5 ft-bls.
- At RMW-6, groundwater was encountered at 11.5 ft-bls, at the interface between decomposed bedrock and competent bedrock, and, therefore, the boring was advanced an additional 1.5 feet into competent bedrock and terminated at 13 ft-bls.

At each location, a sand pack was placed around the well screen extending above the top of the screened zone, and a bentonite pellet seal was placed above the sand pack. The wells were completed using locking well plugs, with flush mounted, bolt down, watertight, manhole covers cemented into place. Construction details for monitoring wells are included as soil boring/monitoring well construction logs in Attachment 1.

Following installation, three of the newly installed monitoring wells were developed by AARCO on June 6, 2023. AARCO developed RMW-1, RMW-2, and RMW-3 using a surge block and submersible pump. Turbidity readings were monitored and pumping proceeded until the discharge water had a turbidity value of 50 nephelometric turbidity units (NTU) or less. On June 8, 2023, Roux developed RMW-4, RMW-5, and RMW-6 using a whale pump. The well was surged until turbidity readings were below 50 NTUs.

On June 12, 2023, all existing and newly installed monitoring wells were surveyed by Mega Engineering and Land Surveying, P.C., for horizontal (North American Datum 1983 [NAD83]) and vertical (North American Vertical Datum 1988 [NAVD88]) coordinates within the Long Island State Plane Coordinate System. Survey data is included in Table 2.

On June 15, 2023, Roux conducted a comprehensive fluid level measurement event. At the six existing observation wells and the six newly constructed wells, fluid levels were measured using an oil-water interface probe capable of measuring fluid elevation with an accuracy of 0.01 ft. All groundwater level measurements were collected on the same day to provide a snapshot of the Site-wide conditions. Gauging data was recorded and is provided in Table 2.

Groundwater Sampling

On June 15, 16, and 21, 2023, groundwater samples were collected from eight wells using a low-flow pump and disposable silicone and polyethylene tubing, consistent with the methods described in the USEPA guidance document titled “Ground Water Sampling Procedure, Low Stress (Low Flow) Purging and Sampling.” The groundwater samples were collected from the six newly installed wells and two existing observation wells, LB-1A and LB-12B. As outlined in the Work Plan, groundwater samples were not collected from wells that contained free-product (either LNAPL or DNAPL). As such, groundwater samples were not collected from observation wells LB-1B, LB-4B, LB-9B, and LB-10A. During purging, a water quality meter was used to monitor water quality indicator parameters including pH, conductivity, dissolved oxygen, oxygen reduction potential, temperature, and turbidity. Groundwater samples were sent to Alpha Analytical for the following analyses:

- TCL VOCs via USEPA Method 8260D;
- TCL SVOCs via USEPA Method 8270E;
- PCBs via USEPA Method 8082A;
- Pesticides and herbicides via USEPA Method 8081B; and
- TAL metals (total) via USEPA Method 6020B.

Note the above analyte suite deviates from the Work Plan. The Work Plan indicated that only VOCs and SVOCs would be analyzed in groundwater; however, Roux included additional analysis in an effort to collect additional Site characterization data.

Final Product Recovery Event

A final product recovery event was performed on June 16, 2023, based on gauging data results from the day prior on June 15. Gauging was completed again at LB-9B and LB-10A since these were the wells where measurable product was observed. No LNAPL or DNAPL product was encountered in the six newly installed wells. Except for LB-9B and LB-10A, no LNAPL was recovered due to the observation wells containing trace amounts. Absorbent socks were replaced in all the observation wells, but LNAPL was only identified on the socks of LB-1A, LB-4B, LB-9B, and LB-10A. Less than 0.1 gallons of DNAPL was recovered from LB-9B (OW) and LB-10A (OW) using poly bailers due to the small thickness of product in the wells. Table 2 contains gauging data.

Investigation Derived Waste Management

Soil cuttings, liquid waste (oil, well development water, groundwater sampling purge water), as well as waste products (i.e., absorbent socks and used disposable tubing) were containerized in drums for temporary on-site storage. Samples will be collected from soil and liquid drums for future laboratory analysis and off-site disposal at a disposal facility.

Investigation Results

The following section provides a summary of the hydrogeological findings, and the soil, groundwater, and free-product quality data that were generated by Roux during the investigation. Data tables with all of the data generated during investigation are summarized in attached Tables 3 through 12. Figures presenting the analytical data are provided as Figures 4 and 5. All laboratory analytical reports are included as Attachment 2.

Geologic and Hydrogeologic Conditions

Based on the lithology recorded from soil borings advanced during this investigation, the soil lithology predominantly consists of light brown to grey sand with lesser quantities of silt and gravel. Fill was observed in all six borings but was seen from land surface to a range of 5 to 11 ft bls. Weathered bedrock was encountered between 6 and 11 ft bls. Competent bedrock was observed in RMW- 4, RMW-5, and RMW-6 at a depth of 9 to 11 ft bls. As noted above, soil boring logs are included as Attachment 1.

According to water level data collected during this investigation, the water table surface at the Site ranges from approximately 3.62 to 17.87 ft bls and is tidally influenced. Groundwater flow direction observed during this investigation is consistent with the 2013 investigation, and is generally northwest towards the East River. A groundwater flow contour map based on the data collected during the June 15, 2023 groundwater gauging event is provided as Figure 3.

LNAPL and DNAPL Conditions

LNAPL was observed at all six of the geotechnical observation wells over all the gauging periods. DNAPL was only observed in the eastern observation wells of LB-10A and LB-9B. No evidence of LNAPL or DNAPL has been found in wells at the site that do not extend deep into bedrock..

Soil Quality Results

During soil boring advancement, the highest PID reading was measured at RMW-6 from 9-11 ft-bl, with a reading of 837 parts per million (ppm). Odors and staining were observed at this interval as well which was identified as weathered bedrock. Elevated PID measurements were noted at RMW-2, with a measurement of 32.6 ppm at 15 ft-bl, and at RMW-4, with a measurement of 49.9 ppm at 9 ft-bl. Soil samples were collected for analysis at these intervals. Elevated PID measurements (i.e., greater than 0.1 ppm), odors, and soil staining were not observed in RMW-1, RMW-3 and RMW-5.

As noted above, a total of 11 soil samples were collected from the six soil boring locations and submitted for laboratory analysis. Based on the anticipated future use of the Site as a restricted residential use development, soil sample analytical results were compared to the NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs), Residential Soil Cleanup Objectives (RSCOs), Restricted Residential Soil Cleanup Objectives (RRSCOs), and Commercial Soil Cleanup Objectives (CSCOs). Soil boring locations with soil sample exceedances of the NYSDEC Part 375 SCOs are shown on Figure 4. An evaluation of the analytical data indicates the following about soil conditions observed during this investigation:

- The soil sample collected at RMW-6 (R-6) from 9 to 11 ft-bl exceeded the UUSCOs for 1,2,4-trimethylbenzene, n-propylbenzene, and xylenes. Concentrations for these analytes were below RRUSCOs. This was the only soil sample with concentrations of VOCs above UUSCOs.
- At RMW-5 (R-5), 4 to 6 ft-bl, exceedances of RRSCOs included benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-c,d)pyrene. There were no other samples with SVOC exceedances.
- Several metals exceeded UUSCOs at five of the boring locations. Metals exceedances of UUSCOs included copper, chromium, lead, mercury nickel, and zinc. Chromium and nickel concentrations exceeded UUSCOs in R-2 and R-4. At R-1 (5-7 ft bls) and R-2 (12-14 ft bls) mercury exceeded RRSOCs. At R-6 (9-11 ft bls) chromium exceeded RRSCOs. Four exceedances that were much higher than RRSCOs included, arsenic at R-2 (12-14 ft bls), lead at R-1 (5-7 ft bls), copper at R-2 (12-14 ft bls), and barium at R-6 (9-11 ft bls).
- PCB exceedances were limited to UUSCOs in R-1 (5-7 ft bls).
- Pesticides exceeded UUSCOs in R-1 (5-7 ft bls) for P,P'-DDT, and at R-2 (5-7 ft bls) for P,P'-DDD, P,P'-DDE, and P,P'-DDT.

Groundwater Quality Results

A total of 8 groundwater samples were collected from eight monitoring wells and submitted for laboratory analysis. Groundwater analytical results were compared to NYSDEC AWQSGVs, and exceedances of AWQSGVs are presented on Figure 5. An evaluation of the analytical data indicates the following about groundwater conditions observed during this investigation:

- Of the 76 VOCs analyzed in groundwater, 15 were detected at concentrations exceeding AWQSGVs.
 - Concentrations of VOCs did not exceed AWQSGVs in the samples collected from observation wells LB-1A (OW) or LB-12B (OW), or Roux monitoring wells RMW-1 through RMW-4.
 - Concentrations of VOCs, specifically 1,2,4,5-t, 1,2,4-trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, m,p-xylene, naphthalene, n-propylbenzene, O-xylene, toluene, and total xylenes exceeded AWQSGVs in the samples collected from RMW-5 and RMW-6. In addition, concentrations of 1,3,5-trimethylbenzene, acetone, and cymene exceeded AWQSGVs in RMW-5; and concentrations of sec-butylbenzene exceeded in RMW-6.
 - It should be noted that RMW-6 contained elevated PID measurements (837 ppm), odor, and staining within the decomposed bedrock, and both RMW-5 and RMW-6 (i.e., the only two Roux wells with concentrations of VOCs exceeding AWQSGVs) are partially screened within decomposed and competent bedrock.
- Of the 68 SVOCs analyzed in groundwater, 10 were detected at concentrations exceeding AWQSGVs.
 - Concentrations of SVOCs did not exceed AWQSGVs in the samples collected from observation well LB-1A (OW) or Roux monitoring well RMW-4.
 - SVOCs, primarily polycyclic aromatic hydrocarbons, were detected at concentrations exceeding AWQSGVs at LB-12B (OW), RMW-1 through RMW-3, and RMW-5 and RMW-6.
- Metals including total chromium, copper, iron, lead, magnesium, manganese, mercury, selenium, sodium, and thallium were detected at concentrations exceeding AWQSGVs.
- The total PCB concentration detected at RMW-1 exceeded the AWQSGV. PCBs were not detected in any other groundwater samples.
- Trans-chlordane was detected at a concentration slightly exceeding the AWQSGV at RMW-1. Pesticides and herbicides were not detected at concentrations exceeding AWQSGVs in any other groundwater samples.

It should be noted that with the exception of 1,2,4-trimethylbenzene, n-propylbenzene, and xylenes, none of the VOCs exceeding AWQSGVs in groundwater were detected above UUSCOs in soil. This indicates that VOCs in soil are not acting as a source to groundwater contamination.

Product Analytical Results

Free product samples serving as Site representative LNAPL and DNAPL were collected from LB-4B and LB-9B, respectively. The LNAPL sample was identified to be similar to weathered fuel oil #2/diesel fuel. The DNAPL sample was similar to coal tar/creosote. Both findings are consistent with the historical use of the Site. The laboratory analytical reports for the samples are included in Appendix 2.

Findings and Conclusions

The following section summarizes the environmental conditions observed during this focused investigation and draws conclusions regarding the nature and extent of Spills #2300395 and #2300786.

As observed during the initial fluid level monitoring events, LNAPL was confined to wells LB-4B and LB-10A located on the northern and middle part of the Site. These observation wells are fully screened within bedrock (and in some cases, decomposed bedrock), ranging from 15 to 30 ft-bls; however, bottom of the borings ranged from 35 to 40 ft-bls. LNAPL thickness in the observation wells significantly reduced following the first recovery event, and was not observed for two consecutive fluid level monitoring events, until the final event where it was measured at trace thickness (0.01 ft) in each observation well. Given the lack of a readily LNAPL identifiable source in soil during this investigation and the historical 2013 investigation, as well as the fact that no LNAPL was observed in the new upgradient or downgradient monitoring wells installed by Roux, which were generally screened above bedrock, this indicates the source of the free-product in these observation wells is confined to the intervals within decomposed and competent bedrock. The low-level concentrations of VOCs and SVOCs in soil collected from above bedrock and groundwater samples from wells screened above bedrock further indicate the free-product source is confined within or decomposed or competent bedrock.

It is likely that the LNAPL observed in these wells is actually representative of the degraded free-product observed at depth in primarily decomposed rock, and was disturbed and brought to the surface of the water table during the geotechnical investigation. Following multiple recovery events, the LNAPL has been recovered to the extent practical (0.01 ft) with the use of absorbent socks.

DNAPL was observed in observation wells LB-9B (OW) and LB-10A (OW) located on the eastern area of the Site, which were drilled to depths of 35 and 39 ft-bls, respectively. DNAPL was not encountered in any of the other observation wells, including those downgradient of LB-9B, and all of which were terminated at greater depths. In addition, DNAPL was not encountered in any of the Roux wells screened above bedrock. This indicates that the DNAPL is confined to the decomposed or competent bedrock and is not migrating downgradient. As discussed above, contamination was identified in the decomposed bedrock sitting above more competent bedrock at the adjacent BCP Site. It is likely that similar conditions are present at Buildings 4 and 5, and the contamination within the decomposed bedrock was mobilized at depth and into competent rock during the advancement of the geotechnical borings/observation wells.

With the exception of 1,2,4-trimethylbenzene, n-propylbenzene, and xylenes, none of the VOCs exceeding AWQSGVs in groundwater were detected above UUSCOs in soil. This indicates that VOCs in soil are not acting as a source to groundwater contamination.

Other compounds observed in the soil, and groundwater samples appears to be typical of the urban soil and groundwater in the region. Due to the history of the property as a metal refinery, it was expected to see higher levels of metals in soil.

Respectfully submitted,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.



Rachel Miller
Project Engineer



Charles McGuckin, P.E.
Vice President / Principal Engineer

Investigation Summary Report
Spill #2300395 and #2300786
Halletts Point Buildings 40 and 50
27-02 and 27-50 1st Street, Astoria, New York

TABLES

1. Pre-Investigation - Observation Well Fluid-Level Measurement Data (Embedded)
2. Well Details and Groundwater Monitoring
3. Summary of Volatile Organic Compounds in Soil
4. Summary of Semivolatile Organic Compounds in Soil
5. Summary of Metals in Soil
6. Summary of Polychlorinated Biphenyls in Soil
7. Summary of Pesticides and Herbicides in Soil
8. Summary of Volatile Organic Compounds in Groundwater
9. Summary of Semivolatile Organic Compounds in Groundwater
10. Summary of Metals in Groundwater
11. Summary of Polychlorinated Biphenyls in Groundwater
12. Summary of Pesticides and Herbicides in Groundwater

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	Northing	Easting	Well Top of Riser Elevation (ft)	Length of Screen (ft)	Top of Screen (ft-bls)	Bottom of Screen (ft-bls)	Bottom of Boring (ft-bls)	DTP LNAPL (ft)	DTW (ft)	Apparent Thickness LNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	Apparent Thickness LNAPL (ft)
Date								4/13/2023			5/1/2023		
Type of Sampling								Fluid Level Monitoring			Fluid Level Monitoring		
LB-1A (OW)	221,783.14	1,001,669.76	9.72	10	20	30	40	17.85	17.87	0.02	14.34	14.35	0.01
LB-1B (OW)	221,542.12	1,001,569.12	8.93	10	18	28	38	6.71	6.73	0.02	--	--	--
LB-4B (OW)	221,708.86	1,001,612.36	9.83	10	20	30	40	--	--	--	6.95	7.36	0.41
LB-9B (OW)	221,504.24	1,001,739.94	8.6	10	15	25	35	6.19	6.21	0.02	3.61	3.62	0.01
LB-10A (OW)	221,821.48	1,001,827.54	9.87	10	19	29	39	7.23	7.42	0.19	5.04	5.05	0.01
LB-12B (OW)	221,674.03	1,001,788.01	9.7	10	20	30	40	--	--	--	NA	4.70	0.00
RMW-1	221,465.68	1,001,721.89	8.46	10	2	12	12	--	--	--	--	--	--
RMW-2	221,701.94	1,001,569.99	8.96	10	6	16	16	--	--	--	--	--	--
RMW-3	221,894.34	1,001,712.42	9.96	10	4	14	14	--	--	--	--	--	--
RMW-4	221,693.26	1,001,678.88	9.46	9	1	10	10	--	--	--	--	--	--
RMW-5	221,675.44	1,001,750.69	9.65	9.5	1	10.5	10.5	--	--	--	--	--	--
RMW-6	221,865.88	1,001,803.90	9.58	9	3	13	13	--	--	--	--	--	--

Note:

1. All DTW and DTB measurements are from the top of the well casing and are not in feet above mean sea level
2. All NA measurements mean this parameter was not observed when measurement was taken.
3. A -- marking indicates that a well was not gauged on that day.

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	DTP LNAPL (ft)	DTW (ft)	Apparent Thickness LNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)
Date	5/23/2023			5/25/2023						5/26/2023					
Type of Sampling	Fluid Level Monitoring			Initial Fluid Level Monitoring, Recovery, and DNAPL/LNAPL Sampling						Pre-recovery Monitoring					
LB-1A (OW)	17.5	17.52	0.02	NA	10.22	NA	37.81	0.00	0.00	NA	16.83	NA	37.8	0.00	0.00
LB-1B (OW)	6.26	6.28	0.02	NA	6.54	NA	29.76	0.00	0.00	NA	6.76	NA	29.76	0.00	0.00
LB-4B (OW)	8.12	8.55	0.43	8.25	8.56	NA	34.45	0.31	0.00	NA	8.42	NA	34.45	0.00	0.00
LB-9B (OW)	6.34	6.36	0.02	NA	6.62	33.66	34.87	0.00	1.21	NA	6.64	34.43	34.92	0.00	0.49
LB-10A (OW)	6.79	6.96	0.17	7.06	7.07	32.56	37.68	0.01	5.12	NA	7.16	32.78	37.68	0.00	4.90
LB-12B (OW)	NA	7.12	0.00	NA	7.32	NA	39.39	0.00	0.00	NA	7.37	NA	39.72	0.00	0.00
RMW-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RMW-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RMW-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RMW-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RMW-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RMW-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Note:

1. All DTW and DTE
2. All NA measurem
3. A -- marking indic

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)
Date	5/26/2023						5/31/2023					
Type of Sampling	Post-recovery Monitoring						Pre-recovery Monitoring					
LB-1A (OW)	--	--	--	--	--	--	NA	15.02	NA	37.68	0.00	0.00
LB-1B (OW)	--	--	--	--	--	--	NA	6.49	NA	29.65	0.00	0.00
LB-4B (OW)	--	--	--	--	--	--	NA	8.21	NA	34.45	0.00	0.00
LB-9B (OW)	NA	6.72	34.63	34.92	0.00	0.29	NA	6.52	34.28	34.95	0.00	0.67
LB-10A (OW)	NA	7.21	36.42	37.68	0.00	1.26	NA	7.31	36.85	37.65	0.00	0.80
LB-12B (OW)	--	--	--	--	--	--	NA	7.64	NA	39.37	0.00	0.00
RMW-1	--	--	--	--	--	--	--	--	--	--	--	--
RMW-2	--	--	--	--	--	--	--	--	--	--	--	--
RMW-3	--	--	--	--	--	--	--	--	--	--	--	--
RMW-4	--	--	--	--	--	--	--	--	--	--	--	--
RMW-5	--	--	--	--	--	--	--	--	--	--	--	--
RMW-6	--	--	--	--	--	--	--	--	--	--	--	--

- Note:
- 1. All DTW and DTE
 - 2. All NA measurem
 - 3. A -- marking indic

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)
Date	5/31/2023						6/6/2023					
Type of Sampling	Post-recovery Monitoring						Post Well Development					
LB-1A (OW)	--	--	--	--	--	--	--	--	--	--	--	--
LB-1B (OW)	--	--	--	--	--	--	--	--	--	--	--	--
LB-4B (OW)	--	--	--	--	--	--	--	--	--	--	--	--
LB-9B (OW)	NA	6.78	34.64	34.95	0.00	0.31	--	--	--	--	--	--
LB-10A (OW)	NA	7.33	37.51	37.65	0.00	0.14	--	--	--	--	--	--
LB-12B (OW)	--	--	--	--	--	--	--	--	--	--	--	--
RMW-1	--	--	--	--	--	--	NA	6.23	NA	10.87	NA	NA
RMW-2	--	--	--	--	--	--	NA	8.58	NA	15.99	NA	NA
RMW-3	--	--	--	--	--	--	NA	10.08	NA	13.6	NA	NA
RMW-4	--	--	--	--	--	--	--	--	--	--	--	--
RMW-5	--	--	--	--	--	--	--	--	--	--	--	--
RMW-6	--	--	--	--	--	--	--	--	--	--	--	--

Note:

1. All DTW and DTE
2. All NA measurem
3. A -- marking indic

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)
Date	6/8/2023						6/15/2023					
Type of Sampling	Post Well Development and Monitoring						Groundwater Sampling Monitoring					
LB-1A (OW)	--	--	--	--	--	--	8.31	8.32	NA	37.8	0.01	NA
LB-1B (OW)	--	--	--	--	--	--	6.3	6.31	NA	29.2	0.01	NA
LB-4B (OW)	--	--	--	--	--	--	7.8	7.81	NA	34.4	0.01	NA
LB-9B (OW)	--	--	--	--	--	--	6.48	6.49	33.8	34.9	0.01	1.1
LB-10A (OW)	--	--	--	--	--	--	7.29	7.30	36.0	37.44	0.01	1.4
LB-12B (OW)	--	--	--	--	--	--	7.5	7.51	NA	39.28	0.01	NA
RMW-1	NA	6.04	NA	10.82	NA	NA	NA	6.3	NA	10.8	NA	NA
RMW-2	NA	6.08	NA	16.01	NA	NA	NA	6.8	NA	13.9	NA	NA
RMW-3	NA	7.48	NA	13.49	NA	NA	NA	9.06	NA	13.4	NA	NA
RMW-4	NA	7.42	NA	9.2	NA	NA	NA	6.65	NA	9.25	NA	NA
RMW-5	NA	9.04	NA	9.89	NA	NA	NA	6.55	NA	9.90	NA	NA
RMW-6	NA	10.48	NA	12.39	NA	NA	NA	8.80	NA	12.44	NA	NA

Note:

1. All DTW and DTE
2. All NA measurem
3. A -- marking indic

Table 2. Well Details and Groundwater Monitoring, 27-02 and 27-50 1st Street, Astoria, New York

Well ID	DTP LNAPL (ft)	DTW (ft)	DTP DNAPL (ft)	DTB	Apparent Thickness LNAPL (ft)	Apparent Thickness DNAPL (ft)
Date	6/16/2023					
Type of Sampling	Pre-recovery Monitoring (No Post Due to Inability to Recover)					
LB-1A (OW)	--	--	--	--	--	--
LB-1B (OW)	--	--	--	--	--	--
LB-4B (OW)	--	--	--	--	--	--
LB-9B (OW)	NA	6.48	34.2	34.89	NA	0.69
LB-10A (OW)	NA	7.26	37.1	37.44	NA	0.34
LB-12B (OW)	--	--	--	--	--	--
RMW-1	--	--	--	--	--	--
RMW-2	--	--	--	--	--	--
RMW-3	--	--	--	--	--	--
RMW-4	--	--	--	--	--	--
RMW-5	--	--	--	--	--	--
RMW-6	--	--	--	--	--	--

- Note:
- 1. All DTW and DTE
 - 2. All NA measurem
 - 3. A -- marking indic

Notes Utilized Throughout Tables

Soil Tables

J - Estimated value

U - The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit

P - The RPD between the results for the two columns exceeds the method-specified criteria

I - The lower value for the two columns has been reported due to obvious interference

RPD - Relative Percent Difference

ft bls - Feet below land surface

FD - Duplicate sample

NA - Compound was not analyzed for by laboratory

mg/kg - Milligrams per kilogram

NYSDEC - New York State Department of Environmental Conservation

SCO - Soil Cleanup Objectives

-- No SCO available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use SCO

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential SCO

Groundwater Tables

J - Estimated Value

U - The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit

B - The analyte was found in an associated blank as well as in the sample

P - The RPD between the results for the two columns exceeds the method-specified criteria

I - The lower value for the two columns has been reported due to obvious interference

RPD - Relative Percent Difference

FD - Duplicate

µg/L - Micrograms per liter

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
1,1,1,2-Tetrachloroethane	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
1,1,1-Trichloroethane (TCA)	0.68	100	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
1,1,2,2-Tetrachloroethane	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
1,1,2-Trichloroethane	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,1-Dichloroethane	0.27	26	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,1-Dichloroethene	0.33	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,1-Dichloropropene	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
1,2,3-Trichlorobenzene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2,3-Trichloropropane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2,4,5-Tetramethylbenzene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2,4-Trichlorobenzene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2,4-Trimethylbenzene	3.6	52	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2-Dibromo-3-Chloropropane	--	--	MG/KG	0.0046 U	0.0043 U	0.0037 U	0.0043 U	0.004 U	0.0043 U	
1,2-Dibromoethane (Ethylene Dibromide)	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,2-Dichlorobenzene	1.1	100	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,2-Dichloroethane	0.02	3.1	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,2-Dichloropropane	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,3-Dichlorobenzene	2.4	49	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,3-Dichloropropane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,4-Dichlorobenzene	1.8	13	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,4-Diethyl Benzene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
1,4-Dioxane (P-Dioxane)	0.1	13	MG/KG	0.12 U	0.11 U	0.099 U	0.12 U	0.1 U	0.11 U	
2,2-Dichloropropane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
2-Chlorotoluene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
2-Hexanone	--	--	MG/KG	0.015 U	0.014 U	0.012 U	0.014 U	0.013 U	0.014 U	
4-Chlorotoluene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
4-Ethyltoluene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Acetone	0.05	100	MG/KG	0.015 U	0.019	0.014	0.026	0.01 J	0.014 U	
Acrylonitrile	--	--	MG/KG	0.0062 U	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
Benzene	0.06	4.8	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
Bromobenzene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Bromochloromethane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Bromodichloromethane	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
Bromoform	--	--	MG/KG	0.0062 U	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
Bromomethane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Carbon Disulfide	--	--	MG/KG	0.015 U	0.014 U	0.012 U	0.0067 J	0.013 U	0.014 U	
Carbon Tetrachloride	0.76	2.4	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Chlorobenzene	1.1	100	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
Chloroethane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Chloroform	0.37	49	MG/KG	0.0023 U	0.0021 U	0.0019 U	0.0022 U	0.002 U	0.0021 U	
Chloromethane	--	--	MG/KG	0.0062 U	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
Cis-1,2-Dichloroethylene	0.25	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Cis-1,3-Dichloropropene	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
Cymene	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Dibromochloromethane	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Dibromomethane	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Dichlorodifluoromethane	--	--	MG/KG	0.015 U	0.014 U	0.012 U	0.014 U	0.013 U	0.014 U	
Dichloroethylenes	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Diethyl Ether (Ethyl Ether)	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Ethylbenzene	1	41	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Hexachlorobutadiene	--	--	MG/KG	0.0062 U	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
Isopropylbenzene (Cumene)	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
m,p-Xylene	--	--	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Methyl Ethyl Ketone (2-Butanone)	0.12	100	MG/KG	0.015 U	0.0037 J	0.0053 J	0.0066 J	0.0042 J	0.014 U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	--	MG/KG	0.015 U	0.014 U	0.012 U	0.014 U	0.013 U	0.014 U	
Methylene Chloride	0.05	100	MG/KG	0.0077 U	0.0071 U	0.0062 U	0.0072 U	0.0066 U	0.0071 U	
Naphthalene	12	100	MG/KG	0.0015 J	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
N-Butylbenzene	12	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
N-Propylbenzene	3.9	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
O-Xylene (1,2-Dimethylbenzene)	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Sec-Butylbenzene	11	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
Styrene	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
T-Butylbenzene	5.9	100	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Tert-Butyl Methyl Ether	0.93	100	MG/KG	0.0031 U	0.0028 U	0.0025 U	0.0029 U	0.0026 U	0.0028 U	
Tetrachloroethylene (PCE)	1.3	19	MG/KG	0.001	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
Toluene	0.7	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Total, 1,3-Dichloropropene (Cis And Trans)	--	--	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.00066 U	0.00071 U	
Trans-1,2-Dichloroethene	0.19	100	MG/KG	0.0023 U	0.0021 U	0.0019 U	0.0022 U	0.002 U	0.0021 U	
Trans-1,3-Dichloropropene	--	--	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Trans-1,4-Dichloro-2-Butene	--	--	MG/KG	0.0077 U	0.0071 U	0.0062 U	0.0072 U	0.0066 U	0.0071 U	
Trichloroethylene (TCE)	0.47	21	MG/KG	0.00077 U	0.00071 U	0.00062 U	0.00072 U	0.0002 J	0.00071 U	
Trichlorofluoromethane	--	--	MG/KG	0.0062 U	0.0057 U	0.005 U	0.0058 U	0.0053 U	0.0057 U	
Vinyl Acetate	--	--	MG/KG	0.015 U	0.014 U	0.012 U	0.014 U	0.013 U	0.014 U	
Vinyl Chloride	0.02	0.9	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	
Xylenes	0.26	100	MG/KG	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0014 U	

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
1,1,1,2-Tetrachloroethane	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
1,1,1-Trichloroethane (TCA)	0.68	100	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
1,1,2,2-Tetrachloroethane	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
1,1,2-Trichloroethane	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,1-Dichloroethane	0.27	26	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,1-Dichloroethene	0.33	100	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,1-Dichloropropene	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
1,2,3-Trichlorobenzene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,2,3-Trichloropropane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,2,4,5-Tetramethylbenzene	--	--	MG/KG	0.0056	0.0022 U	0.0028 U	0.21	14	
1,2,4-Trichlorobenzene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,2,4-Trimethylbenzene	3.6	52	MG/KG	0.00065 J	0.0022 U	0.0028 U	0.0095	6.2	
1,2-Dibromo-3-Chloropropane	--	--	MG/KG	0.0038 U	0.0034 U	0.0042 U	0.0041 U	0.3 U	
1,2-Dibromoethane (Ethylene Dibromide)	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,2-Dichlorobenzene	1.1	100	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,2-Dichloroethane	0.02	3.1	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,2-Dichloropropane	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.00096 J	0.19 J	
1,3-Dichlorobenzene	2.4	49	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,3-Dichloropropane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,4-Dichlorobenzene	1.8	13	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
1,4-Diethyl Benzene	--	--	MG/KG	0.00068 J	0.0022 U	0.0028 U	0.015	7.4	
1,4-Dioxane (P-Dioxane)	0.1	13	MG/KG	0.1 U	0.09 U	0.11 U	0.11 U	7.9 U	
2,2-Dichloropropane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
2-Chlorotoluene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
2-Hexanone	--	--	MG/KG	0.012 U	0.011 U	0.014 U	0.014 U	0.99 U	
4-Chlorotoluene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
4-Ethyltoluene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.00068 J	1.5	
Acetone	0.05	100	MG/KG	0.014	0.0079 J	0.0077 J	0.022	0.99 U	
Acrylonitrile	--	--	MG/KG	0.005 U	0.0045 U	0.0056 U	0.0054 U	0.4 U	
Benzene	0.06	4.8	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
Bromobenzene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Bromochloromethane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Bromodichloromethane	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Bromoform	--	--	MG/KG	0.005 U	0.0045 U	0.0056 U	0.0054 U	0.4 U	
Bromomethane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Carbon Disulfide	--	--	MG/KG	0.012 U	0.011 U	0.014 U	0.014 U	0.99 U	
Carbon Tetrachloride	0.76	2.4	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Chlorobenzene	1.1	100	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Chloroethane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Chloroform	0.37	49	MG/KG	0.0019 U	0.0017 U	0.0021 U	0.002 U	0.15 U	
Chloromethane	--	--	MG/KG	0.005 U	0.0045 U	0.0056 U	0.0054 U	0.4 U	
Cis-1,2-Dichloroethylene	0.25	100	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Cis-1,3-Dichloropropene	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Cymene	--	--	MG/KG	0.00093 J	0.0011 U	0.0014 U	0.0018	8	
Dibromochloromethane	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Dibromomethane	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Dichlorodifluoromethane	--	--	MG/KG	0.012 U	0.011 U	0.014 U	0.014 U	0.99 U	
Dichloroethylenes	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Diethyl Ether (Ethyl Ether)	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Ethylbenzene	1	41	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.069 J	
Hexachlorobutadiene	--	--	MG/KG	0.005 U	0.0045 U	0.0056 U	0.0054 U	0.4 U	
Isopropylbenzene (Cumene)	--	--	MG/KG	0.0044	0.0011 U	0.0014 U	0.0035	10	
m,p-Xylene	--	--	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Methyl Ethyl Ketone (2-Butanone)	0.12	100	MG/KG	0.012 U	0.011 U	0.014 U	0.0083 J	0.99 U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	--	MG/KG	0.012 U	0.011 U	0.014 U	0.014 U	0.99 U	
Methylene Chloride	0.05	100	MG/KG	0.0063 U	0.0056 U	0.007 U	0.0068 U	0.5 U	
Naphthalene	12	100	MG/KG	0.0036 J	0.0045 U	0.0056 U	0.059	3	
N-Butylbenzene	12	100	MG/KG	0.00056 J	0.0011 U	0.0014 U	0.035	7.8	
N-Propylbenzene	3.9	100	MG/KG	0.00089 J	0.0011 U	0.0014 U	0.00076 J	7.1	
O-Xylene (1,2-Dimethylbenzene)	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.28	
Sec-Butylbenzene	11	100	MG/KG	0.0012	0.0011 U	0.0014 U	0.059	6.2	

Table 3. Summary of Volatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
Styrene	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.00036 J	0.02 J	
T-Butylbenzene	5.9	100	MG/KG	0.00041 J	0.0022 U	0.0028 U	0.0048	0.5	
Tert-Butyl Methyl Ether	0.93	100	MG/KG	0.0025 U	0.0022 U	0.0028 U	0.0027 U	0.2 U	
Tetrachloroethylene (PCE)	1.3	19	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Toluene	0.7	100	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.001 J	0.21	
Total, 1,3-Dichloropropene (Cis And Trans)	--	--	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Trans-1,2-Dichloroethene	0.19	100	MG/KG	0.0019 U	0.0017 U	0.0021 U	0.002 U	0.15 U	
Trans-1,3-Dichloropropene	--	--	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Trans-1,4-Dichloro-2-Butene	--	--	MG/KG	0.0063 U	0.0056 U	0.007 U	0.0068 U	0.5 U	
Trichloroethylene (TCE)	0.47	21	MG/KG	0.00063 U	0.00056 U	0.0007 U	0.00068 U	0.05 U	
Trichlorofluoromethane	--	--	MG/KG	0.005 U	0.0045 U	0.0056 U	0.0054 U	0.4 U	
Vinyl Acetate	--	--	MG/KG	0.012 U	0.011 U	0.014 U	0.014 U	0.99 U	
Vinyl Chloride	0.02	0.9	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.099 U	
Xylenes	0.26	100	MG/KG	0.0012 U	0.0011 U	0.0014 U	0.0014 U	0.28	

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

Sample Designation: Sample Date: Sample Depth (ft bls): Normal Sample or Field Duplicate:				R-1	R-2	R-2	R-2	R-3	R-4
				06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
1,2,4,5-Tetrachlorobenzene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
1,2,4-Trichlorobenzene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
1,2-Dichlorobenzene	1.1	100	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
1,3-Dichlorobenzene	2.4	49	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
1,4-Dichlorobenzene	1.8	13	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
1,4-Dioxane (P-Dioxane)	0.1	13	MG/KG	0.032 U	0.032 U	0.029 U	0.034 U	0.032 U	0.03 U
2,4,5-Trichlorophenol	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2,4,6-Trichlorophenol	--	--	MG/KG	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U	0.12 U
2,4-Dichlorophenol	--	--	MG/KG	0.19 U	0.19 U	0.17 U	0.2 U	0.19 U	0.18 U
2,4-Dimethylphenol	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2,4-Dinitrophenol	--	--	MG/KG	1 U	1 U	0.92 U	1.1 U	1 U	0.97 U
2,4-Dinitrotoluene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2,6-Dinitrotoluene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2-Chloronaphthalene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2-Chlorophenol	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2-Methylnaphthalene	--	--	MG/KG	0.07 J	0.26 U	0.23 U	0.034 J	0.26 U	0.24 U
2-Methylphenol (O-Cresol)	0.33	100	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2-Nitroaniline	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
2-Nitrophenol	--	--	MG/KG	0.46 U	0.46 U	0.42 U	0.49 U	0.47 U	0.44 U
3,3'-Dichlorobenzidine	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
3-Nitroaniline	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4,6-Dinitro-2-Methylphenol	--	--	MG/KG	0.55 U	0.56 U	0.5 U	0.59 U	0.56 U	0.53 U
4-Bromophenyl Phenyl Ether	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4-Chloro-3-Methylphenol	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4-Chloroaniline	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4-Chlorophenyl Phenyl Ether	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4-Nitroaniline	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U
4-Nitrophenol	--	--	MG/KG	0.3 U	0.3 U	0.27 U	0.32 U	0.3 U	0.28 U
Acenaphthene	20	100	MG/KG	0.12 J	0.024 J	0.033 J	0.18 U	0.17 U	0.16 U
Acenaphthylene	100	100	MG/KG	0.11 J	0.048 J	0.063 J	0.18 U	0.17 U	0.16 U
Acetophenone	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
Anthracene	100	100	MG/KG	0.27	0.095 J	0.12	0.076 J	0.13 U	0.12 U	
Benzo(A)Anthracene	1	1	MG/KG	0.75	0.32	0.41	0.22	0.13 U	0.12 U	
Benzo(A)Pyrene	1	1	MG/KG	0.81	0.32	0.44	0.29	0.17 U	0.16 U	
Benzo(B)Fluoranthene	1	1	MG/KG	1	0.41	0.52	0.28	0.13 U	0.12 U	
Benzo(G,H,I)Perylene	100	100	MG/KG	0.58	0.24	0.24	0.13 J	0.17 U	0.16 U	
Benzo(K)Fluoranthene	0.8	3.9	MG/KG	0.33	0.13	0.17	0.093 J	0.13 U	0.12 U	
Benzoic Acid	--	--	MG/KG	0.68 U	0.7 U	0.62 U	0.73 U	0.7 U	0.66 U	
Benzyl Alcohol	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Benzyl Butyl Phthalate	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Biphenyl (Diphenyl)	--	--	MG/KG	0.48 U	0.49 U	0.44 U	0.52 U	0.49 U	0.46 U	
Bis(2-Chloroethoxy) Methane	--	--	MG/KG	0.23 U	0.23 U	0.21 U	0.24 U	0.23 U	0.22 U	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	--	--	MG/KG	0.19 U	0.19 U	0.17 U	0.2 U	0.19 U	0.18 U	
Bis(2-Chloroisopropyl) Ether	--	--	MG/KG	0.25 U	0.26 U	0.23 U	0.27 U	0.26 U	0.24 U	
Bis(2-Ethylhexyl) Phthalate	--	--	MG/KG	0.11 J	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Carbazole	--	--	MG/KG	0.12 J	0.045 J	0.048 J	0.23 U	0.22 U	0.2 U	
Chrysene	1	3.9	MG/KG	0.87	0.29	0.38	0.23	0.13 U	0.021 J	
Dibenz(A,H)Anthracene	0.33	0.33	MG/KG	0.12 J	0.059 J	0.06 J	0.043 J	0.13 U	0.12 U	
Dibenzofuran	7	59	MG/KG	0.068 J	0.21 U	0.02 J	0.23 U	0.22 U	0.2 U	
Diethyl Phthalate	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Dimethyl Phthalate	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Di-N-Butyl Phthalate	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Di-N-Octylphthalate	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Fluoranthene	100	100	MG/KG	1.9	0.65	0.84	0.33	0.13 U	0.032 J	
Fluorene	30	100	MG/KG	0.13 J	0.024 J	0.034 J	0.23 U	0.22 U	0.2 U	
Hexachlorobenzene	0.33	1.2	MG/KG	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U	0.12 U	
Hexachlorobutadiene	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Hexachlorocyclopentadiene	--	--	MG/KG	0.6 U	0.61 U	0.55 U	0.65 U	0.62 U	0.58 U	
Hexachloroethane	--	--	MG/KG	0.17 U	0.17 U	0.15 U	0.18 U	0.17 U	0.16 U	
Indeno(1,2,3-C,D)Pyrene	0.5	0.5	MG/KG	0.45	0.2	0.2	0.1 J	0.17 U	0.16 U	
Isophorone	--	--	MG/KG	0.19 U	0.19 U	0.17 U	0.2 U	0.19 U	0.18 U	
M+P MethylPhenol	0.33	100	MG/KG	0.3 U	0.31 U	0.28 U	0.32 U	0.31 U	0.29 U	

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
Naphthalene	12	100	MG/KG	0.07 J	0.21 U	0.19 U	0.045 J	0.22 U	0.2 U	
Nitrobenzene	--	--	MG/KG	0.19 U	0.19 U	0.17 U	0.2 U	0.19 U	0.18 U	
N-Nitrosodi-N-Propylamine	--	--	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
N-Nitrosodiphenylamine	--	--	MG/KG	0.17 U	0.17 U	0.15 U	0.18 U	0.17 U	0.16 U	
Pentachlorophenol	0.8	6.7	MG/KG	0.17 U	0.17 U	0.15 U	0.18 U	0.17 U	0.16 U	
Phenanthrene	100	100	MG/KG	2.1	0.32	0.44	0.22	0.13 U	0.041 J	
Phenol	0.33	100	MG/KG	0.21 U	0.21 U	0.19 U	0.23 U	0.22 U	0.2 U	
Pyrene	100	100	MG/KG	2	0.55	0.7	0.5	0.13 U	0.03 J	

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
1,2,4,5-Tetrachlorobenzene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
1,2,4-Trichlorobenzene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
1,2-Dichlorobenzene	1.1	100	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
1,3-Dichlorobenzene	2.4	49	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
1,4-Dichlorobenzene	1.8	13	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
1,4-Dioxane (P-Dioxane)	0.1	13	MG/KG	0.026 U	0.03 U	0.029 U	0.032 U	0.034 U	
2,4,5-Trichlorophenol	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2,4,6-Trichlorophenol	--	--	MG/KG	0.1 U	0.12 U	0.12 U	0.13 U	0.14 U	
2,4-Dichlorophenol	--	--	MG/KG	0.1 J	0.18 U	0.17 U	0.19 U	0.2 U	
2,4-Dimethylphenol	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2,4-Dinitrophenol	--	--	MG/KG	0.83 U	0.95 U	0.93 U	1 U	1.1 U	
2,4-Dinitrotoluene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2,6-Dinitrotoluene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2-Chloronaphthalene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2-Chlorophenol	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2-Methylnaphthalene	--	--	MG/KG	0.21 U	0.077 J	0.23 U	0.37	5.5	
2-Methylphenol (O-Cresol)	0.33	100	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2-Nitroaniline	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
2-Nitrophenol	--	--	MG/KG	0.37 U	0.43 U	0.42 U	0.46 U	0.49 U	
3,3'-Dichlorobenzidine	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
3-Nitroaniline	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4,6-Dinitro-2-Methylphenol	--	--	MG/KG	0.45 U	0.51 U	0.5 U	0.56 U	0.59 U	
4-Bromophenyl Phenyl Ether	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4-Chloro-3-Methylphenol	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4-Chloroaniline	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4-Chlorophenyl Phenyl Ether	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4-Nitroaniline	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
4-Nitrophenol	--	--	MG/KG	0.24 U	0.28 U	0.27 U	0.3 U	0.32 U	
Acenaphthene	20	100	MG/KG	0.49	0.18	0.16 U	0.69	7.5	
Acenaphthylene	100	100	MG/KG	0.14 U	0.12 J	0.16 U	0.17 U	0.18 U	
Acetophenone	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
Anthracene	100	100	MG/KG	0.47	0.47	0.12 U	0.29	2.7	
Benzo(A)Anthracene	1	1	MG/KG	0.11	1.1	0.12 U	0.056 J	0.36	
Benzo(A)Pyrene	1	1	MG/KG	0.14 U	0.98	0.16 U	0.17 U	0.18	
Benzo(B)Fluoranthene	1	1	MG/KG	0.1 U	1.2	0.12 U	0.13 U	0.12 J	
Benzo(G,H,I)Perylene	100	100	MG/KG	0.14 U	0.56	0.16 U	0.17 U	0.054 J	
Benzo(K)Fluoranthene	0.8	3.9	MG/KG	0.1 U	0.37	0.12 U	0.13 U	0.05 J	
Benzoic Acid	--	--	MG/KG	0.56 U	0.64 U	0.63 U	0.7 U	0.73 U	
Benzyl Alcohol	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Benzyl Butyl Phthalate	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Biphenyl (Diphenyl)	--	--	MG/KG	0.39 U	0.45 U	0.44 U	0.49 U	0.18 J	
Bis(2-Chloroethoxy) Methane	--	--	MG/KG	0.19 U	0.21 U	0.21 U	0.23 U	0.24 U	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	--	--	MG/KG	0.16 U	0.18 U	0.17 U	0.19 U	0.2 U	
Bis(2-Chloroisopropyl) Ether	--	--	MG/KG	0.21 U	0.24 U	0.23 U	0.26 U	0.27 U	
Bis(2-Ethylhexyl) Phthalate	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Carbazole	--	--	MG/KG	0.17 U	0.2	0.19 U	0.22 U	0.23 U	
Chrysene	1	3.9	MG/KG	0.14	1	0.12 U	0.066 J	0.5	
Dibenz(A,H)Anthracene	0.33	0.33	MG/KG	0.1 U	0.14	0.12 U	0.13 U	0.028 J	
Dibenzofuran	7	59	MG/KG	0.17 U	0.13 J	0.19 U	0.097 J	0.23 U	
Diethyl Phthalate	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Dimethyl Phthalate	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Di-N-Butyl Phthalate	--	--	MG/KG	0.17 U	0.049 J	0.19 U	0.22 U	0.23 U	
Di-N-Octylphthalate	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Fluoranthene	100	100	MG/KG	0.52	2.2	0.12 U	0.1 J	1.2	
Fluorene	30	100	MG/KG	0.17 U	0.2	0.19 U	0.28	3.6	
Hexachlorobenzene	0.33	1.2	MG/KG	0.1 U	0.12 U	0.12 U	0.13 U	0.14 U	
Hexachlorobutadiene	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Hexachlorocyclopentadiene	--	--	MG/KG	0.49 U	0.57 U	0.55 U	0.62 U	0.65 U	
Hexachloroethane	--	--	MG/KG	0.14 U	0.16 U	0.16 U	0.17 U	0.18 U	
Indeno(1,2,3-C,D)Pyrene	0.5	0.5	MG/KG	0.14 U	0.63	0.16 U	0.17 U	0.055 J	
Isophorone	--	--	MG/KG	0.16 U	0.18 U	0.17 U	0.19 U	0.2 U	
M+P MethylPhenol	0.33	100	MG/KG	0.25 U	0.28 U	0.28 U	0.31 U	0.33 U	

Table 4. Summary of Semivolatile Organic Compounds in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
Naphthalene	12	100	MG/KG	0.17 U	0.12 J	0.19 U	0.098 J	1.3	
Nitrobenzene	--	--	MG/KG	0.16 U	0.18 U	0.17 U	0.19 U	0.2 U	
N-Nitrosodi-N-Propylamine	--	--	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
N-Nitrosodiphenylamine	--	--	MG/KG	0.14 U	0.16 U	0.16 U	0.17 U	0.18 U	
Pentachlorophenol	0.8	6.7	MG/KG	0.14 U	0.16 U	0.16 U	0.17 U	0.18 U	
Phenanthrene	100	100	MG/KG	0.22	2.1	0.12 U	1.3	23	
Phenol	0.33	100	MG/KG	0.17 U	0.2 U	0.19 U	0.22 U	0.23 U	
Pyrene	100	100	MG/KG	0.72	1.9	0.12 U	0.24	2	

Table 5. Summary of Metals in Soil, 27-50 1st Street, Astoria, New York

Sample Designation:				R-1	R-2	R-2	R-2	R-3	R-4	R-4	R-5
Sample Date:				06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Sample Depth (ft bls):				5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6	7 - 9	4 - 6
Normal Sample or Field Duplicate:				N	N	FD	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units								
Aluminum	--	--	MG/KG	8020	9830	9540	11200	737	12400	14400	5100
Antimony	--	--	MG/KG	4.61 J	2.17 J	1.66 J	2.88 J	23.9	2.06 J	1.05 J	1.35 J
Arsenic	13	16	MG/KG	6.09	3.55	2.59	28.8	5.3	9.41	0.96	1.49
Barium	350	400	MG/KG	217	149	142	69.9	19	188	279	56.2
Beryllium	7.2	72	MG/KG	0.525	0.766	0.678	0.715	0.258 J	0.507	0.391 J	0.369 J
Cadmium	2.5	4.3	MG/KG	0.937 J	0.364 J	0.245 J	0.261 J	0.133 J	0.302 J	0.19 J	0.946 U
Calcium	--	--	MG/KG	30400	25800	9580	1560	127000	4080	3550	118000
Chromium, Total	30	180	MG/KG	28.1	37.6	34.7	84.6	5.71	59.6	81.8	13.4
Cobalt	--	--	MG/KG	6.77	8.24	8.49	16.3	1.43 J	11.9	13.2	4.32
Copper	50	270	MG/KG	143	39.7	34.3	286	8.4	77.8	56.8	40.2
Iron	--	--	MG/KG	21100	30500	20900	30700	7960	24900	23900	8830
Lead	63	400	MG/KG	1600	122	114	369	172	35	2.95 J	38.6
Magnesium	--	--	MG/KG	4480	5700	4700	7060	7290	8630	11000	50100
Manganese	1600	2000	MG/KG	272	612	457	255	101	256	258	373
Mercury	0.18	0.81	MG/KG	1.57	0.155	0.149	0.834	0.082 U	0.079 U	0.065 U	0.075 J
Nickel	30	310	MG/KG	18.8	23.1	22.6	241	7.4	33.3	35.2	12.7
Potassium	--	--	MG/KG	1090	2440	3100	3640	186 J	6080	10700	842
Selenium	3.9	180	MG/KG	1.98 U	2 U	1.78 U	2.09 U	1.99 U	0.745 J	0.482 J	1.89 U
Silver	2	180	MG/KG	0.358 J	0.5 U	0.445 U	0.522 U	0.497 U	0.318 J	0.249 J	0.473 U
Sodium	--	--	MG/KG	246	569	425	3020	87.7 J	548	637	535
Thallium	--	--	MG/KG	0.396 J	2 U	0.479 J	0.752 J	1.99 U	1.97 U	1.59 U	1.89 U
Vanadium	--	--	MG/KG	23.8	35.3	31.9	51.7	4.16	54.8	63.6	11.7
Zinc	109	10000	MG/KG	452	102	103	174	19.2	86.7	47.8	27.7

Table 5. Summary of Metals in Soil, 27-50 1st Street, Astoria, New York

Sample Designation:				R-5	R-6	R-6
Sample Date:				06/02/2023	06/05/2023	06/07/2023
Sample Depth (ft bls):				7 - 9	7 - 9	9 - 11
Normal Sample or Field Duplicate:				N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units			
Aluminum	--	--	MG/KG	5930	9640	17700
Antimony	--	--	MG/KG	0.914 J	1.19 J	0.892 J
Arsenic	13	16	MG/KG	3.14	0.999 U	1.29
Barium	350	400	MG/KG	71.1	76.8	427
Beryllium	7.2	72	MG/KG	0.338 J	0.706	0.664
Cadmium	2.5	4.3	MG/KG	0.103 J	0.999 U	0.164 J
Calcium	--	--	MG/KG	80800	3950	5860
Chromium, Total	30	180	MG/KG	13.6	109	205
Cobalt	--	--	MG/KG	4.38	11.2	32.2
Copper	50	270	MG/KG	17.7	11.8	103
Iron	--	--	MG/KG	10600	15200	29400
Lead	63	400	MG/KG	20.6	1.04 J	2.78 J
Magnesium	--	--	MG/KG	35400	9030	15800
Manganese	1600	2000	MG/KG	789	94.3	212
Mercury	0.18	0.81	MG/KG	0.077 U	0.088 U	0.086 U
Nickel	30	310	MG/KG	11.9	50	125
Potassium	--	--	MG/KG	1430	1920	5720
Selenium	3.9	180	MG/KG	1.84 U	2 U	2.12 U
Silver	2	180	MG/KG	0.46 U	0.499 U	0.53 U
Sodium	--	--	MG/KG	434	918	654
Thallium	--	--	MG/KG	1.03 J	1.03 J	1.04 J
Vanadium	--	--	MG/KG	15	30.3	61
Zinc	109	10000	MG/KG	14.2	22	50.4

Table 6. Summary of Polychlorinated Biphenyls in Soil, 27-50 1st Street, Astoria, New York

Sample Designation: Sample Date: Sample Depth (ft bls): Normal Sample or Field Duplicate:				R-1	R-2	R-2	R-2	R-3	R-4	R-4
				06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023	06/02/2023
				5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6	7 - 9
				N	N	FD	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
PCB-1016 (Aroclor 1016)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1221 (Aroclor 1221)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1232 (Aroclor 1232)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1242 (Aroclor 1242)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1248 (Aroclor 1248)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1254 (Aroclor 1254)	--	--	MG/KG	0.268	0.0654 U	0.011 J	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1260 (Aroclor 1260)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0268 J
PCB-1262 (Aroclor 1262)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
PCB-1268 (Aroclor 1268)	--	--	MG/KG	0.0593 U	0.0654 U	0.0536 U	0.0669 U	0.0636 U	0.0606 U	0.0508 U
Polychlorinated Biphenyl (PCBs)	0.1	1	MG/KG	0.268	0.0654 U	0.011 J	0.0669 U	0.0636 U	0.0606 U	0.0268 J

Table 6. Summary of Polychlorinated Biphenyls in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units					
PCB-1016 (Aroclor 1016)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1221 (Aroclor 1221)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1232 (Aroclor 1232)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1242 (Aroclor 1242)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1248 (Aroclor 1248)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1254 (Aroclor 1254)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1260 (Aroclor 1260)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1262 (Aroclor 1262)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
PCB-1268 (Aroclor 1268)	--	--	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	
Polychlorinated Biphenyl (PCBs)	0.1	1	MG/KG	0.0567 U	0.0581 U	0.0647 U	0.0635 U	

Table 7. Summary of Pesticides and Herbicides in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-1	R-2	R-2	R-2	R-3	R-4
				Sample Date:	06/05/2023	06/05/2023	06/05/2023	06/05/2023	06/02/2023	06/02/2023
				Sample Depth (ft bls):	5 - 7	5 - 7	5 - 7	12 - 14	7 - 9	4 - 6
				Normal Sample or Field Duplicate:	N	N	FD	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units							
2,4-D (Dichlorophenoxyacetic Acid)	--	--	MG/KG	0.211 U	0.218 U	0.189 U	0.225 U	0.216 U	0.202 U	
Acetic acid, (2,4,5-trichlorophenoxy)-	--	--	MG/KG	0.211 U	0.218 U	0.189 U	0.225 U	0.216 U	0.202 U	
Aldrin	0.005	0.097	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	MG/KG	0.000849 U	0.000822 U	0.000745 U	0.000901 U	0.000825 U	0.00082 U	
Alpha Endosulfan	2.4	24	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Beta Endosulfan	2.4	24	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Chlordane	--	--	MG/KG	0.017 U	0.0323	0.0186	0.018 U	0.0165 U	0.0164 U	
cis-Chlordane	0.094	4.2	MG/KG	0.00219 J	0.00525 P	0.00327	0.0027 U	0.00248 U	0.00246 U	
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Dieldrin	0.005	0.2	MG/KG	0.00127 U	0.00224	0.00241	0.00135 U	0.00124 U	0.00123 U	
Endosulfan Sulfate	2.4	24	MG/KG	0.000849 U	0.000822 U	0.000745 U	0.000901 U	0.000825 U	0.00082 U	
Endrin	0.014	11	MG/KG	0.000849 U	0.000822 U	0.000745 U	0.000901 U	0.000825 U	0.00082 U	
Endrin Aldehyde	--	--	MG/KG	0.00255 U	0.00246 U	0.00224 U	0.0027 U	0.00248 U	0.00246 U	
Endrin Ketone	--	--	MG/KG	0.00204 U	0.00197 U	0.00179 U	0.00216 U	0.00198 U	0.00197 U	
Gamma Bhc (Lindane)	0.1	1.3	MG/KG	0.000849 U	0.000822 U	0.000745 U	0.000901 U	0.000825 U	0.00082 U	
Heptachlor	0.042	2.1	MG/KG	0.00102 U	0.000986 U	0.000894 U	0.00108 U	0.00099 U	0.000984 U	
Heptachlor Epoxide	--	--	MG/KG	0.00382 U	0.0037 U	0.00335 U	0.00406 U	0.00371 U	0.00369 U	
Methoxychlor	--	--	MG/KG	0.00382 U	0.0037 U	0.00335 U	0.00406 U	0.00371 U	0.00369 U	
P,P'-DDD	0.0033	13	MG/KG	0.00204 U	0.00346	0.00221	0.00216 U	0.00198 U	0.00197 U	
P,P'-DDE	0.0033	8.9	MG/KG	0.00204 U	0.008	0.00673	0.00216 U	0.00198 U	0.00197 U	
P,P'-DDT	0.0033	7.9	MG/KG	0.0431	0.0415	0.0277	0.00216 U	0.00198 U	0.00197 U	
Silvex (2,4,5-TP)	3.8	100	MG/KG	0.211 U	0.218 U	0.189 U	0.225 U	0.216 U	0.202 U	
Toxaphene	--	--	MG/KG	0.0382 U	0.037 U	0.0335 U	0.0406 U	0.0371 U	0.0369 U	
trans-Chlordane	--	--	MG/KG	0.00255 U	0.00281 IP	0.00436	0.0027 U	0.00248 U	0.00246 U	

Table 7. Summary of Pesticides and Herbicides in Soil, 27-50 1st Street, Astoria, New York

				Sample Designation:	R-4	R-5	R-5	R-6	R-6
				Sample Date:	06/02/2023	06/02/2023	06/02/2023	06/05/2023	06/07/2023
				Sample Depth (ft bls):	7 - 9	4 - 6	7 - 9	7 - 9	9 - 11
				Normal Sample or Field Duplicate:	N	N	N	N	N
Parameters	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units						
2,4-D (Dichlorophenoxyacetic Acid)	--	--	MG/KG	0.173 U	0.199 U	0.193 U	0.212 U	0.225 U	
Acetic acid, (2,4,5-trichlorophenoxy)-	--	--	MG/KG	0.173 U	0.199 U	0.193 U	0.212 U	0.225 U	
Aldrin	0.005	0.097	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	MG/KG	0.000671 U	0.000805 U	0.000763 U	0.000849 U	0.000899 U	
Alpha Endosulfan	2.4	24	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Beta Endosulfan	2.4	24	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Chlordane	--	--	MG/KG	0.0134 U	0.0161 U	0.0152 U	0.017 U	0.018 U	
cis-Chlordane	0.094	4.2	MG/KG	0.00201 U	0.00241 U	0.00229 U	0.00255 U	0.0027 U	
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Dieldrin	0.005	0.2	MG/KG	0.00101 U	0.00121 U	0.00114 U	0.00127 U	0.00135 U	
Endosulfan Sulfate	2.4	24	MG/KG	0.000671 U	0.000805 U	0.000763 U	0.000849 U	0.000899 U	
Endrin	0.014	11	MG/KG	0.000671 U	0.000805 U	0.000763 U	0.000849 U	0.000899 U	
Endrin Aldehyde	--	--	MG/KG	0.00201 U	0.00241 U	0.00229 U	0.00255 U	0.0027 U	
Endrin Ketone	--	--	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Gamma Bhc (Lindane)	0.1	1.3	MG/KG	0.000671 U	0.000805 U	0.000763 U	0.000849 U	0.000899 U	
Heptachlor	0.042	2.1	MG/KG	0.000805 U	0.000966 U	0.000915 U	0.00102 U	0.00108 U	
Heptachlor Epoxide	--	--	MG/KG	0.00302 U	0.00362 U	0.00343 U	0.00382 U	0.00405 U	
Methoxychlor	--	--	MG/KG	0.00302 U	0.00362 U	0.00343 U	0.00382 U	0.00405 U	
P,P'-DDD	0.0033	13	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
P,P'-DDE	0.0033	8.9	MG/KG	0.00161 U	0.000745 J	0.00183 U	0.00204 U	0.00216 U	
P,P'-DDT	0.0033	7.9	MG/KG	0.00161 U	0.00193 U	0.00183 U	0.00204 U	0.00216 U	
Silvex (2,4,5-TP)	3.8	100	MG/KG	0.173 U	0.199 U	0.193 U	0.212 U	0.225 U	
Toxaphene	--	--	MG/KG	0.0302 U	0.0362 U	0.0343 U	0.0382 U	0.0405 U	
trans-Chlordane	--	--	MG/KG	0.00201 U	0.00241 U	0.00229 U	0.00255 U	0.0027 U	

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
1,1,1,2-Tetrachloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,1-Trichloroethane (TCA)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.94 J	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1-Dichloropropene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,3-Trichloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4,5-Tetramethylbenzene	5	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	9
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trimethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	74
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	8.6
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,3-Dichloropropane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Diethyl Benzene	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	8.9
1,4-Dioxane (P-Dioxane)	0.35	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2,2-Dichloropropane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
2-Chlorotoluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
4-Chlorotoluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
4-Ethyltoluene	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	38
Acetone	50	UG/L	5 U	5 U	1.8 J	5 U	5 U	2.4 J	74
Acrylonitrile	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Benzene	1	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	54
Bromobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	1.2 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Cymene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	13
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromomethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Dichloroethylenes	5	UG/L	1.2 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Diethyl Ether (Ethyl Ether)	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	160
Hexachlorobutadiene	0.5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	48
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	68
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	17
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Naphthalene	10	UG/L	2.5 U	1 J	2.5 U	2.5 U	2.5 U	1.6 J	410
N-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	7.1
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	50
Sec-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.8 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
T-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.5
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,4-Dichloro-2-Butene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trichloroethylene (TCE)	5	UG/L	0.57	0.5 U	0.5 U	0.5 U	0.46 J	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Acetate	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	120

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
1,1,1,2-Tetrachloroethane	5	UG/L	5 U	5 U
1,1,1-Trichloroethane (TCA)	5	UG/L	5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1 U	1 U
1,1,2-Trichloroethane	1	UG/L	3 U	3 U
1,1-Dichloroethane	5	UG/L	5 U	5 U
1,1-Dichloroethene	5	UG/L	1 U	1 U
1,1-Dichloropropene	5	UG/L	5 U	5 U
1,2,3-Trichlorobenzene	5	UG/L	5 U	5 U
1,2,3-Trichloropropane	0.04	UG/L	5 U	5 U
1,2,4,5-Tetramethylbenzene	5	UG/L	8.7	9
1,2,4-Trichlorobenzene	5	UG/L	5 U	5 U
1,2,4-Trimethylbenzene	5	UG/L	20	20
1,2-Dibromo-3-Chloropropane	0.04	UG/L	5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	UG/L	4 U	4 U
1,2-Dichlorobenzene	3	UG/L	5 U	5 U
1,2-Dichloroethane	0.6	UG/L	1 U	1 U
1,2-Dichloropropane	1	UG/L	2 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	1.5 J	1.6 J
1,3-Dichlorobenzene	3	UG/L	5 U	5 U
1,3-Dichloropropane	5	UG/L	5 U	5 U
1,4-Dichlorobenzene	3	UG/L	5 U	5 U
1,4-Diethyl Benzene	--	UG/L	4.6	4.8
1,4-Dioxane (P-Dioxane)	0.35	UG/L	500 U	500 U
2,2-Dichloropropane	5	UG/L	5 U	5 U
2-Chlorotoluene	5	UG/L	5 U	5 U
2-Hexanone	50	UG/L	10 U	10 U
4-Chlorotoluene	5	UG/L	5 U	5 U
4-Ethyltoluene	--	UG/L	16	16
Acetone	50	UG/L	10 U	10 U
Acrylonitrile	5	UG/L	10 U	10 U
Benzene	1	UG/L	58	62
Bromobenzene	5	UG/L	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
Bromochloromethane	5	UG/L	5 U	5 U
Bromodichloromethane	50	UG/L	1 U	1 U
Bromoform	50	UG/L	4 U	4 U
Bromomethane	5	UG/L	5 U	5 U
Carbon Disulfide	60	UG/L	10 U	10 U
Carbon Tetrachloride	5	UG/L	1 U	1 U
Chlorobenzene	5	UG/L	5 U	5 U
Chloroethane	5	UG/L	5 U	5 U
Chloroform	7	UG/L	5 U	5 U
Chloromethane	5	UG/L	5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	5 U	5 U
Cis-1,3-Dichloropropene	--	UG/L	1 U	1 U
Cymene	5	UG/L	2.9 J	3 J
Dibromochloromethane	50	UG/L	1 U	1 U
Dibromomethane	5	UG/L	10 U	10 U
Dichlorodifluoromethane	5	UG/L	10 U	10 U
Dichloroethylenes	5	UG/L	5 U	5 U
Diethyl Ether (Ethyl Ether)	--	UG/L	5 U	5 U
Ethylbenzene	5	UG/L	22	22
Hexachlorobutadiene	0.5	UG/L	5 U	5 U
Isopropylbenzene (Cumene)	5	UG/L	52	54
m,p-Xylene	5	UG/L	19	19
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	10 U	10 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	10 U	10 U
Methylene Chloride	5	UG/L	5 U	5 U
Naphthalene	10	UG/L	42	43
N-Butylbenzene	5	UG/L	2.9 J	2.9 J
N-Propylbenzene	5	UG/L	11	12
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	23	24
Sec-Butylbenzene	5	UG/L	5.8	6.1
Styrene	5	UG/L	5 U	5 U
T-Butylbenzene	5	UG/L	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
Tert-Butyl Methyl Ether	10	UG/L	5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	1 U	1 U
Toluene	5	UG/L	7.6	7.9
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	1 U	1 U
Trans-1,4-Dichloro-2-Butene	5	UG/L	5 U	5 U
Trichloroethylene (TCE)	5	UG/L	1 U	1 U
Trichlorofluoromethane	5	UG/L	5 U	5 U
Vinyl Acetate	--	UG/L	10 U	10 U
Vinyl Chloride	2	UG/L	2 U	2 U
Xylenes	5	UG/L	42	43

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
1,2,4,5-Tetrachlorobenzene	5	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	3	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,3-Dichlorobenzene	3	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,4-Dichlorobenzene	3	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,4,5-Trichlorophenol	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	10	UG/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chloronaphthalene	10	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chlorophenol	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	--	UG/L	0.1 U	0.18	0.06 J	0.07 JB	0.1 U	0.03 JB	160
2-Methylphenol (O-Cresol)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	--	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4,6-Dinitro-2-Methylphenol	--	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl Phenyl Ether	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chloro-3-Methylphenol	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chloroaniline	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl Phenyl Ether	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Nitroaniline	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitrophenol	--	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	20	UG/L	0.06 J	0.21	0.06 J	0.04 J	0.03 J	0.13	72
Acenaphthylene	20	UG/L	0.02 J	0.14	0.35	0.05 J	0.1 U	0.04 J	5.5
Acetophenone	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	50	UG/L	0.12	0.08 J	0.24	0.06 J	0.03 J	0.38	20
Benzo(A)Anthracene	0.002	UG/L	0.1 U	0.1 U	1.1	0.18	0.03 J	0.1 U	5.5

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
Benzo(A)Pyrene	0	UG/L	0.1 U	0.1 U	1.6	0.27	0.03 J	0.1 U	3.1
Benzo(B)Fluoranthene	0.002	UG/L	0.01 J	0.1 U	1.9	0.32	0.03 J	0.1 U	2.2
Benzo(G,H,I)Perylene	--	UG/L	0.1 U	0.1 U	1.2	0.16	0.02 J	0.1 U	0.79
Benzo(K)Fluoranthene	0.002	UG/L	0.1 U	0.1 U	0.57	0.09 J	0.02 J	0.1 U	0.56
Benzoic Acid	--	UG/L	50 U	9.6 J	8.5 J	50 U	50 U	50 U	50 U
Benzyl Alcohol	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzyl Butyl Phthalate	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Biphenyl (Diphenyl)	5	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Chloroethoxy) Methane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Chloroisopropyl) Ether	5	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Ethylhexyl) Phthalate	5	UG/L	3 U	3 U	3.8	3 U	3 U	3 U	3 U
Carbazole	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chrysene	0.002	UG/L	0.01 J	0.1 U	1.1	0.18	0.02 J	0.1 U	6.6
Dibenz(A,H)Anthracene	--	UG/L	0.1 U	0.1 U	0.3	0.05 J	0.1 U	0.1 U	0.57
Dibenzofuran	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diethyl Phthalate	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dimethyl Phthalate	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-N-Butyl Phthalate	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-N-Octylphthalate	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	50	UG/L	0.1 U	0.03 J	1.9	0.33	0.06 J	0.04 J	6.4
Fluorene	50	UG/L	0.1 U	0.08 J	0.06 J	0.03 J	0.1 U	0.02 J	23
Hexachlorobenzene	0.04	UG/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobutadiene	0.5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	5	UG/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Hexachloroethane	5	UG/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Indeno(1,2,3-C,D)Pyrene	0.002	UG/L	0.1 U	0.1 U	1.2	0.16	0.02 J	0.1 U	0.83
Isophorone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
M+P MethylPhenol	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	10	UG/L	0.1 U	0.68	0.06 J	0.06 JB	0.1 U	0.1 U	26
Nitrobenzene	0.4	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
N-Nitrosodi-N-Propylamine	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
N-Nitrosodiphenylamine	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene	50	UG/L	0.04 J	0.35	0.74	0.24	0.04 J	0.03 J	140
Phenol	1	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	1.8 J
Pyrene	50	UG/L	0.07 J	0.15	1.9	0.41	0.06 J	0.06 J	16

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
1,2,4,5-Tetrachlorobenzene	5	UG/L	10 U	10 U
1,2,4-Trichlorobenzene	5	UG/L	5 U	5 U
1,2-Dichlorobenzene	3	UG/L	2 U	2 U
1,3-Dichlorobenzene	3	UG/L	2 U	2 U
1,4-Dichlorobenzene	3	UG/L	2 U	2 U
2,4,5-Trichlorophenol	--	UG/L	5 U	5 U
2,4,6-Trichlorophenol	--	UG/L	5 U	5 U
2,4-Dichlorophenol	5	UG/L	5 U	5 U
2,4-Dimethylphenol	50	UG/L	5 U	5 U
2,4-Dinitrophenol	10	UG/L	20 U	20 U
2,4-Dinitrotoluene	5	UG/L	5 U	5 U
2,6-Dinitrotoluene	5	UG/L	5 U	5 U
2-Chloronaphthalene	10	UG/L	0.2 U	0.2 U
2-Chlorophenol	--	UG/L	2 U	2 U
2-Methylnaphthalene	--	UG/L	1.6	2.9
2-Methylphenol (O-Cresol)	--	UG/L	5 U	5 U
2-Nitroaniline	5	UG/L	5 U	5 U
2-Nitrophenol	--	UG/L	10 U	10 U
3,3'-Dichlorobenzidine	5	UG/L	5 U	5 U
3-Nitroaniline	5	UG/L	5 U	5 U
4,6-Dinitro-2-Methylphenol	--	UG/L	10 U	10 U
4-Bromophenyl Phenyl Ether	--	UG/L	2 U	2 U
4-Chloro-3-Methylphenol	--	UG/L	2 U	2 U
4-Chloroaniline	5	UG/L	5 U	5 U
4-Chlorophenyl Phenyl Ether	--	UG/L	2 U	2 U
4-Nitroaniline	5	UG/L	5 U	5 U
4-Nitrophenol	--	UG/L	10 U	10 U
Acenaphthene	20	UG/L	28	33
Acenaphthylene	20	UG/L	1.8	2.2
Acetophenone	--	UG/L	5 U	5 U
Anthracene	50	UG/L	2.2	2.8
Benzo(A)Anthracene	0.002	UG/L	0.08 J	0.09 J

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
Benzo(A)Pyrene	0	UG/L	0.04 J	0.04 J
Benzo(B)Fluoranthene	0.002	UG/L	0.03 J	0.03 J
Benzo(G,H,I)Perylene	--	UG/L	0.01 J	0.1 U
Benzo(K)Fluoranthene	0.002	UG/L	0.01 J	0.01 J
Benzoic Acid	--	UG/L	50 U	50 U
Benzyl Alcohol	--	UG/L	2 U	2 U
Benzyl Butyl Phthalate	50	UG/L	5 U	5 U
Biphenyl (Diphenyl)	5	UG/L	0.89 J	1.1 J
Bis(2-Chloroethoxy) Methane	5	UG/L	5 U	5 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	UG/L	2 U	2 U
Bis(2-Chloroisopropyl) Ether	5	UG/L	2 U	2 U
Bis(2-Ethylhexyl) Phthalate	5	UG/L	3 U	3 U
Carbazole	--	UG/L	2 U	2 U
Chrysene	0.002	UG/L	0.11	0.12
Dibenz(A,H)Anthracene	--	UG/L	0.1 U	0.1 U
Dibenzofuran	--	UG/L	1.6 J	1.7 J
Diethyl Phthalate	50	UG/L	5 U	5 U
Dimethyl Phthalate	50	UG/L	5 U	5 U
Di-N-Butyl Phthalate	50	UG/L	5 U	5 U
Di-N-Octylphthalate	--	UG/L	5 U	5 U
Fluoranthene	50	UG/L	0.46	0.54
Fluorene	50	UG/L	4	5.2
Hexachlorobenzene	0.04	UG/L	0.8 U	0.8 U
Hexachlorobutadiene	0.5	UG/L	0.5 U	0.5 U
Hexachlorocyclopentadiene	5	UG/L	20 U	20 U
Hexachloroethane	5	UG/L	0.8 U	0.8 U
Indeno(1,2,3-C,D)Pyrene	0.002	UG/L	0.01 J	0.01 J
Isophorone	50	UG/L	5 U	5 U
M+P MethylPhenol	--	UG/L	5 U	5 U
Naphthalene	10	UG/L	8.2	18
Nitrobenzene	0.4	UG/L	2 U	2 U
N-Nitrosodi-N-Propylamine	--	UG/L	5 U	5 U

Table 9. Summary of Semivolatile Organic Compounds in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
N-Nitrosodiphenylamine	50	UG/L	2 U	2 U
Phenanthrene	50	UG/L	1.3	6.9
Phenol	1	UG/L	5 U	0.82 J
Pyrene	50	UG/L	0.85	1

Table 10. Summary of Metals in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5	RMW-6	RMW-6
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023	06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N	N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units									
Aluminum	--	UG/L	81.5	59.7 J	46200	765	597	130	227	18.8	17.8
Antimony	3	UG/L	2.81 J	40 U	1.82 J	40 U	40 U	1.14 J	1.06 J	4 U	4 U
Arsenic	25	UG/L	0.39 J	2.18 J	18.16	2.56 J	2.38 J	1.11	2.67	0.8	0.77
Barium	1000	UG/L	122.5	132.4	929.3	65.8	91.14	96.86	111.1	316.6	329.7
Beryllium	3	UG/L	0.5 U	5 U	2.28	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	5	UG/L	0.08 J	2 U	1.96	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	--	UG/L	175000	193000	508000	143000	197000	319000	83000	286000	293000
Chromium, Total	50	UG/L	1.17	10 U	95.57	2.17 J	10 U	0.88 J	1.57	0.99 J	0.88 J
Cobalt	--	UG/L	0.73	2.95 J	51	5 U	5 U	1.03	0.74	0.38 J	0.37 J
Copper	200	UG/L	8.46	7.37 J	316.2	31.75	10 U	3.34	2.91	1.13	0.97 J
Iron	300	UG/L	148	4650	62500	901	615	233	272	5680	5370
Lead	25	UG/L	0.8 J	10.99	2735	42.26	14.34	1.08	1.24	0.82 J	0.64 J
Magnesium	35000	UG/L	46800	1310000	92000	844000	722000	194000	27500	89200	91100
Manganese	300	UG/L	191.9	216.6	3480	28.74	106.5	160.8	186	2284	2291
Mercury	0.7	UG/L	0.2 U	0.2 U	6.44	0.12 J	0.18 J	0.2 U	0.2 U	0.14 J	0.15 J
Nickel	100	UG/L	10.49	8.51 J	73.88	13.06 J	20 U	3.35	7.14	2.5	2.14
Potassium	--	UG/L	29500	208000	53700	207000	187000	67800	42800	28900	30100
Selenium	10	UG/L	8.3	50 U	31.8	50 U	50 U	24.6	5 U	5 U	5 U
Silver	50	UG/L	0.4 U	4 U	0.71	4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium	20000	UG/L	181000	12100000	455000	6910000	5940000	812000	282000	323000	327000
Thallium	0.5	UG/L	0.23 J	1.59 J	0.61 J	10 U	10 U	1 U	1 U	1 U	1 U
Vanadium	--	UG/L	3.91 J	50 U	158.5	50 U	50 U	1.71 J	11.09	4.51 J	4.52 J
Zinc	2000	UG/L	5.32 J	100 U	748	100 U	100 U	10 U	10 U	10 U	10 U

Table 11. Summary of Polychlorinated Biphenyls in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5	RMW-6
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023	06/15/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units								
PCB-1016 (Aroclor 1016)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1221 (Aroclor 1221)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1232 (Aroclor 1232)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1242 (Aroclor 1242)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1248 (Aroclor 1248)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1254 (Aroclor 1254)	--	UG/L	0.071 U	0.071 U	0.178	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1260 (Aroclor 1260)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1262 (Aroclor 1262)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
PCB-1268 (Aroclor 1268)	--	UG/L	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
Polychlorinated Biphenyl (PCBs)	0.09	UG/L	0.071 U	0.071 U	0.178	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U

Table 11. Summary of Polychlorinated Biphenyls in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:		RMW-6	
Sample Date:		06/15/2023	
Normal Sample or Field Duplicate:		FD	
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units	
PCB-1016 (Aroclor 1016)	--	UG/L	0.071 U
PCB-1221 (Aroclor 1221)	--	UG/L	0.071 U
PCB-1232 (Aroclor 1232)	--	UG/L	0.071 U
PCB-1242 (Aroclor 1242)	--	UG/L	0.071 U
PCB-1248 (Aroclor 1248)	--	UG/L	0.071 U
PCB-1254 (Aroclor 1254)	--	UG/L	0.071 U
PCB-1260 (Aroclor 1260)	--	UG/L	0.071 U
PCB-1262 (Aroclor 1262)	--	UG/L	0.071 U
PCB-1268 (Aroclor 1268)	--	UG/L	0.071 U
Polychlorinated Biphenyl (PCBs)	0.09	UG/L	0.071 U

Table 12. Summary of Pesticides and Herbicides in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			LB-12B	LB-1A	RMW-1	RMW-2	RMW-3	RMW-4	RMW-5
Sample Date:			06/21/2023	06/21/2023	06/16/2023	06/15/2023	06/15/2023	06/16/2023	06/16/2023
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units							
2,4-D (Dichlorophenoxyacetic Acid)	50	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetic acid, (2,4,5-trichlorophenoxy)-	35	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aldrin	0	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Alpha Endosulfan	--	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Beta Endosulfan	--	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Chlordane	0.05	UG/L	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
cis-Chlordane	--	UG/L	0.014 U	0.014 U	0.007 J	0.014 U	0.014 U	0.014 U	0.014 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Dieldrin	0.004	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endosulfan Sulfate	--	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin	0	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin Aldehyde	5	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Endrin Ketone	5	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
Gamma Bhc (Lindane)	0.05	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Heptachlor	0.04	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Heptachlor Epoxide	0.03	UG/L	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
Methoxychlor	35	UG/L	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
P,P'-DDD	0.3	UG/L	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
P,P'-DDE	0.2	UG/L	0.029 U	0.029 U	0.013 JIP	0.029 U	0.029 U	0.029 U	0.029 U
P,P'-DDT	0.2	UG/L	0.029 U	0.029 U	0.039	0.029 U	0.029 U	0.029 U	0.029 U
Silvex (2,4,5-TP)	0.26	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toxaphene	0.06	UG/L	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
trans-Chlordane	0	UG/L	0.014 U	0.014 U	0.014 J	0.014 U	0.014 U	0.014 U	0.014 U

Table 12. Summary of Pesticides and Herbicides in Groundwater, 27-50 1st Street, Astoria, New York

Sample Designation:			RMW-6	RMW-6
Sample Date:			06/15/2023	06/15/2023
Normal Sample or Field Duplicate:			N	FD
Parameters	NYSDEC Ambient Water Quality Standards and Guidance Values	Units		
2,4-D (Dichlorophenoxyacetic Acid)	50	UG/L	10 U	10 U
Acetic acid, (2,4,5-trichlorophenoxy)-	35	UG/L	2 U	2 U
Aldrin	0	UG/L	0.014 U	0.014 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	UG/L	0.014 U	0.014 U
Alpha Endosulfan	--	UG/L	0.014 U	0.014 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	UG/L	0.014 U	0.014 U
Beta Endosulfan	--	UG/L	0.029 U	0.029 U
Chlordane	0.05	UG/L	0.143 U	0.143 U
cis-Chlordane	--	UG/L	0.014 U	0.014 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	UG/L	0.014 U	0.014 U
Dieldrin	0.004	UG/L	0.029 U	0.029 U
Endosulfan Sulfate	--	UG/L	0.029 U	0.029 U
Endrin	0	UG/L	0.029 U	0.029 U
Endrin Aldehyde	5	UG/L	0.029 U	0.029 U
Endrin Ketone	5	UG/L	0.029 U	0.029 U
Gamma Bhc (Lindane)	0.05	UG/L	0.014 U	0.014 U
Heptachlor	0.04	UG/L	0.014 U	0.014 U
Heptachlor Epoxide	0.03	UG/L	0.014 U	0.014 U
Methoxychlor	35	UG/L	0.143 U	0.143 U
P,P'-DDD	0.3	UG/L	0.029 U	0.029 U
P,P'-DDE	0.2	UG/L	0.029 U	0.029 U
P,P'-DDT	0.2	UG/L	0.029 U	0.029 U
Silvex (2,4,5-TP)	0.26	UG/L	2 U	2 U
Toxaphene	0.06	UG/L	0.143 U	0.143 U
trans-Chlordane	0	UG/L	0.014 U	0.014 U

**Investigation Summary Report
Spill #2300395 and #2300786
Halletts Point Buildings 40 and 50
27-02 and 27-50 1st Street, Astoria, New York**

FIGURES

1. Site Location Map
2. Site Investigation Locations
3. Groundwater Elevation Contour Map
4. Soil Detection Exceedances Above Part 375 Standards
5. Groundwater Detection Exceedances Above Ambient Water-Quality Standards and Guidance Values



EAST RIVER

R-2/RMW-2

LB-4B

LB-1B

R-3/RMW-3

LB-1A

R-4/RMW-4

R-6/RMW-6

R-5/RMW-5

LB-10A

LB-12B

R-1/RMW-1

LB-9B

1ST STREET



LEGEND

- LOCATION AND DESIGNATION OF MONITORING WELL INSTALLED DURING GEOTECHNICAL INVESTIGATION
- ⊕ LOCATION AND DESIGNATION OF ROUX MONITORING WELL
- FUTURE BUILDING FOOTPRINT
- SITE BOUNDARY

NOTES

1. AERIAL SOURCE : GOOGLE EARTH PRO



Title:

SITE INVESTIGATION LOCATIONS

27-02 1ST STREET
QUEENS, NEW YORK

Prepared for:

HALLETS BUILDING 4 SPE LLC
HALLETS BUILDING 5 SPE LLC

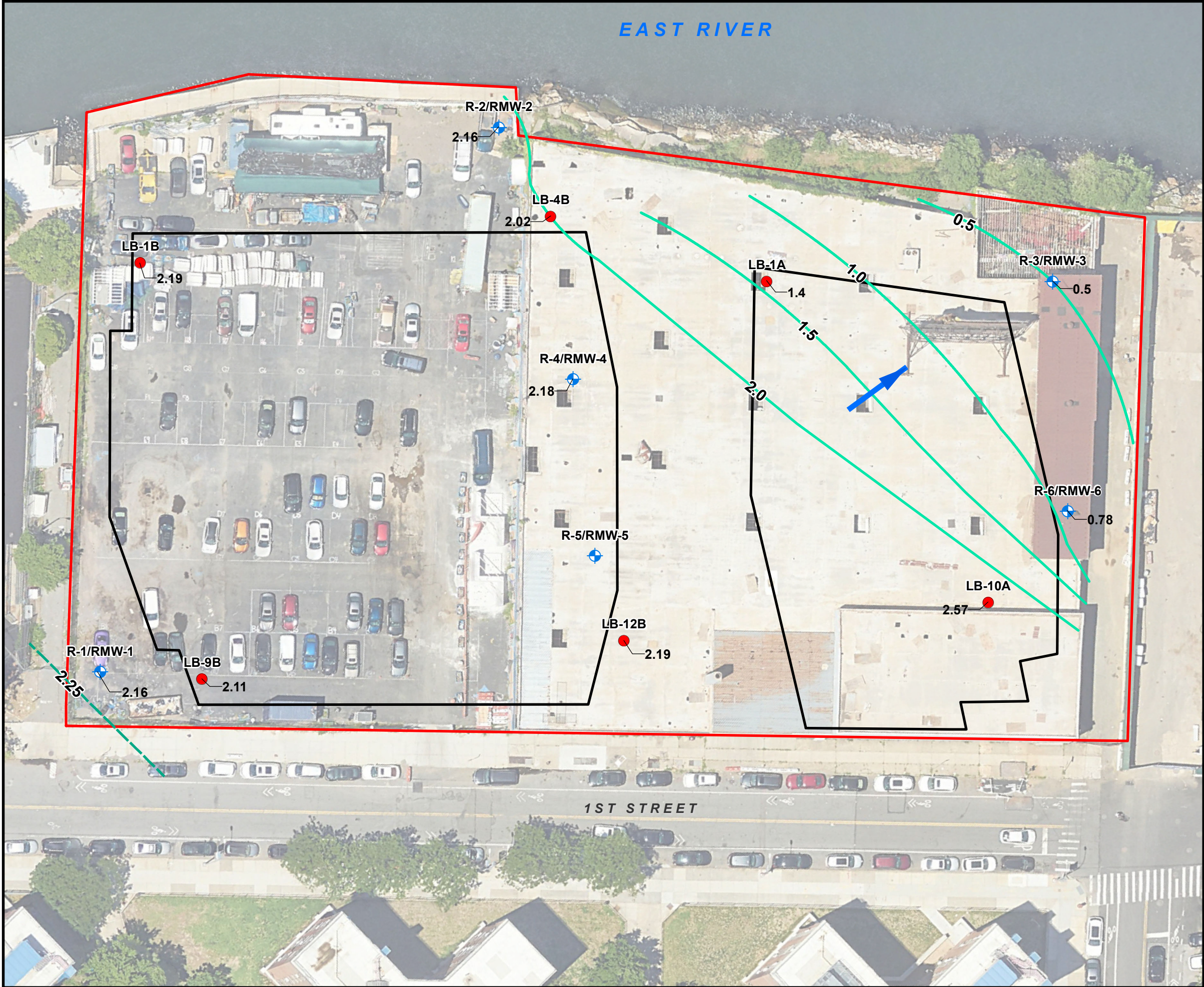


Compiled by: P.P.	Date: 07/13/23
Prepared by: M.S.R.	Scale: AS SHOWN
Project Mgr: R.M.	Project: 1338.0013Y000
File: 1338.0013Y106.2.mxd	

FIGURE

2

V:\GIS\PROJECTS\1338\0013Y106\1338.0013Y106.2.MXD



EAST RIVER

1ST STREET



LEGEND

- LOCATION AND DESIGNATION OF MONITORING WELL INSTALLED DURING GEOTECHNICAL INVESTIGATION
- ⊕ LOCATION AND DESIGNATION OF ROUX MONITORING WELL
- ▭ FUTURE BUILDING FOOTPRINT
- ▭ SITE BOUNDARY
- ➡ DIRECTION OF GROUNDWATER FLOW
- 2.19 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 2.0 LINE OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 2.25 INFERRED LINE OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

NOTES

1. AERIAL SOURCE : GOOGLE EARTH PRO
2. GROUNDWATER ELEVATION OF 3.1 IN RMW-5 IS AN ANOMOLY AND IS NOT CONSIDERED IN GW CONTOURS



Title:

GROUNDWATER ELEVATION
CONTOUR MAP

27-02 1ST STREET
QUEENS, NEW YORK

Prepared for:

HALLETS BUILDING 4 SPE LLC
HALLETS BUILDING 5 SPE LLC



Compiled by: P.P.	Date: 07/20/23
Prepared by: M.S.R.	Scale: AS SHOWN
Project Mgr: R.M.	Project: 1338.0013Y000
File: 1338.0013Y106.3.mxd	

FIGURE

3

V:\GIS\PROJECTS\1338Y001\3Y106\1338.0013Y106.3.MXD

R-2	06/05/2023	06/05/2023	06/05/2023
Depth (ft bls)	5 - 7	5 - 7 DUP	12 - 14
Metals			
Arsenic	NE	NE	28.8
Chromium, Total	37.6	34.7	84.6
Copper	NE	NE	286
Lead	122	114	369
Mercury	NE	NE	0.834
Nickel	NE	NE	241
Zinc	NE	NE	174
Pesticides			
P,P'-DDD	0.00346	NE	ND
P,P'-DDE	0.008	0.00673	ND
P,P'-DDT	0.0415	0.0277	ND

R-4	06/02/2023	06/02/2023
Depth (ft bls)	4 - 6	7 - 9
Metals		
Chromium, Total	59.6	81.8
Copper	77.8	56.8
Nickel	33.3	35.2

R-3	06/02/2023
Depth (ft bls)	7 - 9
Metals	
Lead	172

R-6	06/05/2023	06/07/2023
Depth (ft bls)	7 - 9	9 - 11
VOCs		
1,2,4-Trimethylbenzene	NE	6.2
N-Propylbenzene	NE	7.1
Xylenes	ND	0.28
Metals		
Barium	NE	427
Chromium, Total	109	205
Copper	NE	103
Nickel	50	125

R-1	06/05/2023
Depth (ft bls)	5 - 7
Metals	
Copper	143
Lead	1600
Mercury	1.57
Zinc	452
PCBs	
Polychlorinated Biphenyl (PCBs)	0.268
Pesticides	
P,P'-DDT	0.0431

R-5	06/02/2023	06/02/2023
Depth (ft bls)	4 - 6	7 - 9
SVOCs		
Benzo(A)Anthracene	1.1	ND
Benzo(B)Fluoranthene	1.2	ND
Indeno(1,2,3-C,D)Pyrene	0.63	ND

LEGEND

LOCATION AND DESIGNATION OF MONITORING WELL INSTALLED DURING GEOTECHNICAL INVESTIGATION

LOCATION AND DESIGNATION OF ROUX MONITORING WELL

FUTURE BUILDING FOOTPRINT

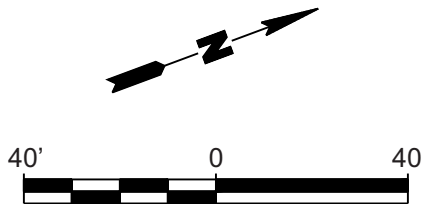
SITE BOUNDARY

DIRECTION OF GROUNDWATER FLOW

TYPICAL DATA BOX INFORMATION				
SAMPLE ID	R-4	06/02/2023	06/02/2023	SAMPLE DATE
	Depth (ft bls)	4 - 6	7 - 9	SAMPLE DEPTH
ANALYTES	Metals			CONCENTRATIONS
	Chromium, Total	59.6	81.8	
	Copper	77.8	56.8	
	Nickel	33.3	35.2	

Parameter	NYSDEC Part 375 Unrestricted Use SCO	NYSDEC Part 375 Restricted Residential SCO	Units
VOCs			
1,2,4-Trimethylbenzene	3.6	52	mg/kg
N-Propylbenzene	3.9	100	mg/kg
Xylenes	0.26	100	mg/kg
SVOCs			
Benzo(A)Anthracene	1	1	mg/kg
Benzo(B)Fluoranthene	1	1	mg/kg
Indeno(1,2,3-C,D)Pyrene	0.5	0.5	mg/kg
Metals			
Arsenic	13	16	mg/kg
Barium	350	400	mg/kg
Chromium, Total	30	180	mg/kg
Copper	50	270	mg/kg
Lead	63	400	mg/kg
Mercury	0.18	0.81	mg/kg
Nickel	30	310	mg/kg
Zinc	109	10000	mg/kg
PCBs			
Polychlorinated Biphenyl (PCBs)	0.1	1	mg/kg
Pesticides			
P,P'-DDD	0.0033	13	mg/kg
P,P'-DDE	0.0033	8.9	mg/kg
P,P'-DDT	0.0033	7.9	mg/kg

mg/kg - Milligrams per kilogram
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Soil Cleanup Objectives available
J - Estimated value
DUP - Duplicate Sample
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
PCBs - Polychlorinated Biphenyls
NE - No exceedance
ND - No detection
NA - Not analyzed for by laboratory
ft bls - Feet below land surface



NOTES

1. AERIAL SOURCE : GOOGLE EARTH PRO

Title:

SOIL DETECTION EXCEEDANCES
ABOVE PART 375 STANDARDS

27-02 1ST STREET
QUEENS, NEW YORK

Prepared for:

HALLETS BUILDING 4 SPE LLC
HALLETS BUILDING 5 SPE LLC

Compiled by: R.M...

Date: 21JUL23

Prepared by: B.H.C.

Scale: AS SHOWN

Project Mgr: R.M.

Project: 1338.0013Y000

File: 1338.0013Y106.01.CDR

FIGURE

4

RMW-2	06/15/2023
SVOCs	
Benzo(A)Anthracene	0.18
Benzo(A)Pyrene	0.27
Benzo(B)Fluoranthene	0.32
Benzo(K)Fluoranthene	0.09 J
Chrysene	0.18
Indeno(1,2,3-C,D)Pyrene	0.16
Metals	
Iron	901
Lead	42.26
Magnesium	844000
Sodium	6910000

RMW-4	06/16/2023
Metals	
Magnesium	194000
Selenium	24.6
Sodium	812000

LB-1A	06/21/2023
Metals	
Iron	4650
Magnesium	1310000
Sodium	12100000
Thallium	1.59 J

LEGEND

- LOCATION AND DESIGNATION OF MONITORING WELL INSTALLED DURING GEOTECHNICAL INVESTIGATION
- LOCATION AND DESIGNATION OF ROUX MONITORING WELL
- FUTURE BUILDING FOOTPRINT
- SITE BOUNDARY
- DIRECTION OF GROUNDWATER FLOW

TYPICAL DATA BOX INFORMATION

SAMPLE ID	RMW-3	06/15/2023	SAMPLE DATE
ANALYTES	SVOCs		CONCENTRATIONS
	Benzo(A)Anthracene	0.03 J	
	Benzo(A)Pyrene	0.03 J	
	Benzo(B)Fluoranthene	0.03 J	
	Benzo(K)Fluoranthene	0.02 J	
	Chrysene	0.02 J	
	Indeno(1,2,3-C,D)Pyrene	0.02 J	
	Metals		
	Iron	615	
	Magnesium	722000	
	Sodium	5940000	

Parameter	NYSDEC AWQSGV
VOCs	
1,2,4,5-Tetramethylbenzene	5
1,2,4-Trimethylbenzene	5
1,3,5-Trimethylbenzene (Mesitylene)	5
Acetone	50
Benzene	1
Cymene	5
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
Naphthalene	10
N-Propylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
Toluene	5
Xylenes	5
SVOCs	
Acenaphthene	20
Benzo(A)Anthracene	0.002
Benzo(A)Pyrene	0
Benzo(B)Fluoranthene	0.002
Benzo(K)Fluoranthene	0.002
Chrysene	0.002
Indeno(1,2,3-C,D)Pyrene	0.002
Naphthalene	10
Phenanthrene	50
Phenol	1
Metals	
Chromium, Total	50
Copper	200
Iron	300
Lead	25
Magnesium	35000
Manganese	300
Mercury	0.7
Selenium	10
Sodium	20000
Thallium	0.5
PCBs	
Polychlorinated Biphenyl (PCBs)	0.09
Pesticides	
trans-Chlordane	0

RMW-3	06/15/2023
SVOCs	
Benzo(A)Anthracene	0.03 J
Benzo(A)Pyrene	0.03 J
Benzo(B)Fluoranthene	0.03 J
Benzo(K)Fluoranthene	0.02 J
Chrysene	0.02 J
Indeno(1,2,3-C,D)Pyrene	0.02 J
Metals	
Iron	615
Magnesium	722000
Sodium	5940000

RMW-6	06/15/2023	06/15/2023 DUP
VOCs		
1,2,4,5-Tetramethylbenzene	8.7	9
1,2,4-Trimethylbenzene	20	20
Benzene	58	62
Ethylbenzene	22	22
Isopropylbenzene (Cumene)	52	54
m,p-Xylene	19	19
Naphthalene	42	43
N-Propylbenzene	11	12
O-Xylene (1,2-Dimethylbenzene)	23	24
Sec-Butylbenzene	5.8	6.1
Toluene	7.6	7.9
Xylenes	42	43
SVOCs		
Acenaphthene	28	33
Benzo(A)Anthracene	0.08 J	0.09 J
Benzo(A)Pyrene	0.04 J	0.04 J
Benzo(B)Fluoranthene	0.03 J	0.03 J
Benzo(K)Fluoranthene	0.01 J	0.01 J
Chrysene	0.11	0.12
Indeno(1,2,3-C,D)Pyrene	0.01 J	0.01 J
Naphthalene	NE	18
Metals		
Iron	5680	5370
Magnesium	89200	91100
Manganese	2284	2291
Sodium	323000	327000

RMW-1	06/16/2023
SVOCs	
Benzo(A)Anthracene	1.1
Benzo(A)Pyrene	1.6
Benzo(B)Fluoranthene	1.9
Benzo(K)Fluoranthene	0.57
Chrysene	1.1
Indeno(1,2,3-C,D)Pyrene	1.2
Metals	
Chromium, Total	95.57
Copper	316.2
Iron	62500
Lead	2735
Magnesium	92000
Manganese	3480
Mercury	6.44
Selenium	31.8
Sodium	455000
Thallium	0.61 J
PCBs	
Polychlorinated Biphenyl (PCBs)	0.178
Pesticides	
trans-Chlordane	0.014 J

RMW-5	06/16/2023
VOCs	
1,2,4,5-Tetramethylbenzene	9
1,2,4-Trimethylbenzene	74
1,3,5-Trimethylbenzene (Mesitylene)	8.6
Acetone	74
Benzene	54
Cymene	13
Ethylbenzene	160
Isopropylbenzene (Cumene)	48
m,p-Xylene	68
Naphthalene	410
N-Propylbenzene	7.1
O-Xylene (1,2-Dimethylbenzene)	50
Toluene	5.5
Xylenes	120
SVOCs	
Acenaphthene	72
Benzo(A)Anthracene	5.5
Benzo(A)Pyrene	3.1
Benzo(B)Fluoranthene	2.2
Benzo(K)Fluoranthene	0.56
Chrysene	6.6
Indeno(1,2,3-C,D)Pyrene	0.83
Naphthalene	26
Phenanthrene	140
Phenol	1.8 J
Metals	
Sodium	282000

LB-12B	06/21/2023
SVOCs	
Benzo(B)Fluoranthene	0.01 J
Chrysene	0.01 J
Metals	
Magnesium	46800
Sodium	181000

Concentrations in µg/L
µg/L - Micrograms per liter
NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
-- Not detected above NYSDEC AWQSGV
J - Estimated value
DUP - Duplicate Sample
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
PCBs - Polychlorinated Biphenyls
NE - No exceedances
ND - No detection

Title:

GROUNDWATER DETECTION EXCEEDANCES
ABOVE AMBIENT WATER-QUALITY STANDARDS
AND GUIDANCE VALUES

27-02 1ST STREET
QUEENS, NEW YORK

Prepared for:

HALLETS BUILDING 4 SPE LLC
HALLETS BUILDING 5 SPE LLC

Compiled by: R.M...

Date: 14JUL23

Prepared by: B.H.C.

Scale: AS SHOWN

Project Mgr: R.M.

Project: 1338.0013Y000

File: 1338.0013Y106.01.CDR

FIGURE

5

NOTES
1. AERIAL SOURCE: GOOGLE EARTH PRO

1338.0013Y106.01.CDR

**Investigation Summary Report
Spill #2300395 and #2300786
Halletts Point Buildings 40 and 50
27-02 and 27-50 1st Street, Astoria, New York**

ATTACHMENT 1

Boring/Well Logs



Client: Hallets Point Building 4 and 5 LLC		Site: HLP Buildings 40/50		Project Number: 1338.0013Y000	
Address: 27-50 1st St		City/State: Astoria, New York		Logged By: J. Rusk	
Start to Finish Date: 6/1/2023 - 6/5/2023		Contractor: AARCO Environmental Services		Drill Type: Rotosonic	
Borehole Depth: 12 feet		Backfill: Sand Pack		Sampler Type/Method: 2" Macro-Core	
Area: NM		Elevation: 8.46		DTW: 7 feet	
Well Depth: 12 feet		Screen Interval: 2-12 feet		Northing: 221465.65	
Well Dia./Materials: 2-inch PVC		Screen Slot Size: 20-Slot		Easting: 1001721.95	
		Sand/Filter Pack Size: Morie #2		Annular Seal:	

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
	Bentonite	ASPH		ASPHALT.				
	#2 Morie Sand, 2' of Schedule 20 PVC solid riser.			Brown, fine to coarse SAND, some fine to coarse Gravel, little Cobble and Concrete, trace glass and brick (fill); moist.			0.0	
		MIXD				5	0.0	
							0.0	
							0.0	Boring hand-cleared to 5 ft bls for utility clearance.
5				Greyish Brown, fine to coarse SAND, some fine to coarse Gravel, trace brick and silt (fill); moist.			0.0	Collected sample R-1_(5-7). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
		MIXD					0.1	
	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.			Greyish Brown, fine to coarse SAND, little fine to coarse Gravel and Silt, trace brick (fill); wet.		5	0.1	Groundwater encountered at 7 ft bls.
		MIXD					0.1	
				Brown, fine to coarse SAND, little fine to coarse Gravel and Silt; wet.			0.1	
10		SM					0.1	
							0.1	
				WEATHERED BEDROCK.		2	0.1	
		BEDR					0.1	Refusal at Bedrock at 12 ft bls. End of boring at 12 ft bls.
	Bottom Plug							



Client: Hallets Point Building 4 and 5 LLC		Site: HLP Buildings 40/50		Project Number: 1338.0013Y000	
Address: 27-50 1st St		City/State: Astoria, New York		Logged By: J. Rusk	
Start to Finish Date: 6/1/2023 - 6/5/2023		Contractor: AARCO Environmental Services		Drill Type: Rotosonic	
Borehole Depth: 16 feet		Backfill: Sand Pack		Sampler Type/Method: 2" Macro-Core	
Area: NM		Elevation: 8.96		Northing: 221701.99	
				Easting: 1001569.95	
Well Depth: 16 feet	Well Dia./Materials: 2-inch PVC	Screen Interval: 6-16 feet	Screen Slot Size: 20-Slot	Sand/Filter Pack Size: Morie #2	Annular Seal:

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
		CONC		CONCRETE.			0.0	
				VOID SPACE				
		CONC		CONCRETE.			0.0	
	Bentonite							
	#2 Morie Sand. 6' of Schedule 20 PVC solid riser.	MIXD		Brown, fine to coarse SAND, some fine to coarse Gravel, little Concrete, trace silt (fill); moist.	G	5	0.0	
5							0.0	Boring hand-cleared to 5 ft bls for utility clearance.
		MIXD		Brown, fine to coarse SAND, little fine to coarse Gravel, trace silt and concrete (fill); moist.			0.0	Collected sample R-2_(5-7). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
							0.1	
				BOULDERS; wet.			0.1	Groundwater encountered at 7 ft bls.
		BLDRCBLL				5	0.2	
10		MIXD		Brown, fine to coarse GRAVEL, little fine to coarse Sand and Silt, trace brick and wood (fill); wet.			1.1	
	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.						1.0	Odor, staining, and sheen encountered from 11 to 14 ft bls.
				Dark Grey, fine to coarse SAND, some Silt, little fine to coarse Gravel; wet.			2.1	Collected sample R-2_(12-14). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
		SW				5	11.6	
							18.3	
15							32.6	Refusal at Bedrock at 16 ft bls. End of Boring at 16 ft bls.
	Bottom Plug					1	3.8	

ROUX STANDARD LOG - 7/3/23 11:22 - S:\GINT\PROJECTS\1338.0013Y000.GPJ



Client: Hallets Point Building 4 and 5 LLC			Site: HLP Buildings 40/50			Project Number: 1338.0013Y000			
Address: 27-50 1st St			City/State: Astoria, New York			Logged By: J. Rusk			
Start to Finish Date: 6/1/2023 - 6/2/2023		Contractor: AARCO Environmental Services		Drill Type: Rotosonic			Sampler Type/Method: 2" Macro-Core		
Borehole Depth: 14 feet		Backfill: Sand Pack		Borehole Diameter: 3-inches			DTW: 9 feet		
Area: NM		Elevation: 9.56		Northing: 221894.36			Easting: 1001712.36		
Well Depth: 14 feet	Well Dia./Materials: 2-inch PVC	Screen Interval: 4-14 feet		Screen Slot Size: 20-Slot		Sand/Filter Pack Size: Morie #2		Annular Seal:	

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
		CONC		CONCRETE.				
	Bentonite			Dark Brown, fine to coarse SAND, some fine to coarse Gravel, little Brick, Metal, Peat, and Silt (fill); moist.			0.0	
		MIXD				5	0.0	
	#2 Morie Sand. 4' of Schedule 20 PVC solid riser.						0.0	
							0.0	
5		MIXD		Light Brown, fine to coarse SAND, little fine to coarse Gravel, Peat, and Brick (fill); moist.			0.0	
				Greyish Brown, fine to coarse SAND, little fine to coarse Gravel and Silt (fill); moist.			0.0	Boring hand-cleared to 5 ft bls for utility clearance.
		MIXD					0.0	
						5	0.0	Collected R-3 (7-9). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
		MIXD		Dark Grey, fine to coarse SAND, little fine to coarse Gravel, Brick, and Silt (fill); moist.			0.0	
	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.						0.0	
10		MIXD		Dark Grey, fine to coarse SAND, little fine to coarse Gravel, Brick, and Silt (fill); wet.			0.0	Groundwater encountered at 9 ft bls.
							0.0	
		SM		Brown, fine to coarse SAND, little fine to coarse Gravel and Silt; wet.			0.0	
							0.0	
		SM		Greyish Brown, fine to coarse SAND, some fine to coarse Gravel, little Silt and Wood; wet.		4	0.0	
							0.0	
	Bottom Plug						0.0	Refusal at Bedrock at 14 ft bls. End of Boring at 14 ft bls.



Client: Hallets Point Building 4 and 5 LLC		Site: HLP Buildings 40/50		Project Number: 1338.0013Y000	
Address: 27-50 1st St		City/State: Astoria, New York		Logged By: J. Rusk	
Start to Finish Date: 6/1/2023 - 6/8/2023		Contractor: AARCO Environmental Services		Drill Type: Rotosonic	
Borehole Depth: 10 feet		Backfill: Sand Pack		Sampler Type/Method: 2" Macro-Core	
Area: NM		Elevation: 9.46		DTW: 6 feet	
Well Depth: 10 feet		Screen Interval: 0-10 feet		Sand/Filter Pack Size: Morie #2	
Well Dia./Materials: 2-inch PVC		Screen Slot Size: 20-Slot		Annular Seal:	

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
	Bentonite	CONC		CONCRETE.				
		MIXD		Brown, fine to coarse SAND, trace gravel, cobble, and brick (fill); moist.			0.0	
		MIXD		Dark Brown, fine to coarse SAND, trace gravel, cobble, and brick (fill); moist.			0.0	
		MIXD		Grey, fine to coarse SAND, some fine to coarse Gravel and Slag, trace brick (fill); moist.	G	5	0.0	
		MIXD		Grey, fine to coarse SAND, some fine to coarse Gravel and Slag, trace brick and wood (fill); moist.			0.0	Collected sample R-4 (4-6). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
5		SM		Brown, fine to coarse SAND, some fine to coarse Gravel, little Silt; moist.			0.0	Boring hand-cleared to 5 ft bls for utility clearance.
	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.			WEATHERED ROCK; wet.			1.3	Groundwater encountered at 6 ft bls.
		BEDR				4	3.4	Collected sample R-4 (7-9). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
							11.3	
		BEDR		BEDROCK.			49.9	Encountered bedrock at 9.5 ft bls. End of boring at 10 ft bls.
	Bottom Plug							

ROUX STANDARD LOG - 7/3/23 11:22 - S:\GINT\PROJECTS\1338.0013Y000.GPJ



Client: Hallets Point Building 4 and 5 LLC		Site: HLP Buildings 40/50		Project Number: 1338.0013Y000	
Address: 27-50 1st St		City/State: Astoria, New York		Logged By: J. Rusk	
Start to Finish Date: 6/1/2023 - 6/8/2023		Contractor: AARCO Environmental Services		Drill Type: Rotosonic	
Borehole Depth: 10 feet		Backfill: Sand Pack		Borehole Diameter: 3-inches	
Area: NM		Elevation: 9.65		Northing: 221675.57	
Well Depth: 10 feet		Well Dia./Materials: 2-inch PVC		Screen Interval: 0-10 feet	
				Screen Slot Size: 20-Slot	
				Sand/Filter Pack Size: Morie #2	
				Annular Seal:	

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
	Bentonite	CONC		CONCRETE.				
		MIXD		Greyish Brown, fine to coarse GRAVEL, some fine to coarse Sand and Concrete, trace brick and asphalt (fill); moist.		0.0		
		MIXD		Greyish Brown, fine to coarse COBBLE, some Concrete, little fine to coarse Gravel and fine to coarse Sand (fill); moist.	G	5	0.0	
		MIXD		Greyish Brown, fine to coarse GRAVEL, little fine to coarse Sand and Concrete, trace brick (fill); moist.		0.0		
		MIXD		Greyish Brown, fine to coarse SAND, fine to coarse Gravel, little Concrete and Silt (fill); moist.		0.0		Collected R-5 (4-6). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
5	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.	MIXD				0.0		Boring hand-cleared to 5 ft bls for utility clearance.
		BEDR		WEATHERED BEDROCK; wet.		0.0		Groundwater encountered at 8.5 ft bls.
		BEDR		BEDROCK.		0.0		Bedrock encountered at 9 ft bls. End of boring at 10.5 ft bls.
	Bottom Plug							

ROUX STANDARD LOG - 7/3/23 11:22 - S:\GINT\PROJECTS\1338.0013Y000.GPJ



Client: Hallets Point Building 4 and 5 LLC		Site: HLP Buildings 40/50		Project Number: 1338.0013Y000	
Address: 27-50 1st St		City/State: Astoria, New York		Logged By: J. Rusk	
Start to Finish Date: 6/1/2023 - 6/8/2023		Contractor: AARCO Environmental Services		Drill Type: Rotasonic	
Borehole Depth: 13 feet		Backfill: Sand Pack		Sampler Type/Method: 2" Macro-Core	
Area: NM		Elevation: 9.58		Northing: 221866.06	
				Easting: 1001803.96	
Well Depth: 13 feet	Well Dia./Materials: 2-inch PVC	Screen Interval: 3-13 feet	Screen Slot Size: 20-Slot	Sand/Filter Pack Size: Morie #2	Annular Seal:

Depth (ft)	Well Diagram	USCS	USCS Graphic	Visual Description	Sample Interval	Recovery (ft)	PID	Notes
	Flushmount Wellbox J Plug							
	Bentonite	CONC		CONCRETE.				
		MIXD		Dark Grey, fine to coarse SAND, some fine to coarse Gravel and Cobble, little Concrete, trace brick and silt (fill); moist.			0.0	
	#2 Morie Sand, 3' of Schedule 20 PVC solid riser.	MIXD		Light Brown, fine to coarse SAND, some fine to coarse Gravel, little Cobble (fill); moist.	G	5	0.0	
		MIXD		Grey, fine to coarse SAND, some fine to coarse Gravel, little Slag (fill); moist.			0.0	
		MIXD		Dark Brown, fine to coarse SAND, little fine to coarse Gravel and Silt, trace brick (fill); moist.			0.0	
5		MIXD		Greyish Brown, fine to coarse SAND, little fine to coarse Gravel, trace silt; moist.			0.0	Boring hand-cleared to 5 ft bls for utility clearance.
		SM					15.4	
							18.5	Collected R-6 (7-9). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides.
	10' of Schedule 40 PVC, 20-slot Pre-pack Screen.	BEDR		WEATHERED BEDROCK; moist.			56.3	
		BEDR		WEATHERED BEDROCK; moist.			837	Odor and staining from 9 to 11 ft bls.
10		BEDR						Collected R-6 (9-11). Analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TAL Metals, TCL Pesticides, and TCL Herbicides. Groundwater encountered at 11.5 ft bls.
		BEDR		BEDROCK; wet.				Bedrock encountered at 11 ft bls. End of boring at 13 ft bls.
	Bottom Plug							

**Investigation Summary Report
Spill #2300395 and #2300786
Halletts Point Buildings 40 and 50
27-02 and 27-50 1st Street, Astoria, New York**

ATTACHMENT 2

Laboratory Reports



ANALYTICAL REPORT

Lab Number:	L2329757
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HALLETT'S POINT BUILDINGS 40&50
Project Number:	1338.0013Y000
Report Date:	06/08/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2329757-01	LB-4(OW)	OIL	27-50 1ST STREET, ASTORIA, NY	05/25/23 11:15	05/26/23
L2329757-02	LB-9B(OW)	OIL	27-50 1ST STREET, ASTORIA, NY	05/25/23 11:55	05/26/23

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Petroleum Hydrocarbon Identification by GC-FID

L2329757-01 and -02: The samples were extracted and then analyzed using a gas chromatograph equipped with a flame ionization detector (GC/FID). The temperature program and associated experimental conditions were optimized to obtain maximum resolution in an eighty minute chromatographic run representative of hydrocarbons in the n-Octane (C8) to n-Tetracontane (C40) range. Qualitative evaluation of the samples was conducted by reviewing the sample chromatogram in conjunction with a chromatogram of a normal alkane series generated with the same chromatographic conditions. Chromatograms of hydrocarbon reference materials obtained from our library of 82 reference standards were also utilized to provide the best possible sample match. Quantitative determination of the sample's hydrocarbon concentration was performed in accordance with EPA Method 8015M. The sample's total hydrocarbon concentration and all associated quality control data are included in the report.

The following qualitative information is based on a tentative interpretation of chromatographic pattern recognition and boiling point ranges:

Total Petroleum Hydrocarbon Identification

L2329757-01 contains hydrocarbons eluting in the range of n-Octane (C8) to after the elution of n-Heptacosane (C27).

Based on the data generated, L2329757-01 contains material eluting in the low to mid weight ranges of the chromatogram. The material present is similar to weathered Fuel Oil #2/Diesel Fuel.

In an analysis of an undegraded product the n-alkanes are typically the dominant constituents, as seen in the petroleum reference chromatogram. As the product deteriorates, the n-alkanes are preferentially degraded, leaving behind other constituents such as isoprenoids. The analytical testing of the sample identified a pattern of isoprenoids. The level of alkanes and their ratios to the isoprenoids present indicates that the fuel oil has

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Case Narrative (continued)

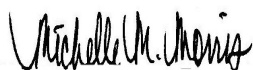
undergone degradation.

L2329757-02 contains hydrocarbons eluting in the range of n-Decane (C10) to after the elution of n-Tetracontane (C40).

Based on the data generated, L2329757-02 contains material eluting in the low to heavy weight ranges of the chromatogram which is similar to coal tar/creosote. Additionally, L2329757-02 contains material eluting in the mid weight range of the chromatogram. The material consists of discrete peaks which cannot be identified by this method.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 06/08/23

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2329757-01
Client ID: LB-4(OW)
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 05/25/23 11:15
Date Received: 05/26/23
Field Prep: Not Specified

Sample Depth:
Matrix: Oil
Analytical Method: 1,8015D(M)
Analytical Date: 06/05/23 22:15
Analyst: AMV
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Extraction Method: EPA 3580A
Extraction Date: 06/01/23 09:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Identification by GC-FID - Mansfield Lab						
Total Petroleum Hydrocarbons (C9-C44)	863000		mg/kg	4920	2460	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	116			50-130		
d50-Tetracosane	99			50-130		

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2329757-02
Client ID: LB-9B(OW)
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 05/25/23 11:55
Date Received: 05/26/23
Field Prep: Not Specified

Sample Depth:

Matrix: Oil
Analytical Method: 1,8015D(M)
Analytical Date: 06/05/23 23:42
Analyst: AMV
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Extraction Method: EPA 3580A
Extraction Date: 06/01/23 09:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Identification by GC-FID - Mansfield Lab						
Total Petroleum Hydrocarbons (C9-C44)	529000		mg/kg	4600	2300	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	105			50-130		
d50-Tetracosane	129			50-130		

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D(M)
Analytical Date: 06/06/23 11:20
Analyst: AMV

Extraction Method: EPA 3580A
Extraction Date: 06/01/23 09:39

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbon Identification by GC-FID - Mansfield Lab for sample(s): 01-02 Batch: WG1785883-1					
Total Petroleum Hydrocarbons (C9-C44)	3620	J	mg/kg	6600	3300

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	104		50-130
d50-Tetracosane	101		50-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HALLETTS POINT BUILDINGS 40&50

Lab Number: L2329757

Project Number: 1338.0013Y000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Identification by GC-FID - Mansfield Lab Associated sample(s): 01-02 Batch: WG1785883-2 WG1785883-3								
Nonane (C9)	90		91		50-130	1		30
Decane (C10)	98		100		50-130	2		30
Dodecane (C12)	100		103		50-130	3		30
Tetradecane (C14)	101		103		50-130	2		30
Hexadecane (C16)	112		112		50-130	0		30
Octadecane (C18)	110		112		50-130	2		30
Nonadecane (C19)	104		106		50-130	2		30
Eicosane (C20)	103		105		50-130	2		30
Docosane (C22)	104		106		50-130	2		30
Tetracosane (C24)	105		107		50-130	2		30
Hexacosane (C26)	102		103		50-130	1		30
Octacosane (C28)	102		103		50-130	1		30
Triacontane (C30)	101		102		50-130	1		30
Hexatriacontane (C36)	91		91		50-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
o-Terphenyl	104		104		50-130
d50-Tetracosane	99		99		50-130

Project Name: HALLETTS POINT BUILDINGS 40&50**Lab Number:** L2329757**Project Number:** 1338.0013Y000**Report Date:** 06/08/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2329757-01A	Amber 1000ml unpreserved	A	NA		4.6	Y	Absent		A2-PHI(365)
L2329757-01B	Amber 1000ml unpreserved	A	NA		4.6	Y	Absent		A2-PHI(365)
L2329757-02A	Amber 1000ml unpreserved	A	NA		4.6	Y	Absent		A2-PHI(365)

Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HALLETTS POINT BUILDINGS 40&50
Project Number: 1338.0013Y000

Lab Number: L2329757
Report Date: 06/08/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

1 of 1

5/27/23

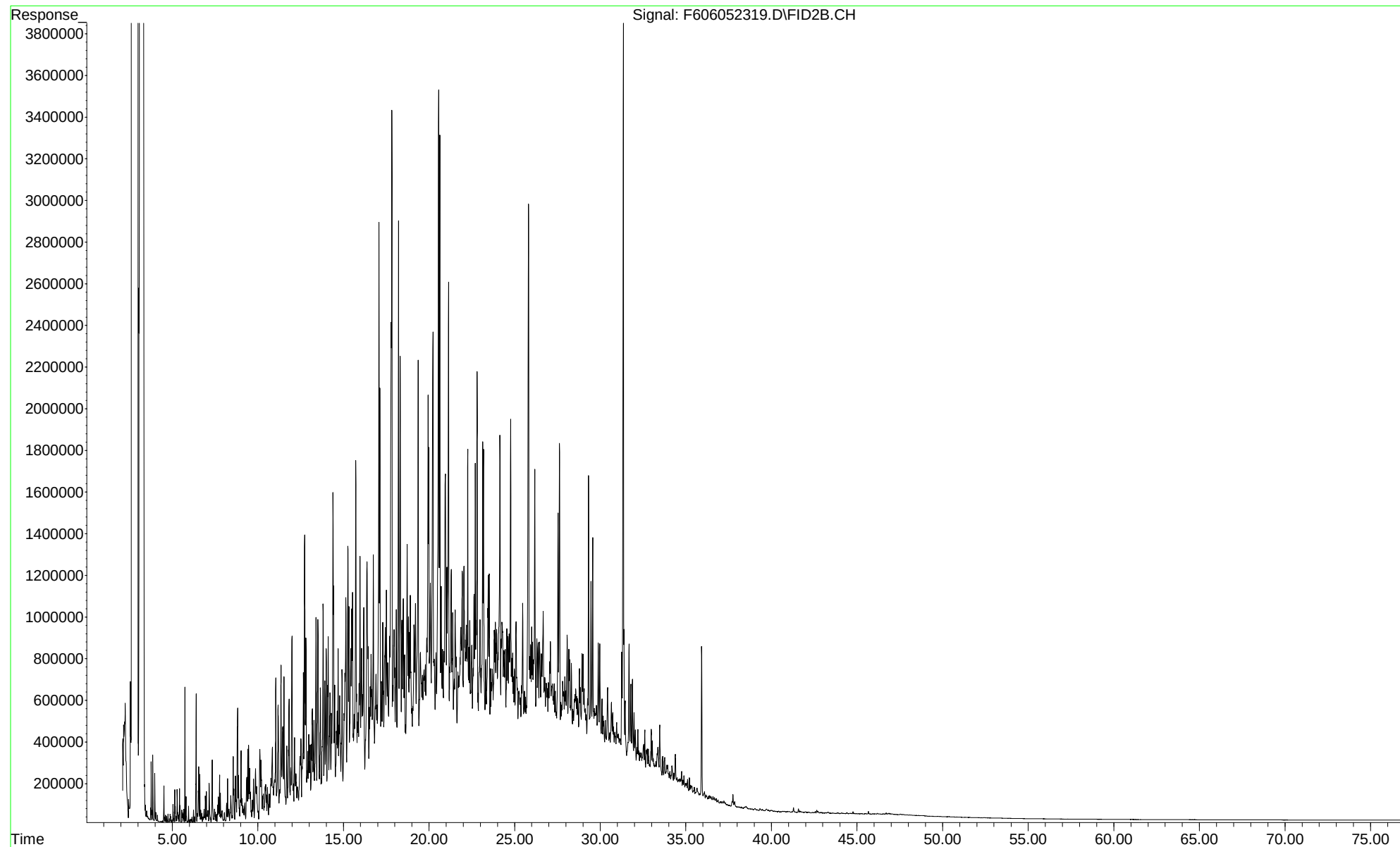
L2329757

Page 18 of 27

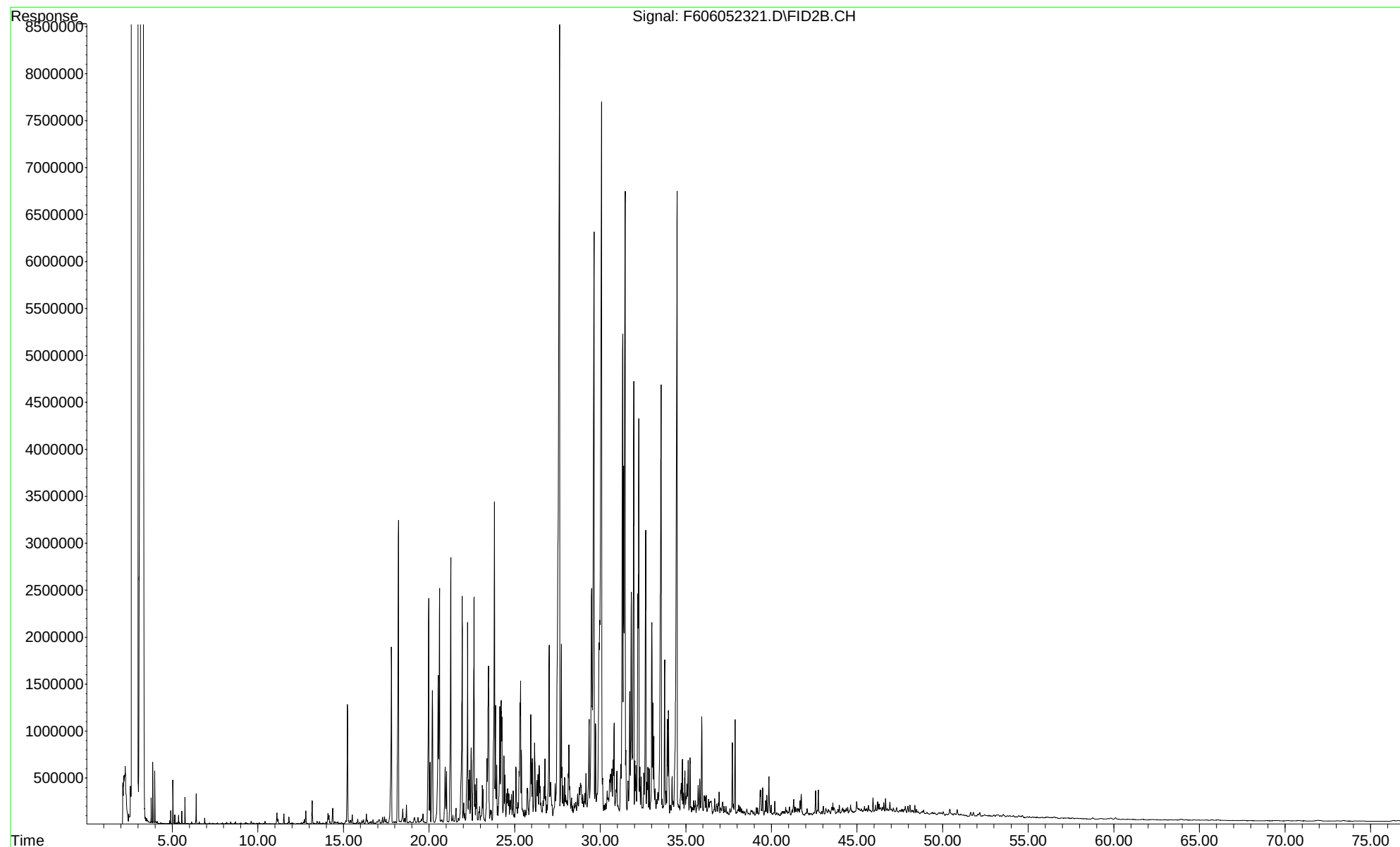
✓ AD - Apr 5/27/23 0755

GC-FID Chromatogram

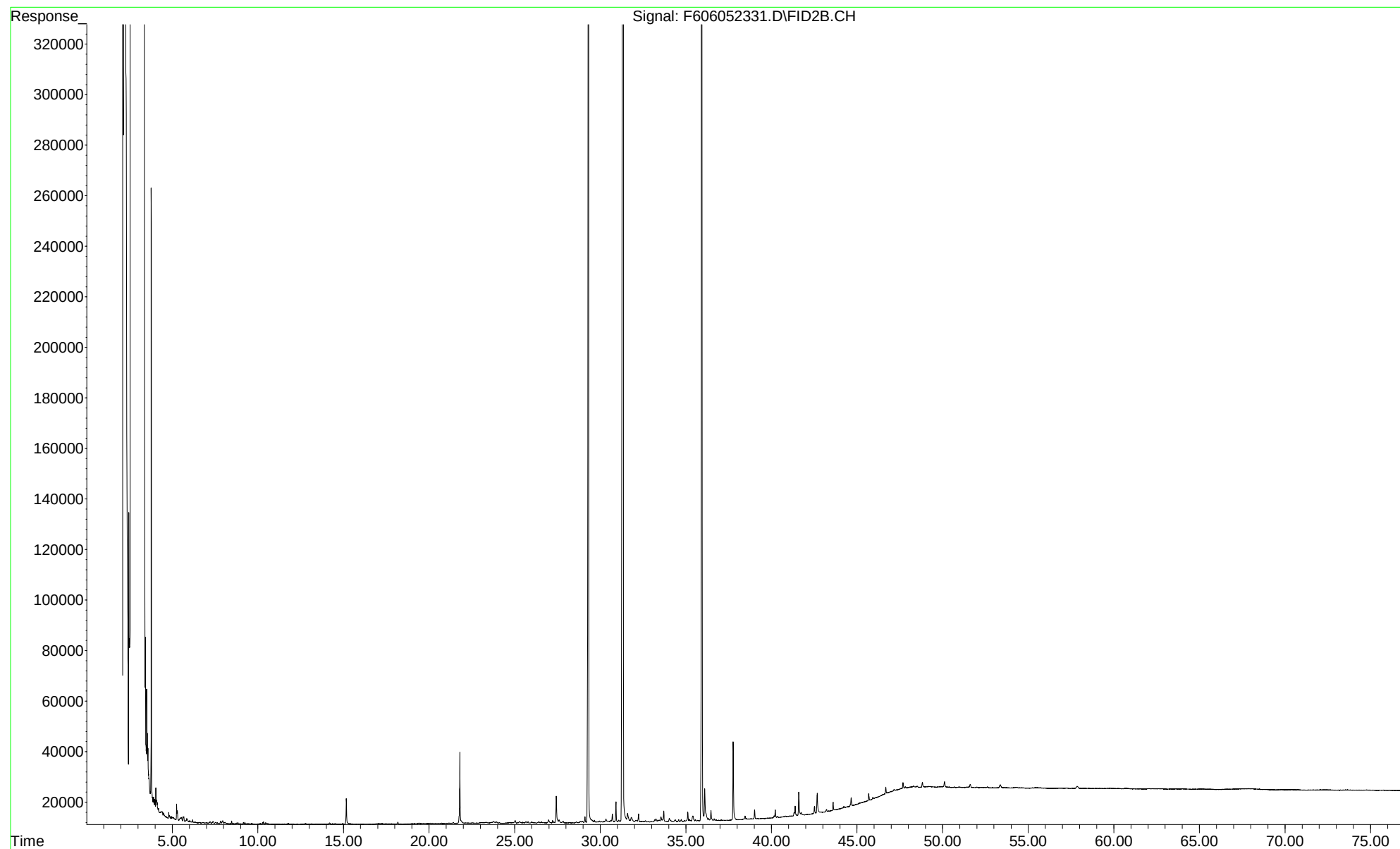
File :0:\Forensics\Data\FID6\2023\JUN\JUN05.SEC\F606052319.D
Operator : FID6:AMV
Acquired : 05 Jun 2023 10:15 pm using AcqMethod FID6A.M
Instrument : FID6
Sample Name: L2329757-01
Misc Info : WG1786603, WG1785883, ICAL19796
Vial Number: 60



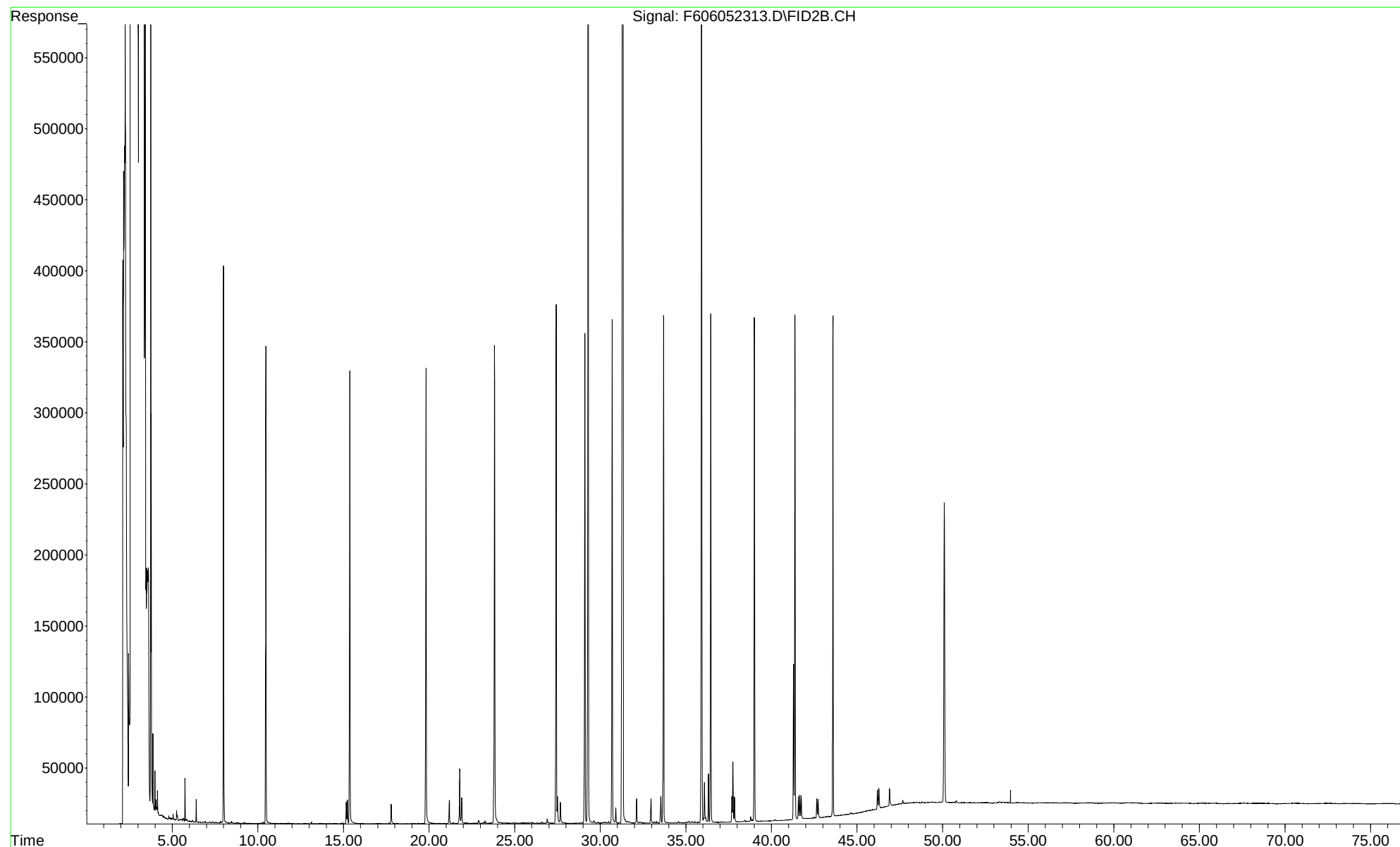
File :0:\Forensics\Data\FID6\2023\JUN\JUN05.SEC\F606052321.D
Operator : FID6:AMV
Acquired : 05 Jun 2023 11:42 pm using AcqMethod FID6A.M
Instrument : FID6
Sample Name: L2329757-02
Misc Info : WG1786603, WG1785883, ICAL19796
Vial Number: 61



File :0:\Forensics\Data\FID6\2023\JUN\JUN05.SEC\F606052331.D
Operator : FID6:AMV
Acquired : 06 Jun 2023 11:20 am using AcqMethod FID6A.M
Instrument : FID6
Sample Name: WG1785883-1
Misc Info : WG1786603, WG1785883, ICAL19796
Vial Number: 66

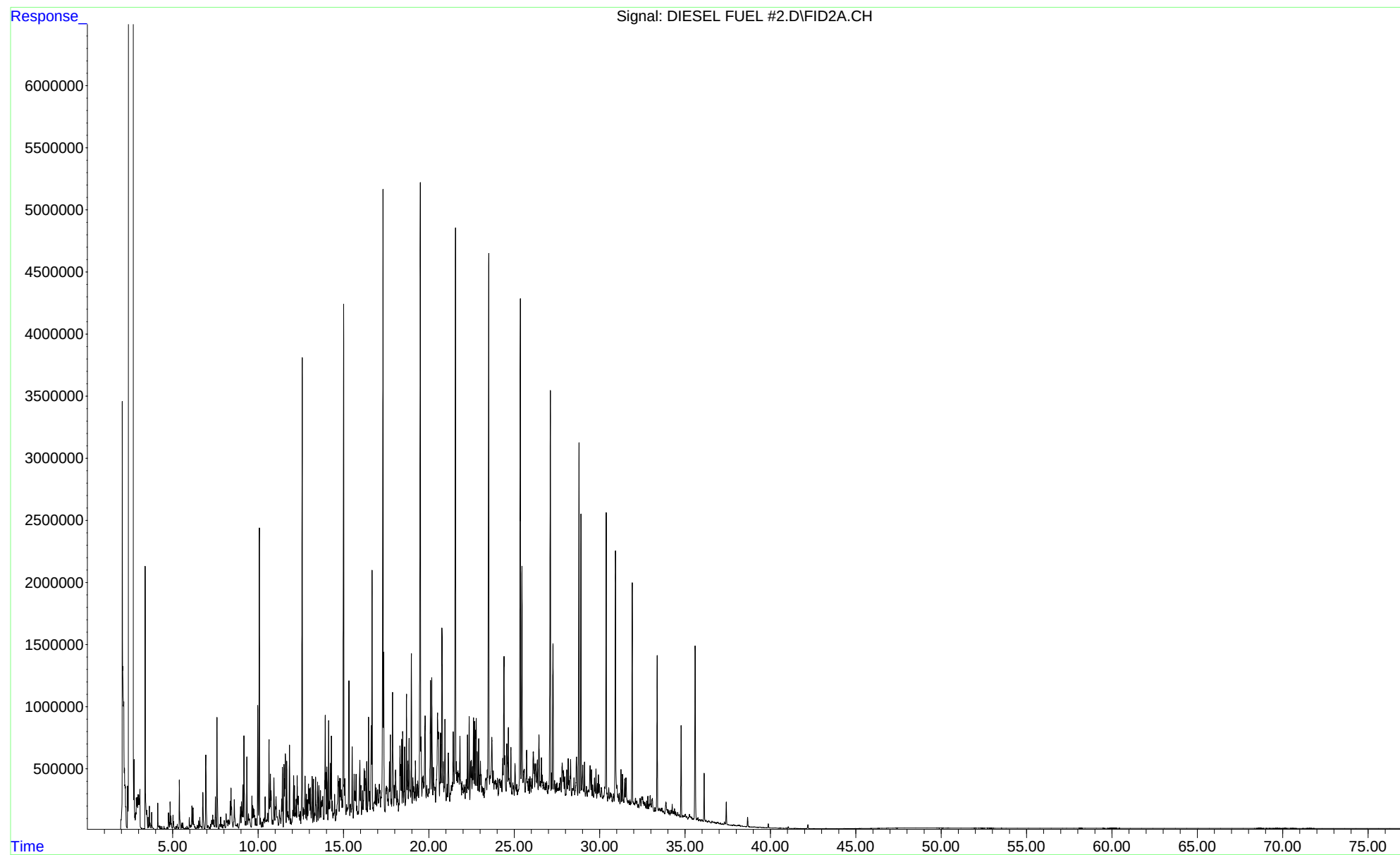


File :0:\Forensics\Data\FID6\2023\JUN\JUN05.SEC\F606052313.D
Operator : FID6:AMV
Acquired : 05 Jun 2023 5:53 pm using AcqMethod FID6A.M
Instrument : FID6
Sample Name: WG1785883-2
Misc Info : WG1786603, WG1785883, ICAL19796
Vial Number: 57

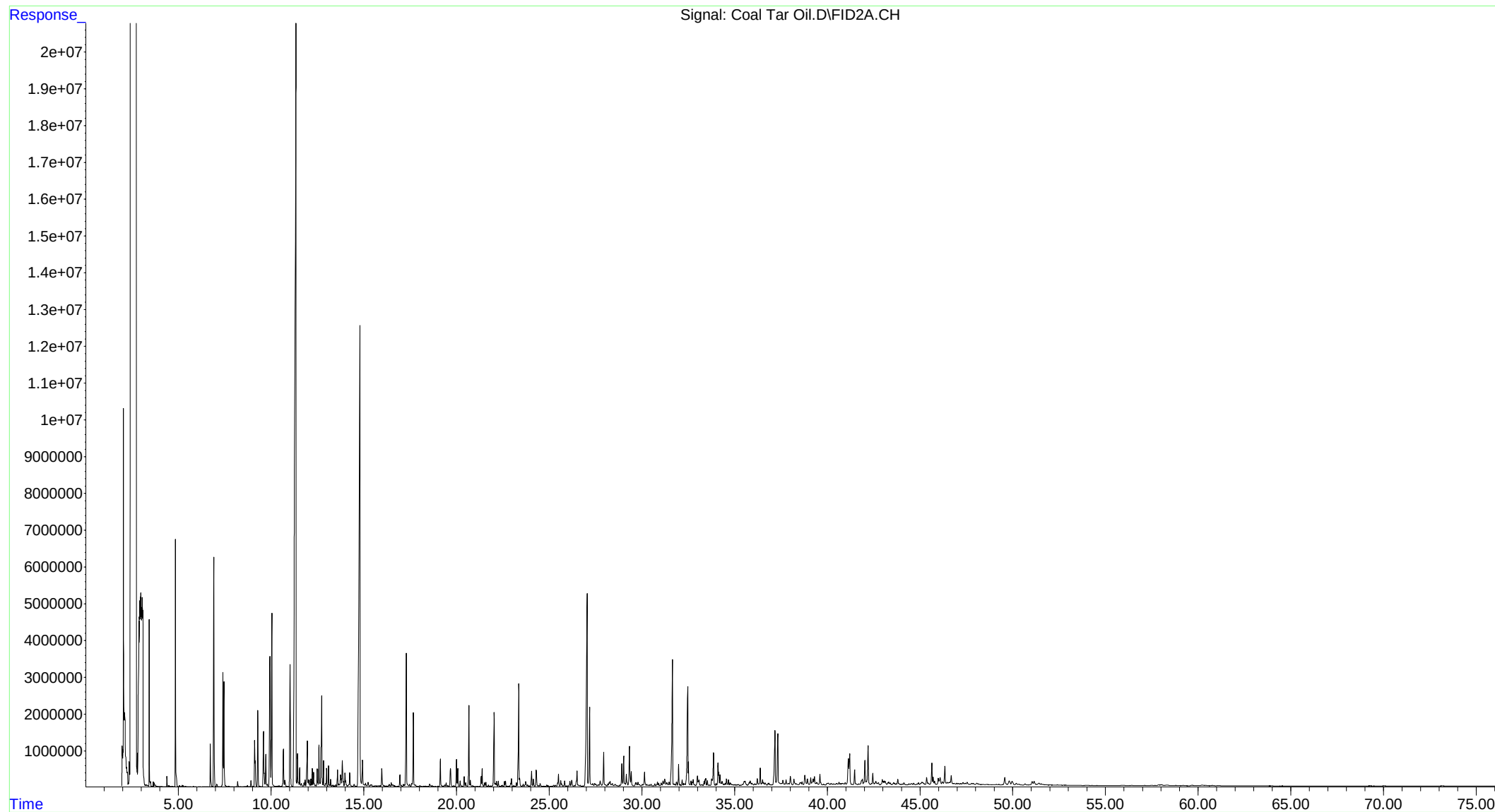


Petroleum Reference Standards

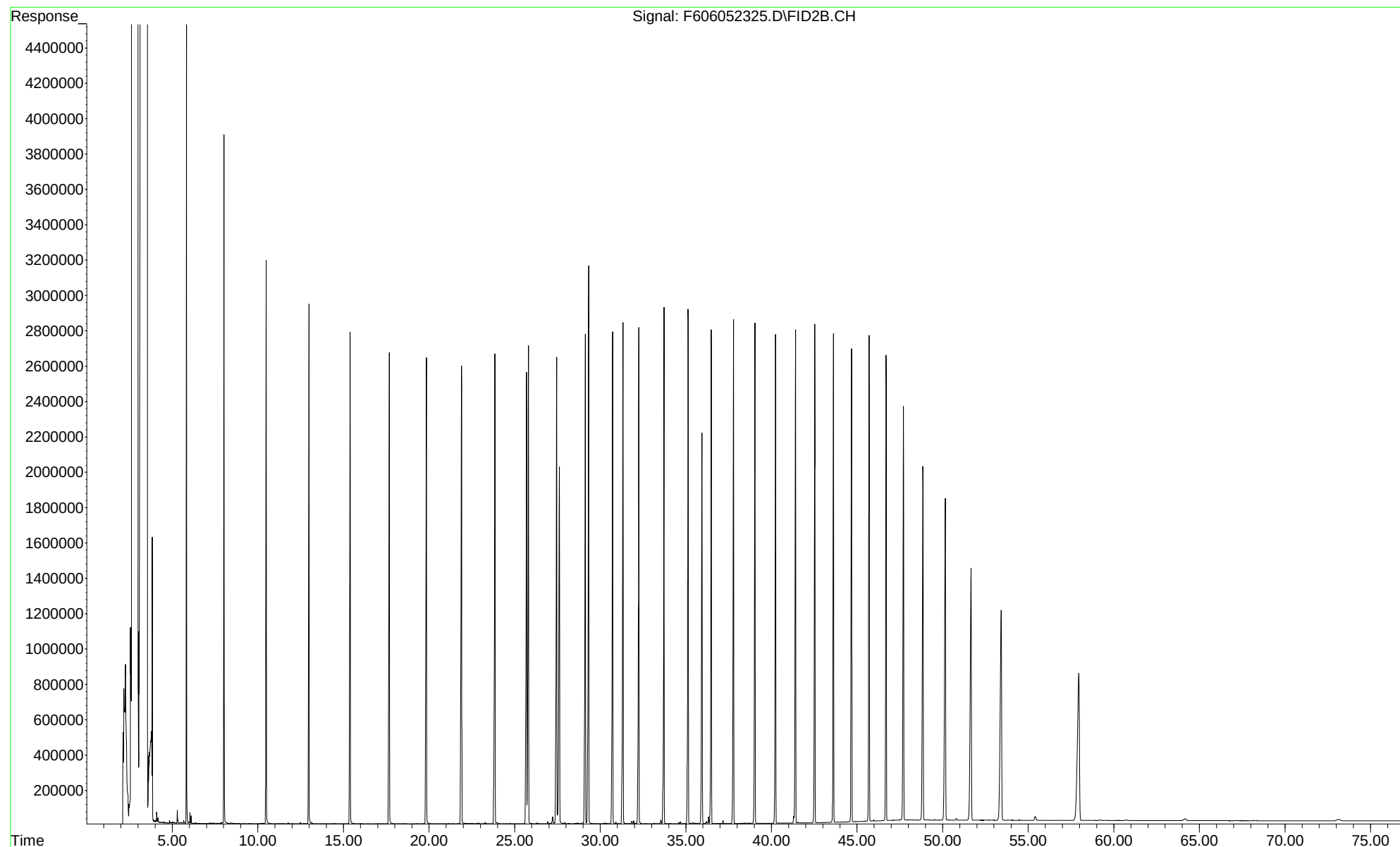
File :O:\FORENSICS\LIBRARY\HYDROCARBON REFERENCE STANDARDS\DIESEL
... FUEL #2.D
Operator : PAH2:AC
Instrument : PAH 2
Acquired : 18 Nov 2011 8:19 pm using AcqMethod FRNC2AF.M
Sample : #2 DIESEL FUEL
Misc Info : F050410A



File :0:\Forensics\Data\LIBRARY\Hydrocarbon Reference Standards\Coal Tar Oil.D
... al Tar Oil.D
Operator : DMP
Instrument : PAH2
Acquired : 08 Aug 2013 6:49 pm using AcqMethod FRNC2A.M
Sample : Coal Tar Oil
Misc Info : Chem Service Pz-123 (F031908K)



File :0:\Forensics\Data\FID6\2023\JUN\JUN05.SEC\F606052325.D
Operator : FID6:AMV
Acquired : 06 Jun 2023 2:36 am using AcqMethod FID6A.M
Instrument : FID6
Sample Name: WG1786603-2
Misc Info : WG1786603,FRBF94,ICAL19796
Vial Number: 63





ANALYTICAL REPORT

Lab Number:	L2330989
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 40/50
Project Number:	1338.0013Y000
Report Date:	06/20/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2330989-01	R-3_(7-9)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/02/23 12:40	06/02/23
L2330989-02	R-5_(4-6)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/02/23 14:00	06/02/23
L2330989-03	R-5_(7-9)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/02/23 14:10	06/02/23
L2330989-04	R-4_(4-6)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/02/23 14:20	06/02/23
L2330989-05	R-4_(7-9)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/02/23 14:30	06/02/23

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Case Narrative (continued)

Report Submission

June 20, 2023: This final report includes the results of all requested analyses.

June 13, 2023: This is a preliminary report.

June 09, 2023: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Semivolatile Organics

The WG1790226-2/-3 LCS/LCSD recoveries, associated with L2330989-03 through -05, are below the acceptance criteria for benzoic acid (3%/9%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L2330989-01: The sample has elevated detection limits for all elements, with the exception of chromium and mercury, due to the dilution required by the sample matrix.

L2330989-02 through -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1788826-1 Method Blank, associated with L2330989-01 and -02, has concentrations above the reporting limits for chromium and iron. The concentration of chromium in L2330989-02, and the concentration of iron in both samples, are greater than 10x the blank concentrations; therefore, no corrective action is required. L2330989-01 was re-digested for chromium and the associated WG1793570-1 Method Blank was non-detect.

The WG1789741-1 Method Blank, associated with L2330989-03 through -05, has concentrations above the

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Case Narrative (continued)

reporting limits for calcium and iron. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/20/23

ORGANICS

VOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/07/23 16:19
Analyst: JIC
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.6	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.35	1
Tetrachloroethene	ND		ug/kg	0.66	0.26	1
Chlorobenzene	ND		ug/kg	0.66	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.92	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.66	0.22	1
Bromodichloromethane	ND		ug/kg	0.66	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
cis-1,3-Dichloropropene	ND		ug/kg	0.66	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.66	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.66	0.21	1
Bromoform	ND		ug/kg	5.3	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.66	0.22	1
Benzene	ND		ug/kg	0.66	0.22	1
Toluene	ND		ug/kg	1.3	0.72	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.3	1.2	1
Bromomethane	ND		ug/kg	2.6	0.76	1
Vinyl chloride	ND		ug/kg	1.3	0.44	1
Chloroethane	ND		ug/kg	2.6	0.60	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	0.20	J	ug/kg	0.66	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.74	1
o-Xylene	ND		ug/kg	1.3	0.38	1
Xylenes, Total	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.31	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	10	J	ug/kg	13	6.3	1
Carbon disulfide	ND		ug/kg	13	6.0	1
2-Butanone	4.2	J	ug/kg	13	2.9	1
Vinyl acetate	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.17	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg	2.6	0.27	1
2,2-Dichloropropane	ND		ug/kg	2.6	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.37	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.66	0.17	1
Bromobenzene	ND		ug/kg	2.6	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.16	1
o-Chlorotoluene	ND		ug/kg	2.6	0.25	1
p-Chlorotoluene	ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.3	0.22	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.3	0.86	1
Acrylonitrile	ND		ug/kg	5.3	1.5	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.36	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.44	1
1,4-Dioxane	ND		ug/kg	100	46.	1
p-Diethylbenzene	ND		ug/kg	2.6	0.23	1
p-Ethyltoluene	ND		ug/kg	2.6	0.51	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.25	1
Ethyl ether	ND		ug/kg	2.6	0.45	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.6	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/13/23 10:09
Analyst: AJK
Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.56	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.18	1
Benzene	ND		ug/kg	0.56	0.18	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	7.9	J	ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.56	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.73	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	90	39.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/12/23 14:41
Analyst: JIC
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.0	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.70	0.28	1
Chlorobenzene	ND		ug/kg	0.70	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.98	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.70	0.23	1
Bromodichloromethane	ND		ug/kg	0.70	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.70	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.70	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.70	0.22	1
Bromoform	ND		ug/kg	5.6	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.70	0.23	1
Benzene	ND		ug/kg	0.70	0.23	1
Toluene	ND		ug/kg	1.4	0.76	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.6	1.3	1
Bromomethane	ND		ug/kg	2.8	0.82	1
Vinyl chloride	ND		ug/kg	1.4	0.47	1
Chloroethane	ND		ug/kg	2.8	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.70	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.79	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.33	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	7.7	J	ug/kg	14	6.8	1
Carbon disulfide	ND		ug/kg	14	6.4	1
2-Butanone	ND		ug/kg	14	3.1	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.39	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.70	0.18	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.6	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.6	0.91	1
Acrylonitrile	ND		ug/kg	5.6	1.6	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.45	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.47	1
1,4-Dioxane	ND		ug/kg	110	49.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.54	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.48	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.0	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/12/23 15:07
Analyst: JIC
Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.1	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.71	0.28	1
Chlorobenzene	ND		ug/kg	0.71	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.99	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.71	0.24	1
Bromodichloromethane	ND		ug/kg	0.71	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.71	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.71	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.71	0.23	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.71	0.24	1
Benzene	ND		ug/kg	0.71	0.24	1
Toluene	ND		ug/kg	1.4	0.78	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.8	0.83	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.8	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.20	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.71	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.29	1
p/m-Xylene	ND		ug/kg	2.8	0.80	1
o-Xylene	ND		ug/kg	1.4	0.42	1
Xylenes, Total	ND		ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.8	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	6.9	1
Carbon disulfide	ND		ug/kg	14	6.5	1
2-Butanone	ND		ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.71	0.19	1
Bromobenzene	ND		ug/kg	2.8	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.8	0.17	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.7	0.93	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.39	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.48	1
1,4-Dioxane	ND		ug/kg	110	50.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.55	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.1	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/12/23 15:33
Analyst: JIC
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.25	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	14		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	0.56	J	ug/kg	1.2	0.21	1
sec-Butylbenzene	1.2		ug/kg	1.2	0.18	1
tert-Butylbenzene	0.41	J	ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	4.4		ug/kg	1.2	0.14	1
p-Isopropyltoluene	0.93	J	ug/kg	1.2	0.14	1
Naphthalene	3.6	J	ug/kg	5.0	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.89	J	ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	0.65	J	ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	0.68	J	ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	5.6		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/23 10:19
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1788325-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/23 10:19
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1788325-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/07/23 10:19
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1788325-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03-05 Batch: WG1790714-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03-05 Batch: WG1790714-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03-05 Batch: WG1790714-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/13/23 09:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1790727-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/13/23 09:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1790727-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/13/23 09:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1790727-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1788325-3 WG1788325-4								
Methylene chloride	83		80		70-130	4		30
1,1-Dichloroethane	87		83		70-130	5		30
Chloroform	88		79		70-130	11		30
Carbon tetrachloride	79		70		70-130	12		30
1,2-Dichloropropane	92		92		70-130	0		30
Dibromochloromethane	96		91		70-130	5		30
1,1,2-Trichloroethane	95		95		70-130	0		30
Tetrachloroethene	82		75		70-130	9		30
Chlorobenzene	85		83		70-130	2		30
Trichlorofluoromethane	80		65	Q	70-139	21		30
1,2-Dichloroethane	94		83		70-130	12		30
1,1,1-Trichloroethane	86		75		70-130	14		30
Bromodichloromethane	93		85		70-130	9		30
trans-1,3-Dichloropropene	96		93		70-130	3		30
cis-1,3-Dichloropropene	94		89		70-130	5		30
1,1-Dichloropropene	85		78		70-130	9		30
Bromoform	92		89		70-130	3		30
1,1,2,2-Tetrachloroethane	95		97		70-130	2		30
Benzene	87		83		70-130	5		30
Toluene	80		79		70-130	1		30
Ethylbenzene	84		81		70-130	4		30
Chloromethane	81		68		52-130	17		30
Bromomethane	74		60		57-147	21		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1788325-3 WG1788325-4								
Vinyl chloride	80		64	Q	67-130	22		30
Chloroethane	82		66		50-151	22		30
1,1-Dichloroethene	93		73		65-135	24		30
trans-1,2-Dichloroethene	80		80		70-130	0		30
Trichloroethene	89		81		70-130	9		30
1,2-Dichlorobenzene	91		86		70-130	6		30
1,3-Dichlorobenzene	87		83		70-130	5		30
1,4-Dichlorobenzene	86		83		70-130	4		30
Methyl tert butyl ether	98		94		66-130	4		30
p/m-Xylene	84		80		70-130	5		30
o-Xylene	87		84		70-130	4		30
cis-1,2-Dichloroethene	88		82		70-130	7		30
Dibromomethane	97		88		70-130	10		30
Styrene	90		86		70-130	5		30
Dichlorodifluoromethane	77		63		30-146	20		30
Acetone	85		83		54-140	2		30
Carbon disulfide	95		75		59-130	24		30
2-Butanone	92		93		70-130	1		30
Vinyl acetate	92		90		70-130	2		30
4-Methyl-2-pentanone	98		101		70-130	3		30
1,2,3-Trichloropropane	94		95		68-130	1		30
2-Hexanone	92		98		70-130	6		30
Bromochloromethane	93		85		70-130	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1788325-3 WG1788325-4								
2,2-Dichloropropane	84		75		70-130	11		30
1,2-Dibromoethane	99		96		70-130	3		30
1,3-Dichloropropane	95		95		69-130	0		30
1,1,1,2-Tetrachloroethane	92		86		70-130	7		30
Bromobenzene	86		82		70-130	5		30
n-Butylbenzene	85		83		70-130	2		30
sec-Butylbenzene	83		81		70-130	2		30
tert-Butylbenzene	81		79		70-130	3		30
o-Chlorotoluene	98		98		70-130	0		30
p-Chlorotoluene	84		85		70-130	1		30
1,2-Dibromo-3-chloropropane	92		91		68-130	1		30
Hexachlorobutadiene	83		78		67-130	6		30
Isopropylbenzene	81		80		70-130	1		30
p-Isopropyltoluene	84		82		70-130	2		30
Naphthalene	97		96		70-130	1		30
Acrylonitrile	94		98		70-130	4		30
n-Propylbenzene	83		82		70-130	1		30
1,2,3-Trichlorobenzene	98		93		70-130	5		30
1,2,4-Trichlorobenzene	94		90		70-130	4		30
1,3,5-Trimethylbenzene	85		83		70-130	2		30
1,2,4-Trimethylbenzene	86		84		70-130	2		30
1,4-Dioxane	99		98		65-136	1		30
p-Diethylbenzene	84		82		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1788325-3 WG1788325-4								
p-Ethyltoluene	83		82		70-130	1		30
1,2,4,5-Tetramethylbenzene	90		88		70-130	2		30
Ethyl ether	117		84		67-130	33	Q	30
trans-1,4-Dichloro-2-butene	98		96		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		99		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	100		108		70-130
Dibromofluoromethane	102		97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03-05 Batch: WG1790714-3 WG1790714-4								
Methylene chloride	71		77		70-130	8		30
1,1-Dichloroethane	77		82		70-130	6		30
Chloroform	75		82		70-130	9		30
Carbon tetrachloride	70		73		70-130	4		30
1,2-Dichloropropane	76		82		70-130	8		30
Dibromochloromethane	72		79		70-130	9		30
1,1,2-Trichloroethane	80		88		70-130	10		30
Tetrachloroethene	78		81		70-130	4		30
Chlorobenzene	79		84		70-130	6		30
Trichlorofluoromethane	76		78		70-139	3		30
1,2-Dichloroethane	75		82		70-130	9		30
1,1,1-Trichloroethane	72		75		70-130	4		30
Bromodichloromethane	77		83		70-130	8		30
trans-1,3-Dichloropropene	79		86		70-130	8		30
cis-1,3-Dichloropropene	77		84		70-130	9		30
1,1-Dichloropropene	72		76		70-130	5		30
Bromoform	78		86		70-130	10		30
1,1,2,2-Tetrachloroethane	75		81		70-130	8		30
Benzene	77		82		70-130	6		30
Toluene	76		81		70-130	6		30
Ethylbenzene	78		83		70-130	6		30
Chloromethane	72		76		52-130	5		30
Bromomethane	86		90		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03-05 Batch: WG1790714-3 WG1790714-4								
Vinyl chloride	64	Q	66	Q	67-130	3		30
Chloroethane	75		78		50-151	4		30
1,1-Dichloroethene	69		72		65-135	4		30
trans-1,2-Dichloroethene	77		82		70-130	6		30
Trichloroethene	74		79		70-130	7		30
1,2-Dichlorobenzene	77		86		70-130	11		30
1,3-Dichlorobenzene	78		85		70-130	9		30
1,4-Dichlorobenzene	78		86		70-130	10		30
Methyl tert butyl ether	75		83		66-130	10		30
p/m-Xylene	80		86		70-130	7		30
o-Xylene	80		86		70-130	7		30
cis-1,2-Dichloroethene	76		82		70-130	8		30
Dibromomethane	75		83		70-130	10		30
Styrene	79		85		70-130	7		30
Dichlorodifluoromethane	63		65		30-146	3		30
Acetone	68		74		54-140	8		30
Carbon disulfide	66		69		59-130	4		30
2-Butanone	73		78		70-130	7		30
Vinyl acetate	76		79		70-130	4		30
4-Methyl-2-pentanone	73		80		70-130	9		30
1,2,3-Trichloropropane	74		81		68-130	9		30
2-Hexanone	71		78		70-130	9		30
Bromochloromethane	81		88		70-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03-05 Batch: WG1790714-3 WG1790714-4								
2,2-Dichloropropane	76		79		70-130	4		30
1,2-Dibromoethane	72		79		70-130	9		30
1,3-Dichloropropane	78		85		69-130	9		30
1,1,1,2-Tetrachloroethane	80		87		70-130	8		30
Bromobenzene	76		84		70-130	10		30
n-Butylbenzene	80		85		70-130	6		30
sec-Butylbenzene	80		84		70-130	5		30
tert-Butylbenzene	78		83		70-130	6		30
o-Chlorotoluene	86		93		70-130	8		30
p-Chlorotoluene	76		82		70-130	8		30
1,2-Dibromo-3-chloropropane	72		81		68-130	12		30
Hexachlorobutadiene	81		86		67-130	6		30
Isopropylbenzene	77		82		70-130	6		30
p-Isopropyltoluene	79		84		70-130	6		30
Naphthalene	72		79		70-130	9		30
Acrylonitrile	77		82		70-130	6		30
n-Propylbenzene	79		84		70-130	6		30
1,2,3-Trichlorobenzene	77		85		70-130	10		30
1,2,4-Trichlorobenzene	80		88		70-130	10		30
1,3,5-Trimethylbenzene	76		82		70-130	8		30
1,2,4-Trimethylbenzene	76		82		70-130	8		30
1,4-Dioxane	78		89		65-136	13		30
p-Diethylbenzene	78		84		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03-05 Batch: WG1790714-3 WG1790714-4								
p-Ethyltoluene	78		83		70-130	6		30
1,2,4,5-Tetramethylbenzene	76		82		70-130	8		30
Ethyl ether	76		82		67-130	8		30
trans-1,4-Dichloro-2-butene	76		83		70-130	9		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1790727-3 WG1790727-4								
Methylene chloride	86		81		70-130	6		30
1,1-Dichloroethane	93		87		70-130	7		30
Chloroform	93		87		70-130	7		30
Carbon tetrachloride	95		87		70-130	9		30
1,2-Dichloropropane	92		88		70-130	4		30
Dibromochloromethane	93		88		70-130	6		30
1,1,2-Trichloroethane	101		97		70-130	4		30
Tetrachloroethene	103		97		70-130	6		30
Chlorobenzene	98		93		70-130	5		30
Trichlorofluoromethane	96		89		70-139	8		30
1,2-Dichloroethane	93		88		70-130	6		30
1,1,1-Trichloroethane	96		88		70-130	9		30
Bromodichloromethane	96		90		70-130	6		30
trans-1,3-Dichloropropene	101		96		70-130	5		30
cis-1,3-Dichloropropene	98		93		70-130	5		30
1,1-Dichloropropene	98		90		70-130	9		30
Bromoform	100		97		70-130	3		30
1,1,2,2-Tetrachloroethane	95		91		70-130	4		30
Benzene	93		86		70-130	8		30
Toluene	97		91		70-130	6		30
Ethylbenzene	99		93		70-130	6		30
Chloromethane	89		81		52-130	9		30
Bromomethane	93		88		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1790727-3 WG1790727-4								
Vinyl chloride	95		86		67-130	10		30
Chloroethane	95		89		50-151	7		30
1,1-Dichloroethene	94		87		65-135	8		30
trans-1,2-Dichloroethene	92		85		70-130	8		30
Trichloroethene	98		91		70-130	7		30
1,2-Dichlorobenzene	97		94		70-130	3		30
1,3-Dichlorobenzene	100		94		70-130	6		30
1,4-Dichlorobenzene	98		94		70-130	4		30
Methyl tert butyl ether	94		90		66-130	4		30
p/m-Xylene	102		96		70-130	6		30
o-Xylene	103		98		70-130	5		30
cis-1,2-Dichloroethene	93		87		70-130	7		30
Dibromomethane	96		91		70-130	5		30
Styrene	106		100		70-130	6		30
Dichlorodifluoromethane	89		81		30-146	9		30
Acetone	80		78		54-140	3		30
Carbon disulfide	87		81		59-130	7		30
2-Butanone	86		81		70-130	6		30
Vinyl acetate	87		83		70-130	5		30
4-Methyl-2-pentanone	90		86		70-130	5		30
1,2,3-Trichloropropane	94		93		68-130	1		30
2-Hexanone	87		82		70-130	6		30
Bromochloromethane	96		90		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1790727-3 WG1790727-4								
2,2-Dichloropropane	96		88		70-130	9		30
1,2-Dibromoethane	94		90		70-130	4		30
1,3-Dichloropropane	98		95		69-130	3		30
1,1,1,2-Tetrachloroethane	96		92		70-130	4		30
Bromobenzene	98		95		70-130	3		30
n-Butylbenzene	104		98		70-130	6		30
sec-Butylbenzene	103		96		70-130	7		30
tert-Butylbenzene	102		96		70-130	6		30
o-Chlorotoluene	100		95		70-130	5		30
p-Chlorotoluene	100		95		70-130	5		30
1,2-Dibromo-3-chloropropane	83		80		68-130	4		30
Hexachlorobutadiene	101		96		67-130	5		30
Isopropylbenzene	102		96		70-130	6		30
p-Isopropyltoluene	105		98		70-130	7		30
Naphthalene	96		94		70-130	2		30
Acrylonitrile	88		82		70-130	7		30
n-Propylbenzene	102		95		70-130	7		30
1,2,3-Trichlorobenzene	102		98		70-130	4		30
1,2,4-Trichlorobenzene	104		100		70-130	4		30
1,3,5-Trimethylbenzene	103		97		70-130	6		30
1,2,4-Trimethylbenzene	105		98		70-130	7		30
1,4-Dioxane	94		90		65-136	4		30
p-Diethylbenzene	106		99		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1790727-3 WG1790727-4								
p-Ethyltoluene	103		97		70-130	6		30
1,2,4,5-Tetramethylbenzene	107		102		70-130	5		30
Ethyl ether	96		91		67-130	5		30
trans-1,4-Dichloro-2-butene	96		92		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		94		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	98		96		70-130

SEMIVOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 17:15
Analyst: JG
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/03/23 21:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	ND		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	ND		ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	ND		ug/kg	130	24.	1
Benzo(a)pyrene	ND		ug/kg	170	53.	1
Benzo(b)fluoranthene	ND		ug/kg	130	36.	1
Benzo(k)fluoranthene	ND		ug/kg	130	34.	1
Chrysene	ND		ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	ND		ug/kg	130	42.	1
Benzo(ghi)perylene	ND		ug/kg	170	25.	1
Fluorene	ND		ug/kg	220	21.	1
Phenanthrene	ND		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	30.	1
Pyrene	ND		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	28.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	ND		ug/kg	220	20.	1
2-Methylnaphthalene	ND		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	190	35.	1
2,4-Dimethylphenol	ND		ug/kg	220	71.	1
2-Nitrophenol	ND		ug/kg	470	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	48.	1
Phenol	ND		ug/kg	220	33.	1
2-Methylphenol	ND		ug/kg	220	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	ND		ug/kg	220	21.	1
1,4-Dioxane	ND		ug/kg	32	9.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	46		10-136
4-Terphenyl-d14	69		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/13/23 15:25
Analyst: SZ
Percent Solids: 82%

Extraction Method: EPA 3546
Extraction Date: 06/07/23 08:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	180		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	2200		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	120	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	49	J	ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	1100		ug/kg	120	22.	1
Benzo(a)pyrene	980		ug/kg	160	48.	1
Benzo(b)fluoranthene	1200		ug/kg	120	33.	1
Benzo(k)fluoranthene	370		ug/kg	120	32.	1
Chrysene	1000		ug/kg	120	20.	1
Acenaphthylene	120	J	ug/kg	160	30.	1
Anthracene	470		ug/kg	120	39.	1
Benzo(ghi)perylene	560		ug/kg	160	23.	1
Fluorene	200		ug/kg	200	19.	1
Phenanthrene	2100		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	140		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	630		ug/kg	160	28.	1
Pyrene	1900		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	26.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	130	J	ug/kg	200	19.	1
2-Methylnaphthalene	77	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	200		ug/kg	200	19.	1
1,4-Dioxane	ND		ug/kg	30	9.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	55		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/13/23 18:44
Analyst: ALS
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	180	1
Hexachloroethane	ND		ug/kg	160	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	25.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	112		10-136
4-Terphenyl-d14	54		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/13/23 19:07
Analyst: ALS
Percent Solids: 80%

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	32	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	21	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	40.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	41	J	ug/kg	120	25.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	30	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	26.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	97.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	45		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/13/23 19:31
Analyst: ALS
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	490		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	520		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	110		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	140		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	470		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	220		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	720		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	22.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	100	J	ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	830	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	7.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	45		23-120
2-Fluorobiphenyl	44		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	40		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/04/23 14:43
Analyst: CMM

Extraction Method: EPA 3546
Extraction Date: 06/03/23 00:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1786664-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/04/23 14:43
Analyst: CMM

Extraction Method: EPA 3546
Extraction Date: 06/03/23 00:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1786664-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/04/23 14:43
Analyst: CMM

Extraction Method: EPA 3546
Extraction Date: 06/03/23 00:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1786664-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	72		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/09/23 14:12
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/07/23 07:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1788116-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/09/23 14:12
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/07/23 07:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1788116-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/09/23 14:12
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/07/23 07:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1788116-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	95		30-120
2,4,6-Tribromophenol	99		10-136
4-Terphenyl-d14	112		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1790226-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1790226-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	22.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1790226-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	71		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1786664-2 WG1786664-3								
Acenaphthene	80		72		31-137	11		50
1,2,4-Trichlorobenzene	86		78		38-107	10		50
Hexachlorobenzene	81		69		40-140	16		50
Bis(2-chloroethyl)ether	80		74		40-140	8		50
2-Chloronaphthalene	90		78		40-140	14		50
1,2-Dichlorobenzene	84		75		40-140	11		50
1,3-Dichlorobenzene	82		76		40-140	8		50
1,4-Dichlorobenzene	81		75		28-104	8		50
3,3'-Dichlorobenzidine	76		70		40-140	8		50
2,4-Dinitrotoluene	126		109		40-132	14		50
2,6-Dinitrotoluene	119		98		40-140	19		50
Fluoranthene	85		76		40-140	11		50
4-Chlorophenyl phenyl ether	83		74		40-140	11		50
4-Bromophenyl phenyl ether	85		71		40-140	18		50
Bis(2-chloroisopropyl)ether	79		73		40-140	8		50
Bis(2-chloroethoxy)methane	88		77		40-117	13		50
Hexachlorobutadiene	82		76		40-140	8		50
Hexachlorocyclopentadiene	21	Q	18	Q	40-140	15		50
Hexachloroethane	87		79		40-140	10		50
Isophorone	86		76		40-140	12		50
Naphthalene	83		75		40-140	10		50
Nitrobenzene	91		82		40-140	10		50
NDPA/DPA	86		76		36-157	12		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1786664-2 WG1786664-3								
n-Nitrosodi-n-propylamine	86		77		32-121	11		50
Bis(2-ethylhexyl)phthalate	115		105		40-140	9		50
Butyl benzyl phthalate	102		96		40-140	6		50
Di-n-butylphthalate	104		92		40-140	12		50
Di-n-octylphthalate	122		115		40-140	6		50
Diethyl phthalate	94		81		40-140	15		50
Dimethyl phthalate	96		82		40-140	16		50
Benzo(a)anthracene	92		83		40-140	10		50
Benzo(a)pyrene	106		97		40-140	9		50
Benzo(b)fluoranthene	95		82		40-140	15		50
Benzo(k)fluoranthene	96		91		40-140	5		50
Chrysene	89		82		40-140	8		50
Acenaphthylene	97		83		40-140	16		50
Anthracene	87		78		40-140	11		50
Benzo(ghi)perylene	87		84		40-140	4		50
Fluorene	83		73		40-140	13		50
Phenanthrene	85		75		40-140	13		50
Dibenzo(a,h)anthracene	86		82		40-140	5		50
Indeno(1,2,3-cd)pyrene	89		86		40-140	3		50
Pyrene	85		76		35-142	11		50
Biphenyl	88		78		37-127	12		50
4-Chloroaniline	49		43		40-140	13		50
2-Nitroaniline	120		100		47-134	18		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1786664-2 WG1786664-3								
3-Nitroaniline	80		71		26-129	12		50
4-Nitroaniline	86		71		41-125	19		50
Dibenzofuran	85		74		40-140	14		50
2-Methylnaphthalene	87		78		40-140	11		50
1,2,4,5-Tetrachlorobenzene	85		75		40-117	13		50
Acetophenone	95		84		14-144	12		50
2,4,6-Trichlorophenol	99		88		30-130	12		50
p-Chloro-m-cresol	102		87		26-103	16		50
2-Chlorophenol	95		86		25-102	10		50
2,4-Dichlorophenol	100		86		30-130	15		50
2,4-Dimethylphenol	93		83		30-130	11		50
2-Nitrophenol	124		112		30-130	10		50
4-Nitrophenol	78		63		11-114	21		50
2,4-Dinitrophenol	81		70		4-130	15		50
4,6-Dinitro-o-cresol	122		100		10-130	20		50
Pentachlorophenol	61		49		17-109	22		50
Phenol	98	Q	87		26-90	12		50
2-Methylphenol	90		79		30-130	13		50
3-Methylphenol/4-Methylphenol	91		81		30-130	12		50
2,4,5-Trichlorophenol	99		87		30-130	13		50
Benzoic Acid	31		21		10-110	38		50
Benzyl Alcohol	90		80		40-140	12		50
Carbazole	88		79		54-128	11		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1786664-2 WG1786664-3								
1,4-Dioxane	62		58		40-140	7		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	97		88		25-120
Phenol-d6	90		80		10-120
Nitrobenzene-d5	94		84		23-120
2-Fluorobiphenyl	87		75		30-120
2,4,6-Tribromophenol	85		74		10-136
4-Terphenyl-d14	78		71		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1788116-2 WG1788116-3								
Acenaphthene	95		94		31-137	1		50
1,2,4-Trichlorobenzene	89		93		38-107	4		50
Hexachlorobenzene	100		103		40-140	3		50
Bis(2-chloroethyl)ether	87		88		40-140	1		50
2-Chloronaphthalene	94		94		40-140	0		50
1,2-Dichlorobenzene	87		88		40-140	1		50
1,3-Dichlorobenzene	84		84		40-140	0		50
1,4-Dichlorobenzene	87		88		28-104	1		50
3,3'-Dichlorobenzidine	79		80		40-140	1		50
2,4-Dinitrotoluene	99		100		40-132	1		50
2,6-Dinitrotoluene	89		92		40-140	3		50
Fluoranthene	94		99		40-140	5		50
4-Chlorophenyl phenyl ether	95		99		40-140	4		50
4-Bromophenyl phenyl ether	94		94		40-140	0		50
Bis(2-chloroisopropyl)ether	76		75		40-140	1		50
Bis(2-chloroethoxy)methane	88		88		40-117	0		50
Hexachlorobutadiene	84		85		40-140	1		50
Hexachlorocyclopentadiene	62		63		40-140	2		50
Hexachloroethane	84		83		40-140	1		50
Isophorone	82		84		40-140	2		50
Naphthalene	92		93		40-140	1		50
Nitrobenzene	82		89		40-140	8		50
NDPA/DPA	97		99		36-157	2		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1788116-2 WG1788116-3								
n-Nitrosodi-n-propylamine	88		91		32-121	3		50
Bis(2-ethylhexyl)phthalate	93		97		40-140	4		50
Butyl benzyl phthalate	101		104		40-140	3		50
Di-n-butylphthalate	94		98		40-140	4		50
Di-n-octylphthalate	96		99		40-140	3		50
Diethyl phthalate	96		98		40-140	2		50
Dimethyl phthalate	88		92		40-140	4		50
Benzo(a)anthracene	92		94		40-140	2		50
Benzo(a)pyrene	106		112		40-140	6		50
Benzo(b)fluoranthene	94		98		40-140	4		50
Benzo(k)fluoranthene	106		109		40-140	3		50
Chrysene	96		97		40-140	1		50
Acenaphthylene	99		101		40-140	2		50
Anthracene	94		98		40-140	4		50
Benzo(ghi)perylene	99		100		40-140	1		50
Fluorene	98		97		40-140	1		50
Phenanthrene	90		92		40-140	2		50
Dibenzo(a,h)anthracene	96		99		40-140	3		50
Indeno(1,2,3-cd)pyrene	96		101		40-140	5		50
Pyrene	97		102		35-142	5		50
Biphenyl	91		94		37-127	3		50
4-Chloroaniline	75		73		40-140	3		50
2-Nitroaniline	93		96		47-134	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1788116-2 WG1788116-3								
3-Nitroaniline	85		83		26-129	2		50
4-Nitroaniline	101		103		41-125	2		50
Dibenzofuran	98		96		40-140	2		50
2-Methylnaphthalene	90		92		40-140	2		50
1,2,4,5-Tetrachlorobenzene	90		94		40-117	4		50
Acetophenone	91		95		14-144	4		50
2,4,6-Trichlorophenol	92		95		30-130	3		50
p-Chloro-m-cresol	94		96		26-103	2		50
2-Chlorophenol	96		96		25-102	0		50
2,4-Dichlorophenol	94		94		30-130	0		50
2,4-Dimethylphenol	90		89		30-130	1		50
2-Nitrophenol	93		95		30-130	2		50
4-Nitrophenol	90		91		11-114	1		50
2,4-Dinitrophenol	79		78		4-130	1		50
4,6-Dinitro-o-cresol	106		110		10-130	4		50
Pentachlorophenol	94		95		17-109	1		50
Phenol	91	Q	92	Q	26-90	1		50
2-Methylphenol	93		90		30-130	3		50
3-Methylphenol/4-Methylphenol	100		103		30-130	3		50
2,4,5-Trichlorophenol	92		102		30-130	10		50
Benzoic Acid	26		27		10-110	4		50
Benzyl Alcohol	90		92		40-140	2		50
Carbazole	97		99		54-128	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1788116-2 WG1788116-3								
1,4-Dioxane	70		66		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	91		91		25-120
Phenol-d6	89		88		10-120
Nitrobenzene-d5	86		84		23-120
2-Fluorobiphenyl	91		91		30-120
2,4,6-Tribromophenol	98		101		10-136
4-Terphenyl-d14	93		96		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1790226-2 WG1790226-3								
Acenaphthene	76		72		31-137	5		50
1,2,4-Trichlorobenzene	74		64		38-107	14		50
Hexachlorobenzene	82		75		40-140	9		50
Bis(2-chloroethyl)ether	70		66		40-140	6		50
2-Chloronaphthalene	77		68		40-140	12		50
1,2-Dichlorobenzene	71		64		40-140	10		50
1,3-Dichlorobenzene	70		65		40-140	7		50
1,4-Dichlorobenzene	73		66		28-104	10		50
3,3'-Dichlorobenzidine	66		60		40-140	10		50
2,4-Dinitrotoluene	74		68		40-132	8		50
2,6-Dinitrotoluene	71		61		40-140	15		50
Fluoranthene	79		69		40-140	14		50
4-Chlorophenyl phenyl ether	75		69		40-140	8		50
4-Bromophenyl phenyl ether	76		69		40-140	10		50
Bis(2-chloroisopropyl)ether	67		61		40-140	9		50
Bis(2-chloroethoxy)methane	72		64		40-117	12		50
Hexachlorobutadiene	70		63		40-140	11		50
Hexachlorocyclopentadiene	50		45		40-140	11		50
Hexachloroethane	65		60		40-140	8		50
Isophorone	65		58		40-140	11		50
Naphthalene	79		71		40-140	11		50
Nitrobenzene	68		58		40-140	16		50
NDPA/DPA	77		72		36-157	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1790226-2 WG1790226-3								
n-Nitrosodi-n-propylamine	69		61		32-121	12		50
Bis(2-ethylhexyl)phthalate	78		70		40-140	11		50
Butyl benzyl phthalate	85		73		40-140	15		50
Di-n-butylphthalate	82		71		40-140	14		50
Di-n-octylphthalate	84		72		40-140	15		50
Diethyl phthalate	77		69		40-140	11		50
Dimethyl phthalate	75		65		40-140	14		50
Benzo(a)anthracene	75		66		40-140	13		50
Benzo(a)pyrene	96		86		40-140	11		50
Benzo(b)fluoranthene	79		74		40-140	7		50
Benzo(k)fluoranthene	92		80		40-140	14		50
Chrysene	77		69		40-140	11		50
Acenaphthylene	83		73		40-140	13		50
Anthracene	79		70		40-140	12		50
Benzo(ghi)perylene	83		76		40-140	9		50
Fluorene	77		71		40-140	8		50
Phenanthrene	77		67		40-140	14		50
Dibenzo(a,h)anthracene	84		77		40-140	9		50
Indeno(1,2,3-cd)pyrene	82		78		40-140	5		50
Pyrene	80		68		35-142	16		50
Biphenyl	76		68		37-127	11		50
4-Chloroaniline	71		61		40-140	15		50
2-Nitroaniline	80		65		47-134	21		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1790226-2 WG1790226-3								
3-Nitroaniline	76		68		26-129	11		50
4-Nitroaniline	78		70		41-125	11		50
Dibenzofuran	79		74		40-140	7		50
2-Methylnaphthalene	78		69		40-140	12		50
1,2,4,5-Tetrachlorobenzene	72		65		40-117	10		50
Acetophenone	75		66		14-144	13		50
2,4,6-Trichlorophenol	71		62		30-130	14		50
p-Chloro-m-cresol	75		66		26-103	13		50
2-Chlorophenol	77		71		25-102	8		50
2,4-Dichlorophenol	78		67		30-130	15		50
2,4-Dimethylphenol	72		62		30-130	15		50
2-Nitrophenol	77		69		30-130	11		50
4-Nitrophenol	61		55		11-114	10		50
2,4-Dinitrophenol	58		37		4-130	44		50
4,6-Dinitro-o-cresol	76		68		10-130	11		50
Pentachlorophenol	61		51		17-109	18		50
Phenol	74		65		26-90	13		50
2-Methylphenol	76		66		30-130.	14		50
3-Methylphenol/4-Methylphenol	82		70		30-130	16		50
2,4,5-Trichlorophenol	75		63		30-130	17		50
Benzoic Acid	3	Q	9	Q	10-110	102	Q	50
Benzyl Alcohol	71		65		40-140	9		50
Carbazole	81		70		54-128	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1790226-2 WG1790226-3								
1,4-Dioxane	51		47		40-140	8		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		65		25-120
Phenol-d6	72		60		10-120
Nitrobenzene-d5	64		56		23-120
2-Fluorobiphenyl	74		65		30-120
2,4,6-Tribromophenol	83		73		10-136
4-Terphenyl-d14	79		65		18-120

PCBS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/10/23 10:21
Analyst: ER
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/09/23 08:48
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	63.6	5.64	1	A
Aroclor 1221	ND		ug/kg	63.6	6.37	1	A
Aroclor 1232	ND		ug/kg	63.6	13.5	1	A
Aroclor 1242	ND		ug/kg	63.6	8.57	1	A
Aroclor 1248	ND		ug/kg	63.6	9.54	1	A
Aroclor 1254	ND		ug/kg	63.6	6.96	1	A
Aroclor 1260	ND		ug/kg	63.6	11.7	1	A
Aroclor 1262	ND		ug/kg	63.6	8.07	1	A
Aroclor 1268	ND		ug/kg	63.6	6.59	1	A
PCBs, Total	ND		ug/kg	63.6	5.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/08/23 11:04
Analyst: JM
Percent Solids: 82%

Extraction Method: EPA 3546
Extraction Date: 06/07/23 12:42
Cleanup Method: EPA 3665A
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	56.7	5.04	1	A
Aroclor 1221	ND		ug/kg	56.7	5.68	1	A
Aroclor 1232	ND		ug/kg	56.7	12.0	1	A
Aroclor 1242	ND		ug/kg	56.7	7.65	1	A
Aroclor 1248	ND		ug/kg	56.7	8.51	1	A
Aroclor 1254	ND		ug/kg	56.7	6.20	1	A
Aroclor 1260	ND		ug/kg	56.7	10.5	1	A
Aroclor 1262	ND		ug/kg	56.7	7.20	1	A
Aroclor 1268	ND		ug/kg	56.7	5.88	1	A
PCBs, Total	ND		ug/kg	56.7	5.04	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/11/23 10:56
Analyst: ER
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 06/10/23 09:55
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	58.1	5.16	1	A
Aroclor 1221	ND		ug/kg	58.1	5.82	1	A
Aroclor 1232	ND		ug/kg	58.1	12.3	1	A
Aroclor 1242	ND		ug/kg	58.1	7.83	1	A
Aroclor 1248	ND		ug/kg	58.1	8.72	1	A
Aroclor 1254	ND		ug/kg	58.1	6.36	1	A
Aroclor 1260	ND		ug/kg	58.1	10.7	1	A
Aroclor 1262	ND		ug/kg	58.1	7.38	1	A
Aroclor 1268	ND		ug/kg	58.1	6.02	1	A
PCBs, Total	ND		ug/kg	58.1	5.16	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/12/23 10:40
Analyst: JM
Percent Solids: 80%

Extraction Method: EPA 3546
Extraction Date: 06/11/23 14:32
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	60.6	5.38	1	A
Aroclor 1221	ND		ug/kg	60.6	6.07	1	A
Aroclor 1232	ND		ug/kg	60.6	12.8	1	A
Aroclor 1242	ND		ug/kg	60.6	8.17	1	A
Aroclor 1248	ND		ug/kg	60.6	9.09	1	A
Aroclor 1254	ND		ug/kg	60.6	6.63	1	A
Aroclor 1260	ND		ug/kg	60.6	11.2	1	A
Aroclor 1262	ND		ug/kg	60.6	7.69	1	A
Aroclor 1268	ND		ug/kg	60.6	6.28	1	A
PCBs, Total	ND		ug/kg	60.6	5.38	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/12/23 10:48
Analyst: JM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/11/23 14:32
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	50.8	4.51	1	A
Aroclor 1221	ND		ug/kg	50.8	5.09	1	A
Aroclor 1232	ND		ug/kg	50.8	10.8	1	A
Aroclor 1242	ND		ug/kg	50.8	6.84	1	A
Aroclor 1248	ND		ug/kg	50.8	7.61	1	A
Aroclor 1254	ND		ug/kg	50.8	5.55	1	A
Aroclor 1260	26.8	J	ug/kg	50.8	9.38	1	B
Aroclor 1262	ND		ug/kg	50.8	6.45	1	A
Aroclor 1268	ND		ug/kg	50.8	5.26	1	A
PCBs, Total	26.8	J	ug/kg	50.8	4.51	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	49		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/08/23 09:46
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 06/07/23 12:42
Cleanup Method: EPA 3665A
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1788322-1						
Aroclor 1016	ND		ug/kg	48.3	4.29	A
Aroclor 1221	ND		ug/kg	48.3	4.84	A
Aroclor 1232	ND		ug/kg	48.3	10.2	A
Aroclor 1242	ND		ug/kg	48.3	6.51	A
Aroclor 1248	ND		ug/kg	48.3	7.25	A
Aroclor 1254	ND		ug/kg	48.3	5.28	A
Aroclor 1260	ND		ug/kg	48.3	8.93	A
Aroclor 1262	ND		ug/kg	48.3	6.14	A
Aroclor 1268	ND		ug/kg	48.3	5.00	A
PCBs, Total	ND		ug/kg	48.3	4.29	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/10/23 09:52
Analyst: ER

Extraction Method: EPA 3546
Extraction Date: 06/09/23 08:48
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1789211-1						
Aroclor 1016	ND		ug/kg	47.6	4.22	A
Aroclor 1221	ND		ug/kg	47.6	4.77	A
Aroclor 1232	ND		ug/kg	47.6	10.1	A
Aroclor 1242	ND		ug/kg	47.6	6.41	A
Aroclor 1248	ND		ug/kg	47.6	7.14	A
Aroclor 1254	ND		ug/kg	47.6	5.20	A
Aroclor 1260	ND		ug/kg	47.6	8.79	A
Aroclor 1262	ND		ug/kg	47.6	6.04	A
Aroclor 1268	ND		ug/kg	47.6	4.93	A
PCBs, Total	ND		ug/kg	47.6	4.22	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/11/23 10:33
Analyst: ER

Extraction Method: EPA 3546
Extraction Date: 06/10/23 09:01
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 03 Batch: WG1789644-1						
Aroclor 1016	ND		ug/kg	48.8	4.33	A
Aroclor 1221	ND		ug/kg	48.8	4.89	A
Aroclor 1232	ND		ug/kg	48.8	10.3	A
Aroclor 1242	ND		ug/kg	48.8	6.58	A
Aroclor 1248	ND		ug/kg	48.8	7.32	A
Aroclor 1254	ND		ug/kg	48.8	5.34	A
Aroclor 1260	ND		ug/kg	48.8	9.01	A
Aroclor 1262	ND		ug/kg	48.8	6.20	A
Aroclor 1268	ND		ug/kg	48.8	5.05	A
PCBs, Total	ND		ug/kg	48.8	4.33	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/12/23 10:16
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 06/11/23 14:25
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04-05 Batch: WG1789880-1						
Aroclor 1016	ND		ug/kg	48.9	4.34	A
Aroclor 1221	ND		ug/kg	48.9	4.90	A
Aroclor 1232	ND		ug/kg	48.9	10.4	A
Aroclor 1242	ND		ug/kg	48.9	6.59	A
Aroclor 1248	ND		ug/kg	48.9	7.33	A
Aroclor 1254	ND		ug/kg	48.9	5.35	A
Aroclor 1260	ND		ug/kg	48.9	9.03	A
Aroclor 1262	ND		ug/kg	48.9	6.21	A
Aroclor 1268	ND		ug/kg	48.9	5.06	A
PCBs, Total	ND		ug/kg	48.9	4.34	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1788322-2 WG1788322-3									
Aroclor 1016	72		71		40-140	1		50	A
Aroclor 1260	68		68		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		73		30-150	A
Decachlorobiphenyl	63		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		72		30-150	B
Decachlorobiphenyl	61		65		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1789211-2 WG1789211-3									
Aroclor 1016	83		73		40-140	13		50	A
Aroclor 1260	76		68		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		78		30-150	A
Decachlorobiphenyl	81		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		76		30-150	B
Decachlorobiphenyl	82		72		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03 Batch: WG1789644-2 WG1789644-3									
Aroclor 1016	80		84		40-140	5		50	A
Aroclor 1260	80		82		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		79		30-150	A
Decachlorobiphenyl	77		80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		83		30-150	B
Decachlorobiphenyl	79		83		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04-05 Batch: WG1789880-2 WG1789880-3									
Aroclor 1016	84		99		40-140	16		50	A
Aroclor 1260	83		97		40-140	16		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		65		30-150	A
Decachlorobiphenyl	80		67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		66		30-150	B
Decachlorobiphenyl	85		70		30-150	B

PESTICIDES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 13:48
Analyst: EJL
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/07/23 09:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.98	0.388	1	A
Lindane	ND		ug/kg	0.825	0.369	1	A
Alpha-BHC	ND		ug/kg	0.825	0.234	1	A
Beta-BHC	ND		ug/kg	1.98	0.751	1	A
Heptachlor	ND		ug/kg	0.990	0.444	1	A
Aldrin	ND		ug/kg	1.98	0.697	1	A
Heptachlor epoxide	ND		ug/kg	3.71	1.11	1	A
Endrin	ND		ug/kg	0.825	0.338	1	A
Endrin aldehyde	ND		ug/kg	2.48	0.866	1	A
Endrin ketone	ND		ug/kg	1.98	0.510	1	A
Dieldrin	ND		ug/kg	1.24	0.619	1	A
4,4'-DDE	ND		ug/kg	1.98	0.458	1	A
4,4'-DDD	ND		ug/kg	1.98	0.706	1	A
4,4'-DDT	ND		ug/kg	1.98	1.59	1	A
Endosulfan I	ND		ug/kg	1.98	0.468	1	A
Endosulfan II	ND		ug/kg	1.98	0.662	1	A
Endosulfan sulfate	ND		ug/kg	0.825	0.393	1	A
Methoxychlor	ND		ug/kg	3.71	1.16	1	A
Toxaphene	ND		ug/kg	37.1	10.4	1	A
cis-Chlordane	ND		ug/kg	2.48	0.690	1	A
trans-Chlordane	ND		ug/kg	2.48	0.654	1	A
Chlordane	ND		ug/kg	16.5	6.56	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/11/23 00:51
Analyst: ER
Percent Solids: 77%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	216	13.6	1	A
2,4,5-T	ND		ug/kg	216	6.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	216	5.75	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	101		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 14:00
Analyst: EJL
Percent Solids: 82%

Extraction Method: EPA 3546
Extraction Date: 06/07/23 09:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.93	0.378	1	A
Lindane	ND		ug/kg	0.805	0.360	1	A
Alpha-BHC	ND		ug/kg	0.805	0.228	1	A
Beta-BHC	ND		ug/kg	1.93	0.732	1	A
Heptachlor	ND		ug/kg	0.966	0.433	1	A
Aldrin	ND		ug/kg	1.93	0.680	1	A
Heptachlor epoxide	ND		ug/kg	3.62	1.09	1	A
Endrin	ND		ug/kg	0.805	0.330	1	A
Endrin aldehyde	ND		ug/kg	2.41	0.845	1	A
Endrin ketone	ND		ug/kg	1.93	0.497	1	A
Dieldrin	ND		ug/kg	1.21	0.604	1	A
4,4'-DDE	0.745	J	ug/kg	1.93	0.446	1	B
4,4'-DDD	ND		ug/kg	1.93	0.689	1	A
4,4'-DDT	ND		ug/kg	1.93	1.55	1	B
Endosulfan I	ND		ug/kg	1.93	0.456	1	A
Endosulfan II	ND		ug/kg	1.93	0.645	1	A
Endosulfan sulfate	ND		ug/kg	0.805	0.383	1	A
Methoxychlor	ND		ug/kg	3.62	1.13	1	A
Toxaphene	ND		ug/kg	36.2	10.1	1	A
cis-Chlordane	ND		ug/kg	2.41	0.673	1	B
trans-Chlordane	ND	IP	ug/kg	2.41	0.637	1	B
Chlordane	ND		ug/kg	16.1	6.40	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/11/23 01:46
Analyst: ER
Percent Solids: 82%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	199	12.5	1	A
2,4,5-T	ND		ug/kg	199	6.16	1	A
2,4,5-TP (Silvex)	ND		ug/kg	199	5.29	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	101		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/12/23 10:59
Analyst: AR
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 06/10/23 10:26
Cleanup Method: EPA 3620B
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.83	0.358	1	A
Lindane	ND		ug/kg	0.763	0.341	1	A
Alpha-BHC	ND		ug/kg	0.763	0.217	1	A
Beta-BHC	ND		ug/kg	1.83	0.694	1	A
Heptachlor	ND		ug/kg	0.915	0.410	1	A
Aldrin	ND		ug/kg	1.83	0.644	1	A
Heptachlor epoxide	ND		ug/kg	3.43	1.03	1	A
Endrin	ND		ug/kg	0.763	0.313	1	A
Endrin aldehyde	ND		ug/kg	2.29	0.801	1	A
Endrin ketone	ND		ug/kg	1.83	0.471	1	A
Dieldrin	ND		ug/kg	1.14	0.572	1	A
4,4'-DDE	ND		ug/kg	1.83	0.423	1	A
4,4'-DDD	ND		ug/kg	1.83	0.653	1	A
4,4'-DDT	ND		ug/kg	1.83	1.47	1	A
Endosulfan I	ND		ug/kg	1.83	0.432	1	A
Endosulfan II	ND		ug/kg	1.83	0.612	1	A
Endosulfan sulfate	ND		ug/kg	0.763	0.363	1	A
Methoxychlor	ND		ug/kg	3.43	1.07	1	A
Toxaphene	ND		ug/kg	34.3	9.61	1	A
cis-Chlordane	ND		ug/kg	2.29	0.638	1	A
trans-Chlordane	ND		ug/kg	2.29	0.604	1	A
Chlordane	ND		ug/kg	15.2	6.06	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/15/23 00:13
Analyst: ER
Percent Solids: 84%
Methylation Date: 06/14/23 07:50

Extraction Method: EPA 8151A
Extraction Date: 06/13/23 02:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	193	12.2	1	A
2,4,5-T	ND		ug/kg	193	5.99	1	A
2,4,5-TP (Silvex)	ND		ug/kg	193	5.14	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	61		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/12/23 11:11
Analyst: AR
Percent Solids: 80%

Extraction Method: EPA 3546
Extraction Date: 06/10/23 10:26
Cleanup Method: EPA 3620B
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.97	0.385	1	A
Lindane	ND		ug/kg	0.820	0.367	1	A
Alpha-BHC	ND		ug/kg	0.820	0.233	1	A
Beta-BHC	ND		ug/kg	1.97	0.746	1	A
Heptachlor	ND		ug/kg	0.984	0.441	1	A
Aldrin	ND		ug/kg	1.97	0.693	1	A
Heptachlor epoxide	ND		ug/kg	3.69	1.11	1	A
Endrin	ND		ug/kg	0.820	0.336	1	A
Endrin aldehyde	ND		ug/kg	2.46	0.861	1	A
Endrin ketone	ND		ug/kg	1.97	0.507	1	A
Dieldrin	ND		ug/kg	1.23	0.615	1	A
4,4'-DDE	ND		ug/kg	1.97	0.455	1	A
4,4'-DDD	ND		ug/kg	1.97	0.702	1	A
4,4'-DDT	ND		ug/kg	1.97	1.58	1	A
Endosulfan I	ND		ug/kg	1.97	0.465	1	A
Endosulfan II	ND		ug/kg	1.97	0.658	1	A
Endosulfan sulfate	ND		ug/kg	0.820	0.390	1	A
Methoxychlor	ND		ug/kg	3.69	1.15	1	A
Toxaphene	ND		ug/kg	36.9	10.3	1	A
cis-Chlordane	ND		ug/kg	2.46	0.686	1	A
trans-Chlordane	ND		ug/kg	2.46	0.650	1	A
Chlordane	ND		ug/kg	16.4	6.52	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/15/23 00:32
Analyst: ER
Percent Solids: 80%
Methylation Date: 06/14/23 07:50

Extraction Method: EPA 8151A
Extraction Date: 06/13/23 02:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	202	12.7	1	A
2,4,5-T	ND		ug/kg	202	6.26	1	A
2,4,5-TP (Silvex)	ND		ug/kg	202	5.37	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	78		30-150	A
DCAA	75		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/12/23 11:23
Analyst: AR
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 06/10/23 10:26
Cleanup Method: EPA 3620B
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.315	1	A
Lindane	ND		ug/kg	0.671	0.300	1	A
Alpha-BHC	ND		ug/kg	0.671	0.190	1	A
Beta-BHC	ND		ug/kg	1.61	0.610	1	A
Heptachlor	ND		ug/kg	0.805	0.361	1	A
Aldrin	ND		ug/kg	1.61	0.567	1	A
Heptachlor epoxide	ND		ug/kg	3.02	0.906	1	A
Endrin	ND		ug/kg	0.671	0.275	1	A
Endrin aldehyde	ND		ug/kg	2.01	0.704	1	A
Endrin ketone	ND		ug/kg	1.61	0.415	1	A
Dieldrin	ND		ug/kg	1.01	0.503	1	A
4,4'-DDE	ND		ug/kg	1.61	0.372	1	A
4,4'-DDD	ND		ug/kg	1.61	0.574	1	A
4,4'-DDT	ND		ug/kg	1.61	1.29	1	A
Endosulfan I	ND		ug/kg	1.61	0.380	1	A
Endosulfan II	ND		ug/kg	1.61	0.538	1	A
Endosulfan sulfate	ND		ug/kg	0.671	0.319	1	A
Methoxychlor	ND		ug/kg	3.02	0.939	1	A
Toxaphene	ND		ug/kg	30.2	8.45	1	A
cis-Chlordane	ND		ug/kg	2.01	0.561	1	A
trans-Chlordane	ND		ug/kg	2.01	0.531	1	A
Chlordane	ND		ug/kg	13.4	5.33	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	43		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/15/23 00:50
Analyst: ER
Percent Solids: 96%
Methylation Date: 06/14/23 07:50

Extraction Method: EPA 8151A
Extraction Date: 06/13/23 02:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	173	10.9	1	A
2,4,5-T	ND		ug/kg	173	5.35	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	4.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	80		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/08/23 10:34
Analyst: AR

Extraction Method: EPA 3546
Extraction Date: 06/07/23 01:56
Cleanup Method: EPA 3620B
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1788021-1						
Delta-BHC	ND		ug/kg	1.57	0.307	A
Lindane	ND		ug/kg	0.654	0.292	A
Alpha-BHC	ND		ug/kg	0.654	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.595	A
Heptachlor	ND		ug/kg	0.784	0.352	A
Aldrin	ND		ug/kg	1.57	0.552	A
Heptachlor epoxide	ND		ug/kg	2.94	0.882	A
Endrin	ND		ug/kg	0.654	0.268	A
Endrin aldehyde	ND		ug/kg	1.96	0.686	A
Endrin ketone	ND		ug/kg	1.57	0.404	A
Dieldrin	ND		ug/kg	0.980	0.490	A
4,4'-DDE	ND		ug/kg	1.57	0.363	A
4,4'-DDD	ND		ug/kg	1.57	0.559	A
4,4'-DDT	ND		ug/kg	1.57	1.26	A
Endosulfan I	ND		ug/kg	1.57	0.370	A
Endosulfan II	ND		ug/kg	1.57	0.524	A
Endosulfan sulfate	ND		ug/kg	0.654	0.311	A
Methoxychlor	ND		ug/kg	2.94	0.915	A
Toxaphene	ND		ug/kg	29.4	8.24	A
cis-Chlordane	ND		ug/kg	1.96	0.546	A
trans-Chlordane	ND		ug/kg	1.96	0.518	A
Chlordane	ND		ug/kg	13.1	5.20	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/08/23 10:34
 Analyst: AR

Extraction Method: EPA 3546
 Extraction Date: 06/07/23 01:56
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/08/23
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/08/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1788021-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/10/23 17:29
Analyst: ER

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Methylation Date: 06/10/23 06:17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1789075-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.31	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	119		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/12/23 09:21
Analyst: EJJ

Extraction Method: EPA 3546
Extraction Date: 06/10/23 10:26
Cleanup Method: EPA 3620B
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 03-05 Batch: WG1789658-1						
Delta-BHC	ND		ug/kg	1.55	0.303	A
Lindane	ND		ug/kg	0.644	0.288	A
Alpha-BHC	ND		ug/kg	0.644	0.183	A
Beta-BHC	ND		ug/kg	1.55	0.586	A
Heptachlor	ND		ug/kg	0.773	0.347	A
Aldrin	ND		ug/kg	1.55	0.544	A
Heptachlor epoxide	ND		ug/kg	2.90	0.870	A
Endrin	ND		ug/kg	0.644	0.264	A
Endrin aldehyde	ND		ug/kg	1.93	0.676	A
Endrin ketone	ND		ug/kg	1.55	0.398	A
Dieldrin	ND		ug/kg	0.966	0.483	A
4,4'-DDE	ND		ug/kg	1.55	0.358	A
4,4'-DDD	ND		ug/kg	1.55	0.552	A
4,4'-DDT	ND		ug/kg	1.55	1.24	A
Endosulfan I	ND		ug/kg	1.55	0.365	A
Endosulfan II	ND		ug/kg	1.55	0.517	A
Endosulfan sulfate	ND		ug/kg	0.644	0.307	A
Methoxychlor	ND		ug/kg	2.90	0.902	A
Toxaphene	ND		ug/kg	29.0	8.12	A
cis-Chlordane	ND		ug/kg	1.93	0.539	A
trans-Chlordane	ND		ug/kg	1.93	0.510	A
Chlordane	ND		ug/kg	12.9	5.12	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/12/23 09:21
 Analyst: EJL

Extraction Method: EPA 3546
 Extraction Date: 06/10/23 10:26
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/12/23
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 03-05 Batch: WG1789658-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/14/23 22:59
Analyst: ER

Extraction Method: EPA 8151A
Extraction Date: 06/13/23 02:52

Methylation Date: 06/14/23 07:50

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 03-05 Batch: WG1790413-1						
2,4-D	ND		ug/kg	165	10.4	A
2,4,5-T	ND		ug/kg	165	5.11	A
2,4,5-TP (Silvex)	ND		ug/kg	165	4.38	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	82		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1788021-2 WG1788021-3									
Delta-BHC	76		82		30-150	8		30	A
Lindane	72		77		30-150	7		30	A
Alpha-BHC	74		79		30-150	7		30	A
Beta-BHC	77		83		30-150	8		30	A
Heptachlor	75		81		30-150	8		30	A
Aldrin	73		79		30-150	8		30	A
Heptachlor epoxide	63		68		30-150	8		30	A
Endrin	72		79		30-150	9		30	A
Endrin aldehyde	68		75		30-150	10		30	A
Endrin ketone	78		84		30-150	7		30	A
Dieldrin	76		83		30-150	9		30	A
4,4'-DDE	70		77		30-150	10		30	A
4,4'-DDD	79		86		30-150	8		30	A
4,4'-DDT	86		94		30-150	9		30	A
Endosulfan I	71		77		30-150	8		30	A
Endosulfan II	75		81		30-150	8		30	A
Endosulfan sulfate	67		70		30-150	4		30	A
Methoxychlor	92		100		30-150	8		30	A
cis-Chlordane	75		82		30-150	9		30	A
trans-Chlordane	89		98		30-150	10		30	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1788021-2 WG1788021-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		67		30-150	A
Decachlorobiphenyl	78		87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		71		30-150	B
Decachlorobiphenyl	81		90		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1789075-2 WG1789075-3									
2,4-D	109		98		30-150	11		30	A
2,4,5-T	105		94		30-150	11		30	A
2,4,5-TP (Silvex)	99		90		30-150	10		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	111		98		30-150	A
DCAA	112		103		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 03-05 Batch: WG1789658-2 WG1789658-3									
Delta-BHC	78		66		30-150	17		30	A
Lindane	72		61		30-150	17		30	A
Alpha-BHC	74		62		30-150	18		30	A
Beta-BHC	80		63		30-150	24		30	A
Heptachlor	67		57		30-150	16		30	A
Aldrin	71		60		30-150	17		30	A
Heptachlor epoxide	68		57		30-150	18		30	A
Endrin	73		61		30-150	18		30	A
Endrin aldehyde	64		54		30-150	17		30	A
Endrin ketone	78		67		30-150	15		30	A
Dieldrin	76		64		30-150	17		30	A
4,4'-DDE	75		62		30-150	19		30	A
4,4'-DDD	80		67		30-150	18		30	A
4,4'-DDT	74		63		30-150	16		30	A
Endosulfan I	71		61		30-150	15		30	A
Endosulfan II	73		61		30-150	18		30	A
Endosulfan sulfate	71		60		30-150	17		30	A
Methoxychlor	73		63		30-150	15		30	A
cis-Chlordane	66		55		30-150	18		30	A
trans-Chlordane	81		68		30-150	17		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 03-05 Batch: WG1789658-2 WG1789658-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		53		30-150	A
Decachlorobiphenyl	79		69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		57		30-150	B
Decachlorobiphenyl	89		75		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 03-05 Batch: WG1790413-2 WG1790413-3									
2,4-D	96		81		30-150	17		30	A
2,4,5-T	87		79		30-150	10		30	A
2,4,5-TP (Silvex)	86		78		30-150	10		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	86		77		30-150	A
DCAA	88		86		30-150	B

METALS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	737		mg/kg	9.94	2.68	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Antimony, Total	23.9		mg/kg	4.97	0.378	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Arsenic, Total	5.30		mg/kg	0.994	0.207	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Barium, Total	19.0		mg/kg	0.994	0.173	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Beryllium, Total	0.258	J	mg/kg	0.497	0.033	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Cadmium, Total	0.133	J	mg/kg	0.994	0.097	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Calcium, Total	127000		mg/kg	49.7	17.4	10	06/09/23 07:35	06/12/23 18:37	EPA 3050B	1,6010D	AMW
Chromium, Total	5.71		mg/kg	0.503	0.048	1	06/20/23 08:30	06/20/23 16:29	EPA 3050B	1,6010D	TAA
Cobalt, Total	1.43	J	mg/kg	1.99	0.165	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Copper, Total	8.40		mg/kg	0.994	0.256	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Iron, Total	7960		mg/kg	4.97	0.898	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Lead, Total	172		mg/kg	4.97	0.266	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Magnesium, Total	7290		mg/kg	9.94	1.53	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Manganese, Total	101		mg/kg	0.994	0.158	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Mercury, Total	ND		mg/kg	0.082	0.053	1	06/09/23 08:25	06/13/23 12:17	EPA 7471B	1,7471B	DMB
Nickel, Total	7.40		mg/kg	2.48	0.240	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Potassium, Total	186	J	mg/kg	248	14.3	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Selenium, Total	ND		mg/kg	1.99	0.256	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Silver, Total	ND		mg/kg	0.497	0.281	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Sodium, Total	87.7	J	mg/kg	199	3.13	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Thallium, Total	ND		mg/kg	1.99	0.313	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Vanadium, Total	4.16		mg/kg	0.994	0.202	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW
Zinc, Total	19.2		mg/kg	4.97	0.291	2	06/09/23 07:35	06/12/23 17:10	EPA 3050B	1,6010D	AMW



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5100		mg/kg	9.46	2.55	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Antimony, Total	1.35	J	mg/kg	4.73	0.359	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Arsenic, Total	1.49		mg/kg	0.946	0.197	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Barium, Total	56.2		mg/kg	0.946	0.164	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Beryllium, Total	0.369	J	mg/kg	0.473	0.031	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Cadmium, Total	ND		mg/kg	0.946	0.093	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Calcium, Total	118000		mg/kg	47.3	16.5	10	06/09/23 07:35	06/12/23 18:42	EPA 3050B	1,6010D	AMW
Chromium, Total	13.4		mg/kg	0.946	0.091	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Cobalt, Total	4.32		mg/kg	1.89	0.157	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Copper, Total	40.2		mg/kg	0.946	0.244	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Iron, Total	8830		mg/kg	4.73	0.854	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Lead, Total	38.6		mg/kg	4.73	0.253	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Magnesium, Total	50100		mg/kg	47.3	7.28	10	06/09/23 07:35	06/12/23 18:42	EPA 3050B	1,6010D	AMW
Manganese, Total	373		mg/kg	0.946	0.150	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Mercury, Total	0.075	J	mg/kg	0.076	0.050	1	06/09/23 08:25	06/13/23 12:20	EPA 7471B	1,7471B	DMB
Nickel, Total	12.7		mg/kg	2.36	0.229	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Potassium, Total	842		mg/kg	236	13.6	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Selenium, Total	ND		mg/kg	1.89	0.244	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Silver, Total	ND		mg/kg	0.473	0.268	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Sodium, Total	535		mg/kg	189	2.98	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Thallium, Total	ND		mg/kg	1.89	0.298	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Vanadium, Total	11.7		mg/kg	0.946	0.192	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW
Zinc, Total	27.7		mg/kg	4.73	0.277	2	06/09/23 07:35	06/12/23 17:15	EPA 3050B	1,6010D	AMW



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
 Client ID: R-5_(7-9)
 Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
 Date Received: 06/02/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5930		mg/kg	9.20	2.48	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Antimony, Total	0.914	J	mg/kg	4.60	0.350	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Arsenic, Total	3.14		mg/kg	0.920	0.191	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Barium, Total	71.1		mg/kg	0.920	0.160	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Beryllium, Total	0.338	J	mg/kg	0.460	0.030	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Cadmium, Total	0.103	J	mg/kg	0.920	0.090	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Calcium, Total	80800		mg/kg	9.20	3.22	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Chromium, Total	13.6		mg/kg	0.920	0.088	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Cobalt, Total	4.38		mg/kg	1.84	0.153	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Copper, Total	17.7		mg/kg	0.920	0.237	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Iron, Total	10600		mg/kg	4.60	0.831	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Lead, Total	20.6		mg/kg	4.60	0.247	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Magnesium, Total	35400		mg/kg	9.20	1.42	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Manganese, Total	789		mg/kg	0.920	0.146	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Mercury, Total	ND		mg/kg	0.077	0.050	1	06/14/23 07:15	06/15/23 20:15	EPA 7471B	1,7471B	GMG
Nickel, Total	11.9		mg/kg	2.30	0.223	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Potassium, Total	1430		mg/kg	230	13.2	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Selenium, Total	ND		mg/kg	1.84	0.237	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Silver, Total	ND		mg/kg	0.460	0.260	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Sodium, Total	434		mg/kg	184	2.90	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Thallium, Total	1.03	J	mg/kg	1.84	0.290	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Vanadium, Total	15.0		mg/kg	0.920	0.187	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF
Zinc, Total	14.2		mg/kg	4.60	0.270	2	06/14/23 06:15	06/17/23 11:15	EPA 3050B	1,6010D	EJF



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12400		mg/kg	9.85	2.66	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Antimony, Total	2.06	J	mg/kg	4.92	0.374	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Arsenic, Total	9.41		mg/kg	0.985	0.205	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Barium, Total	188		mg/kg	0.985	0.171	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Beryllium, Total	0.507		mg/kg	0.492	0.033	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Cadmium, Total	0.302	J	mg/kg	0.985	0.097	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Calcium, Total	4080		mg/kg	9.85	3.45	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Chromium, Total	59.6		mg/kg	0.985	0.095	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Cobalt, Total	11.9		mg/kg	1.97	0.163	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Copper, Total	77.8		mg/kg	0.985	0.254	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Iron, Total	24900		mg/kg	4.92	0.889	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Lead, Total	35.0		mg/kg	4.92	0.264	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Magnesium, Total	8630		mg/kg	9.85	1.52	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Manganese, Total	256		mg/kg	0.985	0.156	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Mercury, Total	ND		mg/kg	0.079	0.052	1	06/14/23 07:15	06/15/23 20:19	EPA 7471B	1,7471B	GMG
Nickel, Total	33.3		mg/kg	2.46	0.238	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Potassium, Total	6080		mg/kg	246	14.2	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Selenium, Total	0.745	J	mg/kg	1.97	0.254	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Silver, Total	0.318	J	mg/kg	0.492	0.279	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Sodium, Total	548		mg/kg	197	3.10	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Thallium, Total	ND		mg/kg	1.97	0.310	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Vanadium, Total	54.8		mg/kg	0.985	0.200	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF
Zinc, Total	86.7		mg/kg	4.92	0.288	2	06/14/23 06:15	06/17/23 11:18	EPA 3050B	1,6010D	EJF



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
 Client ID: R-4_(7-9)
 Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
 Date Received: 06/02/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14400		mg/kg	7.97	2.15	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Antimony, Total	1.05	J	mg/kg	3.99	0.303	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Arsenic, Total	0.960		mg/kg	0.797	0.166	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Barium, Total	279		mg/kg	0.797	0.139	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Beryllium, Total	0.391	J	mg/kg	0.399	0.026	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Cadmium, Total	0.190	J	mg/kg	0.797	0.078	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Calcium, Total	3550		mg/kg	7.97	2.79	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Chromium, Total	81.8		mg/kg	0.797	0.077	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Cobalt, Total	13.2		mg/kg	1.59	0.132	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Copper, Total	56.8		mg/kg	0.797	0.206	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Iron, Total	23900		mg/kg	3.99	0.720	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Lead, Total	2.95	J	mg/kg	3.99	0.214	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Magnesium, Total	11000		mg/kg	7.97	1.23	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Manganese, Total	258		mg/kg	0.797	0.127	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Mercury, Total	ND		mg/kg	0.065	0.043	1	06/14/23 07:15	06/15/23 20:22	EPA 7471B	1,7471B	GMG
Nickel, Total	35.2		mg/kg	1.99	0.193	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Potassium, Total	10700		mg/kg	199	11.5	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Selenium, Total	0.482	J	mg/kg	1.59	0.206	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Silver, Total	0.249	J	mg/kg	0.399	0.226	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Sodium, Total	637		mg/kg	159	2.51	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Thallium, Total	ND		mg/kg	1.59	0.251	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Vanadium, Total	63.6		mg/kg	0.797	0.162	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF
Zinc, Total	47.8		mg/kg	3.99	0.234	2	06/14/23 06:15	06/17/23 11:20	EPA 3050B	1,6010D	EJF



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1788826-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Antimony, Total	0.207	J	mg/kg	2.00	0.152	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Barium, Total	ND		mg/kg	0.400	0.070	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Chromium, Total	0.635		mg/kg	0.400	0.038	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Copper, Total	ND		mg/kg	0.400	0.103	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Iron, Total	2.97		mg/kg	2.00	0.361	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Lead, Total	ND		mg/kg	2.00	0.107	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Nickel, Total	0.311	J	mg/kg	1.00	0.097	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Potassium, Total	ND		mg/kg	100	5.76	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Silver, Total	ND		mg/kg	0.200	0.113	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Sodium, Total	7.64	J	mg/kg	80.0	1.26	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/09/23 07:35	06/09/23 15:52	1,6010D	MRC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1788827-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	06/09/23 08:25	06/09/23 16:14	1,7471B	DJR



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03-05 Batch: WG1789741-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Barium, Total	ND		mg/kg	0.400	0.070	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Calcium, Total	4.40		mg/kg	4.00	1.40	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Copper, Total	ND		mg/kg	0.400	0.103	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Iron, Total	3.82		mg/kg	2.00	0.361	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Lead, Total	ND		mg/kg	2.00	0.107	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Magnesium, Total	2.39	J	mg/kg	4.00	0.616	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Potassium, Total	ND		mg/kg	100	5.76	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Silver, Total	ND		mg/kg	0.200	0.113	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Sodium, Total	ND		mg/kg	80.0	1.26	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/14/23 06:15	06/16/23 09:30	1,6010D	JMF

Prep Information

Digestion Method: EPA 3050B



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03-05 Batch: WG1789742-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	06/14/23 07:15	06/15/23 14:51	1,7471B	GMG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1793570-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Antimony, Total	0.243	J	mg/kg	2.00	0.152	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Barium, Total	ND		mg/kg	0.400	0.070	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Copper, Total	ND		mg/kg	0.400	0.103	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Iron, Total	ND		mg/kg	2.00	0.361	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Lead, Total	ND		mg/kg	2.00	0.107	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Potassium, Total	10.8	J	mg/kg	100	5.76	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Sodium, Total	17.2	J	mg/kg	80.0	1.26	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/20/23 08:30	06/20/23 16:22	1,6010D	TAA

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1788826-2 SRM Lot Number: D119-540								
Aluminum, Total	77		-		48-152	-		
Antimony, Total	145		-		10-190	-		
Arsenic, Total	104		-		83-117	-		
Barium, Total	101		-		82-118	-		
Beryllium, Total	106		-		83-117	-		
Cadmium, Total	112		-		82-117	-		
Calcium, Total	102		-		81-118	-		
Chromium, Total	106		-		82-119	-		
Cobalt, Total	106		-		83-117	-		
Copper, Total	107		-		84-116	-		
Iron, Total	91		-		60-140	-		
Lead, Total	104		-		82-118	-		
Magnesium, Total	93		-		76-124	-		
Manganese, Total	104		-		82-118	-		
Nickel, Total	108		-		82-117	-		
Potassium, Total	93		-		70-130	-		
Selenium, Total	109		-		79-121	-		
Silver, Total	101		-		80-120	-		
Sodium, Total	106		-		74-126	-		
Thallium, Total	113		-		81-119	-		
Vanadium, Total	102		-		79-121	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1788826-2 SRM Lot Number: D119-540					
Zinc, Total	101	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1788827-2 SRM Lot Number: D119-540					
Mercury, Total	105	-	73-127	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-05 Batch: WG1789741-2 SRM Lot Number: D119-540					
Aluminum, Total	74	-	48-152	-	
Antimony, Total	122	-	10-190	-	
Arsenic, Total	95	-	83-117	-	
Barium, Total	96	-	82-118	-	
Beryllium, Total	95	-	83-117	-	
Cadmium, Total	96	-	82-117	-	
Calcium, Total	93	-	81-118	-	
Chromium, Total	97	-	82-119	-	
Cobalt, Total	95	-	83-117	-	
Copper, Total	93	-	84-116	-	
Iron, Total	91	-	60-140	-	
Lead, Total	94	-	82-118	-	
Magnesium, Total	84	-	76-124	-	
Manganese, Total	96	-	82-118	-	
Nickel, Total	95	-	82-117	-	
Potassium, Total	87	-	70-130	-	
Selenium, Total	98	-	79-121	-	
Silver, Total	93	-	80-120	-	
Sodium, Total	97	-	74-126	-	
Thallium, Total	100	-	81-119	-	
Vanadium, Total	95	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-05 Batch: WG1789741-2 SRM Lot Number: D119-540					
Zinc, Total	91	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 03-05 Batch: WG1789742-2 SRM Lot Number: D119-540					
Mercury, Total	98	-	73-127	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1793570-2 SRM Lot Number: D119-540					
Aluminum, Total	74	-	48-152	-	
Antimony, Total	148	-	10-190	-	
Arsenic, Total	103	-	83-117	-	
Barium, Total	100	-	82-118	-	
Beryllium, Total	105	-	83-117	-	
Cadmium, Total	107	-	82-117	-	
Calcium, Total	99	-	81-118	-	
Chromium, Total	104	-	82-119	-	
Cobalt, Total	104	-	83-117	-	
Copper, Total	104	-	84-116	-	
Iron, Total	94	-	60-140	-	
Lead, Total	103	-	82-118	-	
Magnesium, Total	90	-	76-124	-	
Manganese, Total	104	-	82-118	-	
Nickel, Total	104	-	82-117	-	
Potassium, Total	89	-	70-130	-	
Selenium, Total	106	-	79-121	-	
Sodium, Total	105	-	74-126	-	
Thallium, Total	108	-	81-119	-	
Vanadium, Total	100	-	79-121	-	
Zinc, Total	101	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1788826-3			QC Sample: L2331629-05			Client ID: MS Sample			
Aluminum, Total	3220	180	4580	754	Q	-	-		75-125	-		20
Antimony, Total	0.381J	45.1	42.3	94		-	-		75-125	-		20
Arsenic, Total	0.996	10.8	12.1	103		-	-		75-125	-		20
Barium, Total	28.8	180	206	98		-	-		75-125	-		20
Beryllium, Total	0.254J	4.51	4.65	103		-	-		75-125	-		20
Cadmium, Total	0.171J	4.78	4.80	100		-	-		75-125	-		20
Calcium, Total	5400	901	9230	425	Q	-	-		75-125	-		20
Chromium, Total	8.58B	18	29.0	113		-	-		75-125	-		20
Cobalt, Total	4.62	45.1	47.3	95		-	-		75-125	-		20
Copper, Total	13.5	22.5	36.7	103		-	-		75-125	-		20
Iron, Total	9630B	90.1	11000	1520	Q	-	-		75-125	-		20
Lead, Total	11.7	47.8	66.6	115		-	-		75-125	-		20
Magnesium, Total	1680	901	3240	173	Q	-	-		75-125	-		20
Manganese, Total	187	45.1	287	222	Q	-	-		75-125	-		20
Nickel, Total	8.36	45.1	51.3	95		-	-		75-125	-		20
Potassium, Total	630	901	1640	112		-	-		75-125	-		20
Selenium, Total	ND	10.8	10.7	99		-	-		75-125	-		20
Silver, Total	ND	4.51	4.34	96		-	-		75-125	-		20
Sodium, Total	108J	901	1060	118		-	-		75-125	-		20
Thallium, Total	0.327J	10.8	10.7	99		-	-		75-125	-		20
Vanadium, Total	10.8	45.1	58.1	105		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1788826-3		QC Sample: L2331629-05		Client ID: MS Sample		
Zinc, Total	23.4	45.1	73.6	111	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1788827-3		QC Sample: L2331629-05		Client ID: MS Sample		
Mercury, Total	ND	1.51	1.57	104	-	-	80-120	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-05 QC Batch ID: WG1789741-3 WG1789741-4 QC Sample: L2332644-06 Client ID: MS Sample											
Aluminum, Total	4120	175	4230	63	Q	4370	143	Q	75-125	3	20
Antimony, Total	9.88	43.9	52.1	96		52.4	97		75-125	1	20
Arsenic, Total	102	10.5	132	285	Q	136	324	Q	75-125	3	20
Barium, Total	1140	175	1030	0	Q	359	0	Q	75-125	97	Q 20
Beryllium, Total	0.456	4.39	5.15	107		5.08	106		75-125	1	20
Cadmium, Total	2.34	4.65	6.83	96		6.61	92		75-125	3	20
Calcium, Total	20200	877	32600	1410	Q	21200	114		75-125	42	Q 20
Chromium, Total	18.2	17.5	36.6	105		36.5	105		75-125	0	20
Cobalt, Total	8.81	43.9	52.3	99		52.4	100		75-125	0	20
Copper, Total	308	21.9	183	0	Q	221	0	Q	75-125	19	20
Iron, Total	141000	87.7	152000	12500	Q	170000	33200	Q	75-125	11	20
Lead, Total	299	46.5	344	97		341	91		75-125	1	20
Magnesium, Total	2480	877	3450	110		3190	81		75-125	8	20
Manganese, Total	646	43.9	679	75		776	298	Q	75-125	13	20
Nickel, Total	30.2	43.9	77.2	107		73.2	98		75-125	5	20
Potassium, Total	405	877	1470	121		1450	120		75-125	1	20
Selenium, Total	5.02	10.5	19.2	135	Q	18.4	128	Q	75-125	4	20
Silver, Total	ND	4.39	3.77J	0	Q	3.27J	0	Q	75-125	NC	20
Sodium, Total	119J	877	1200	137	Q	1200	137	Q	75-125	0	20
Thallium, Total	2.08	10.5	13.2	106		13.6	110		75-125	3	20
Vanadium, Total	40.1	43.9	90.4	115		87.2	108		75-125	4	20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits			
Total Metals - Mansfield Lab Associated sample(s): 03-05			QC Batch ID: WG1789741-3		WG1789741-4	QC Sample: L2332644-06		Client ID: MS Sample				
Zinc, Total	1480	43.9	1500	46	Q	483	0	Q	75-125	103	Q	20
Total Metals - Mansfield Lab Associated sample(s): 03-05			QC Batch ID: WG1789742-3		WG1789742-4	QC Sample: L2332644-06		Client ID: MS Sample				
Mercury, Total	0.190	1.45	1.67	102		1.74	107		80-120	4		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1793570-3 QC Sample: L2331452-02 Client ID: MS Sample									
Aluminum, Total	868	158	1590	458	Q	-	75-125	-	20
Antimony, Total	0.568J	39.4	39.8	101		-	75-125	-	20
Arsenic, Total	0.679	9.46	11.3	112		-	75-125	-	20
Barium, Total	61.1	158	242	115		-	75-125	-	20
Beryllium, Total	0.047J	3.94	4.17	106		-	75-125	-	20
Cadmium, Total	0.047J	4.18	4.11	98		-	75-125	-	20
Calcium, Total	16000	788	12100	0	Q	-	75-125	-	20
Chromium, Total	11.4	15.8	24.9	86		-	75-125	-	20
Cobalt, Total	1.38	39.4	40.6	100		-	75-125	-	20
Copper, Total	7.80	19.7	32.7	126	Q	-	75-125	-	20
Iron, Total	1990	78.8	3300	1660	Q	-	75-125	-	20
Lead, Total	10.2	41.8	49.2	93		-	75-125	-	20
Magnesium, Total	346	788	1180	106		-	75-125	-	20
Manganese, Total	493	39.4	586	236	Q	-	75-125	-	20
Nickel, Total	7.71	39.4	51.6	111		-	75-125	-	20
Potassium, Total	519	788	1360	107		-	75-125	-	20
Selenium, Total	0.257J	9.46	10.5	111		-	75-125	-	20
Silver, Total	ND	3.94	4.14	105		-	75-125	-	20
Sodium, Total	1740	788	2370	80		-	75-125	-	20
Thallium, Total	0.579J	9.46	10.3	109		-	75-125	-	20
Vanadium, Total	2.10	39.4	43.3	104		-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1793570-3 QC Sample: L2331452-02 Client ID: MS Sample									
Zinc, Total	110	39.4	104	0	Q	-	75-125	-	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1788826-4 QC Sample: L2331629-05 Client ID: DUP Sample						
Aluminum, Total	3220	4000	mg/kg	22	Q	20
Antimony, Total	0.381J	1.15J	mg/kg	NC		20
Arsenic, Total	0.996	1.33	mg/kg	29	Q	20
Barium, Total	28.8	36.6	mg/kg	24	Q	20
Beryllium, Total	0.254J	0.291J	mg/kg	NC		20
Cadmium, Total	0.171J	0.258J	mg/kg	NC		20
Calcium, Total	5400	6600	mg/kg	20		20
Chromium, Total	8.58B	14.2	mg/kg	49	Q	20
Cobalt, Total	4.62	5.73	mg/kg	21	Q	20
Copper, Total	13.5	13.7	mg/kg	1		20
Iron, Total	9630B	11500	mg/kg	18		20
Lead, Total	11.7	23.2	mg/kg	66	Q	20
Magnesium, Total	1680	2250	mg/kg	29	Q	20
Manganese, Total	187	215	mg/kg	14		20
Nickel, Total	8.36	10.6	mg/kg	24	Q	20
Potassium, Total	630	702	mg/kg	11		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	108J	134J	mg/kg	NC		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1788826-4 QC Sample: L2331629-05 Client ID: DUP Sample					
Thallium, Total	0.327J	ND	mg/kg	NC	20
Vanadium, Total	10.8	15.2	mg/kg	34	Q 20
Zinc, Total	23.4	32.8	mg/kg	33	Q 20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1788827-4 QC Sample: L2331629-05 Client ID: DUP Sample					
Mercury, Total	ND	0.130	mg/kg	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1793570-4 QC Sample: L2331452-02 Client ID: DUP Sample					
Antimony, Total	0.568J	0.425J	mg/kg	NC	20
Arsenic, Total	0.679	0.941	mg/kg	32	Q 20
Cadmium, Total	0.047J	ND	mg/kg	NC	20
Copper, Total	7.80	9.63	mg/kg	21	Q 20
Lead, Total	10.2	4.08	mg/kg	86	Q 20
Nickel, Total	7.71	11.3	mg/kg	38	Q 20
Zinc, Total	110	46.8	mg/kg	81	Q 20

Project Name: HLP 40/50
Project Number: 1338.0013Y000

**Lab Serial Dilution
Analysis
Batch Quality Control**

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1788826-6 QC Sample: L2331629-05 Client ID: DUP Sample						
Aluminum, Total	3220	3460	mg/kg	7		20
Barium, Total	28.8	30.3	mg/kg	5		20
Calcium, Total	5400	5820	mg/kg	8		20
Iron, Total	9630B	10400	mg/kg	8		20
Magnesium, Total	1680	1820	mg/kg	8		20
Manganese, Total	187	200	mg/kg	7		20
Total Metals - Mansfield Lab Associated sample(s): 03-05 QC Batch ID: WG1789741-6 QC Sample: L2332644-06 Client ID: DUP Sample						
Aluminum, Total	4120	4030	mg/kg	2		20
Arsenic, Total	102	82.6	mg/kg	19		20
Barium, Total	1140	1110	mg/kg	3		20
Calcium, Total	20200	20300	mg/kg	0		20
Copper, Total	308	308	mg/kg	0		20
Lead, Total	299	264	mg/kg	12		20
Magnesium, Total	2480	2720	mg/kg	10		20
Manganese, Total	646	655	mg/kg	1		20
Vanadium, Total	40.1	40.1	mg/kg	0		20
Zinc, Total	1480	1640	mg/kg	11		20
Total Metals - Mansfield Lab Associated sample(s): 03-05 QC Batch ID: WG1789741-6 QC Sample: L2332644-06 Client ID: DUP Sample						
Iron, Total	141000	141000	mg/kg	0		20

INORGANICS & MISCELLANEOUS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-01
Client ID: R-3_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 12:40
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.8		%	0.100	NA	1	-	06/03/23 09:43	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-02
Client ID: R-5_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:00
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	06/06/23 17:04	121,2540G	RJF



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-03
Client ID: R-5_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:10
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.1		%	0.100	NA	1	-	06/10/23 10:51	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-04
Client ID: R-4_(4-6)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:20
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.9		%	0.100	NA	1	-	06/10/23 10:51	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2330989-05
Client ID: R-4_(7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/02/23 14:30
Date Received: 06/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.1		%	0.100	NA	1	-	06/10/23 10:51	121,2540G	ROI



Lab Duplicate Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1786739-1 QC Sample: L2329712-01 Client ID: DUP Sample						
Solids, Total	74.6	72.5	%	3		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1787884-1 QC Sample: L2330668-08 Client ID: DUP Sample						
Solids, Total	78.6	78.7	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 03-05 QC Batch ID: WG1789604-1 QC Sample: L2330989-03 Client ID: R-5_(7-9)						
Solids, Total	84.1	84.5	%	0		20

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989**Report Date:** 06/20/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2330989-01A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-01B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-01C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2330989-01E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),NI-Ti(180),AL-Ti(180),TL-Ti(180),CR-Ti(180),CU-Ti(180),SB-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),HG-T(28),MN-Ti(180),FE-Ti(180),MG-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180),CA-Ti(180)
L2330989-01F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-01G	Glass 250ml/8oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-01X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-01Y	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-01Z	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-02A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-02B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-02C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-02D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2330989-02E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),SB-Ti(180),SE-Ti(180),CU-Ti(180),PB-Ti(180),CO-Ti(180),HG-T(28),FE-Ti(180),MG-Ti(180),MN-Ti(180),CA-Ti(180),K-Ti(180),CD-Ti(180),NA-Ti(180)
L2330989-02F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-02G	Glass 250ml/8oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Serial_No: 06202320:53
Lab Number: L2330989
Report Date: 06/20/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2330989-02X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-02Y	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-02Z	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-03A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-03B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-03C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-03D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2330989-03E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),NI-Ti(180),TL-Ti(180),AL-Ti(180),CR-Ti(180),CU-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),PB-Ti(180),CO-Ti(180),V-Ti(180),HG-T(28),FE-Ti(180),MN-Ti(180),MG-Ti(180),NA-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180)
L2330989-03F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-03G	Glass 250ml/8oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-03X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-03Y	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-03Z	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-04A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-04B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-04C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-04D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2330989-04E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),BA-Ti(180),AS-Ti(180),AG-Ti(180),TL-Ti(180),CR-Ti(180),NI-Ti(180),AL-Ti(180),PB-Ti(180),ZN-Ti(180),SE-Ti(180),SB-Ti(180),CU-Ti(180),V-Ti(180),CO-Ti(180),HG-T(28),MN-Ti(180),MG-Ti(180),FE-Ti(180),CA-Ti(180),K-Ti(180),NA-Ti(180),CD-Ti(180)
L2330989-04F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-04G	Glass 250ml/8oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-04X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-04Y	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)

Project Name: HLP 40/50**Lab Number:** L2330989**Project Number:** 1338.0013Y000**Report Date:** 06/20/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2330989-04Z	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-05A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-05B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-05C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-05D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2330989-05E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MN-TI(180),MG-TI(180),FE-TI(180),HG-T(28),K-TI(180),CD-TI(180),CA-TI(180),NA-TI(180)
L2330989-05F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-05G	Glass 250ml/8oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2330989-05X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2330989-05Y	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)
L2330989-05Z	Vial Water preserved split	A	NA		2.8	Y	Absent	03-JUN-23 07:17	NYTCL-8260HLW(14)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2330989
Report Date: 06/20/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 20

Department: **Quality Assurance**

Published Date: 6/16/2023 4:52:28 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

612123

22330989

Page 162 of 162



ANALYTICAL REPORT

Lab Number:	L2331289
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 40/50
Project Number:	1338.0013Y000
Report Date:	06/12/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2331289-01	R-1 (5-7)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/05/23 13:30	06/05/23
L2331289-02	R-2 (5-7)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/05/23 13:50	06/05/23
L2331289-03	DUP_060523	SOIL	27-02 1ST STREET, ASTORIA, NY	06/05/23 14:00	06/05/23
L2331289-04	R-6 (7-9)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/05/23 14:20	06/05/23
L2331289-05	R-2 (12-14)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/05/23 14:30	06/05/23
L2331289-06	FB_060523	FIELD BLANK	27-02 1ST STREET, ASTORIA, NY	06/05/23 14:10	06/05/23

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2331289-06: Sample containers identified as "FB_060523" were listed on the Chain of Custody for the analyses for PCBs, Pesticides, Herbicides, and Total Metal, but not received. This was verified by the client.

Volatile Organics

L2331289-04: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (139%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2331289-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (144%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

The WG1789052-2/-3 LCS/LCSD recoveries, associated with L2331289-06, are below the acceptance criteria for 4-chloroaniline (0%/0%), and benzoic acid (0%/0%); however, they have been identified as a "difficult" analytes. The results of the associated sample are reported.

The WG1787902-4/-5 MS/MSD recoveries, performed on L2331289-01, are below the acceptance criteria for hexachlorocyclopentadiene (0%/0%), 2,4-dinitrophenol (0%/0%), 4,6-dinitro-o-cresol (0%/0%) and benzoic acid (0%/0%) due to the concentration of these compounds in the MS/MSD falling below the reported detection limits.

Pesticides

L2331289-05: The internal standard (IS) response for 1-bromo-2-nitrobenzene (1644%) was above the

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Case Narrative (continued)

acceptance criteria on column A; however, the sample was not re-analyzed due to obvious interferences. The surrogate recovery is outside the method acceptance criteria for decachlorobiphenyl (0%) due to interference with the Internal Standard.

Total Metals

L2331289-01 through -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1788785-3/-4 MS/MSD recoveries for aluminum (0%/0%), calcium (0%/0%), copper (0%/129%), iron (0%/1310%), lead (0%/0%), magnesium (193%/8%), manganese (6%/0%) and zinc (0%/0%), performed on L2331289-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1788788-3/-4 MS/MSD recoveries, performed on L2331289-01, are outside the acceptance criteria for mercury (131%/149%). A post digestion spike was performed and was within acceptance criteria.

The WG1788785-3/-4 MS/MSD RPDs for copper (33%), iron (24%) and magnesium (33%), performed on L2331289-01, are above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 06/12/23

ORGANICS

VOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/09/23 11:33
Analyst: JIC
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.7	3.5	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.22	1
Chloroform	ND		ug/kg	2.3	0.22	1
Carbon tetrachloride	ND		ug/kg	1.5	0.35	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.19	1
Dibromochloromethane	ND		ug/kg	1.5	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.41	1
Tetrachloroethene	1.0		ug/kg	0.77	0.30	1
Chlorobenzene	ND		ug/kg	0.77	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.2	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.77	0.26	1
Bromodichloromethane	ND		ug/kg	0.77	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.42	1
cis-1,3-Dichloropropene	ND		ug/kg	0.77	0.24	1
1,3-Dichloropropene, Total	ND		ug/kg	0.77	0.24	1
1,1-Dichloropropene	ND		ug/kg	0.77	0.24	1
Bromoform	ND		ug/kg	6.2	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.77	0.26	1
Benzene	ND		ug/kg	0.77	0.26	1
Toluene	ND		ug/kg	1.5	0.84	1
Ethylbenzene	ND		ug/kg	1.5	0.22	1
Chloromethane	ND		ug/kg	6.2	1.4	1
Bromomethane	ND		ug/kg	3.1	0.89	1
Vinyl chloride	ND		ug/kg	1.5	0.52	1
Chloroethane	ND		ug/kg	3.1	0.70	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.21	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.77	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	3.1	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	3.1	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.1	0.26	1
Methyl tert butyl ether	ND		ug/kg	3.1	0.31	1
p/m-Xylene	ND		ug/kg	3.1	0.86	1
o-Xylene	ND		ug/kg	1.5	0.45	1
Xylenes, Total	ND		ug/kg	1.5	0.45	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.21	1
Dibromomethane	ND		ug/kg	3.1	0.37	1
Styrene	ND		ug/kg	1.5	0.30	1
Dichlorodifluoromethane	ND		ug/kg	15	1.4	1
Acetone	ND		ug/kg	15	7.4	1
Carbon disulfide	ND		ug/kg	15	7.0	1
2-Butanone	ND		ug/kg	15	3.4	1
Vinyl acetate	ND		ug/kg	15	3.3	1
4-Methyl-2-pentanone	ND		ug/kg	15	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.1	0.20	1
2-Hexanone	ND		ug/kg	15	1.8	1
Bromochloromethane	ND		ug/kg	3.1	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.1	0.31	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.43	1
1,3-Dichloropropane	ND		ug/kg	3.1	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.77	0.20	1
Bromobenzene	ND		ug/kg	3.1	0.22	1
n-Butylbenzene	ND		ug/kg	1.5	0.26	1
sec-Butylbenzene	ND		ug/kg	1.5	0.22	1
tert-Butylbenzene	ND		ug/kg	3.1	0.18	1
o-Chlorotoluene	ND		ug/kg	3.1	0.29	1
p-Chlorotoluene	ND		ug/kg	3.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	1.5	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.26	1
Isopropylbenzene	ND		ug/kg	1.5	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.17	1
Naphthalene	1.5	J	ug/kg	6.2	1.0	1
Acrylonitrile	ND		ug/kg	6.2	1.8	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.1	0.50	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.1	0.42	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.1	0.30	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.1	0.51	1
1,4-Dioxane	ND		ug/kg	120	54.	1
p-Diethylbenzene	ND		ug/kg	3.1	0.27	1
p-Ethyltoluene	ND		ug/kg	3.1	0.59	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.1	0.29	1
Ethyl ether	ND		ug/kg	3.1	0.52	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.7	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/09/23 11:59
Analyst: JIC
Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.1	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.71	0.28	1
Chlorobenzene	ND		ug/kg	0.71	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.99	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.71	0.24	1
Bromodichloromethane	ND		ug/kg	0.71	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.71	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.71	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.71	0.23	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.71	0.24	1
Benzene	ND		ug/kg	0.71	0.24	1
Toluene	ND		ug/kg	1.4	0.77	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.8	0.83	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.8	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.20	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.71	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.29	1
p/m-Xylene	ND		ug/kg	2.8	0.80	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.8	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	19		ug/kg	14	6.8	1
Carbon disulfide	ND		ug/kg	14	6.5	1
2-Butanone	3.7	J	ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.71	0.19	1
Bromobenzene	ND		ug/kg	2.8	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.8	0.17	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.7	0.93	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.39	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.48	1
1,4-Dioxane	ND		ug/kg	110	50.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.55	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.1	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	78		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/09/23 12:25
Analyst: JIC
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.20	1
Benzene	ND		ug/kg	0.62	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	14		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	5.3	J	ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1
1,4-Dioxane	ND		ug/kg	99	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	84		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/09/23 22:16
Analyst: AJK
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.26	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.94	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.22	1
Benzene	ND		ug/kg	0.68	0.22	1
Toluene	1.0	J	ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.4	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.45	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.68	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.39	1
Xylenes, Total	ND		ug/kg	1.4	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.18	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	0.36	J	ug/kg	1.4	0.26	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	22		ug/kg	14	6.5	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	8.3	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	35		ug/kg	1.4	0.23	1
sec-Butylbenzene	59		ug/kg	1.4	0.20	1
tert-Butylbenzene	4.8		ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.23	1
Isopropylbenzene	3.5		ug/kg	1.4	0.15	1
p-Isopropyltoluene	1.8		ug/kg	1.4	0.15	1
Naphthalene	59		ug/kg	5.4	0.88	1
Acrylonitrile	ND		ug/kg	5.4	1.6	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.76	J	ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	0.96	J	ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	9.5		ug/kg	2.7	0.45	1
1,4-Dioxane	ND		ug/kg	110	48.	1
p-Diethylbenzene	15		ug/kg	2.7	0.24	1
p-Ethyltoluene	0.68	J	ug/kg	2.7	0.52	1
1,2,4,5-Tetramethylbenzene	210		ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	139	Q	70-130
Dibromofluoromethane	99		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:29
Analyst: AJK
Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.2	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.39	1
Tetrachloroethene	ND		ug/kg	0.72	0.28	1
Chlorobenzene	ND		ug/kg	0.72	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.8	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.72	0.24	1
Bromodichloromethane	ND		ug/kg	0.72	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.40	1
cis-1,3-Dichloropropene	ND		ug/kg	0.72	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.72	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.72	0.23	1
Bromoform	ND		ug/kg	5.8	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.72	0.24	1
Benzene	ND		ug/kg	0.72	0.24	1
Toluene	ND		ug/kg	1.4	0.79	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.8	1.4	1
Bromomethane	ND		ug/kg	2.9	0.84	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.9	0.66	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.72	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.29	1
p/m-Xylene	ND		ug/kg	2.9	0.81	1
o-Xylene	ND		ug/kg	1.4	0.42	1
Xylenes, Total	ND		ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	26		ug/kg	14	7.0	1
Carbon disulfide	6.7	J	ug/kg	14	6.6	1
2-Butanone	6.6	J	ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.72	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.28	1
p-Chlorotoluene	ND		ug/kg	2.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.8	0.94	1
Acrylonitrile	ND		ug/kg	5.8	1.7	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.47	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.39	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	0.48	1
1,4-Dioxane	ND		ug/kg	120	51.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.26	1
p-Ethyltoluene	ND		ug/kg	2.9	0.56	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.28	1
Ethyl ether	ND		ug/kg	2.9	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.2	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	144	Q	70-130
Dibromofluoromethane	100		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8260D
Analytical Date: 06/08/23 12:02
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/08/23 08:30
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1788819-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/08/23 08:30
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1788819-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/08/23 08:30
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1788819-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05 Batch: WG1789904-12					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05 Batch: WG1789904-12					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05 Batch: WG1789904-12					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 08:57
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1789904-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 08:57
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1789904-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 08:57
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1789904-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 17:38
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1790082-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 17:38
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1790082-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/09/23 17:38
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1790082-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1788819-3 WG1788819-4								
Methylene chloride	98		97		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		99		70-130	1		20
Carbon tetrachloride	94		97		63-132	3		20
1,2-Dichloropropane	96		97		70-130	1		20
Dibromochloromethane	89		91		63-130	2		20
1,1,2-Trichloroethane	94		96		70-130	2		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	93		94		70-130	1		20
1,1,1-Trichloroethane	98		98		67-130	0		20
Bromodichloromethane	90		91		67-130	1		20
trans-1,3-Dichloropropene	92		94		70-130	2		20
cis-1,3-Dichloropropene	94		94		70-130	0		20
1,1-Dichloropropene	99		100		70-130	1		20
Bromoform	83		86		54-136	4		20
1,1,2,2-Tetrachloroethane	88		92		67-130	4		20
Benzene	97		97		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	93		90		64-130	3		20
Bromomethane	90		94		39-139	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1788819-3 WG1788819-4								
Vinyl chloride	99		96		55-140	3		20
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	96		96		70-130	0		20
1,2-Dichlorobenzene	96		99		70-130	3		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	97		100		70-130	3		20
Methyl tert butyl ether	90		92		63-130	2		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	99		99		70-130	0		20
Dibromomethane	92		93		70-130	1		20
1,2,3-Trichloropropane	86		90		64-130	5		20
Acrylonitrile	81		85		70-130	5		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	96		95		36-147	1		20
Acetone	70		74		58-148	6		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	74		84		63-138	13		20
Vinyl acetate	100		110		70-130	10		20
4-Methyl-2-pentanone	79		82		59-130	4		20
2-Hexanone	76		79		57-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1788819-3 WG1788819-4								
Bromochloromethane	97		99		70-130	2		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	92		94		70-130	2		20
1,3-Dichloropropane	94		96		70-130	2		20
1,1,1,2-Tetrachloroethane	96		97		64-130	1		20
Bromobenzene	97		99		70-130	2		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	99		100		70-130	1		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	74		81		41-144	9		20
Hexachlorobutadiene	100		100		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	82		88		70-130	7		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	88		94		70-130	7		20
1,2,4-Trichlorobenzene	93		96		70-130	3		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	90		90		56-162	0		20
p-Diethylbenzene	98		100		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1788819-3 WG1788819-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	97		98		70-130	1		20
Ethyl ether	95		97		59-134	2		20
trans-1,4-Dichloro-2-butene	84		87		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		100		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05 Batch: WG1789904-10 WG1789904-11								
Methylene chloride	71		77		70-130	8		30
1,1-Dichloroethane	77		82		70-130	6		30
Chloroform	75		82		70-130	9		30
Carbon tetrachloride	70		73		70-130	4		30
1,2-Dichloropropane	76		82		70-130	8		30
Dibromochloromethane	72		79		70-130	9		30
1,1,2-Trichloroethane	80		88		70-130	10		30
Tetrachloroethene	78		81		70-130	4		30
Chlorobenzene	79		84		70-130	6		30
Trichlorofluoromethane	76		78		70-139	3		30
1,2-Dichloroethane	75		82		70-130	9		30
1,1,1-Trichloroethane	72		75		70-130	4		30
Bromodichloromethane	77		83		70-130	8		30
trans-1,3-Dichloropropene	79		86		70-130	8		30
cis-1,3-Dichloropropene	77		84		70-130	9		30
1,1-Dichloropropene	72		76		70-130	5		30
Bromoform	78		86		70-130	10		30
1,1,2,2-Tetrachloroethane	75		81		70-130	8		30
Benzene	77		82		70-130	6		30
Toluene	76		81		70-130	6		30
Ethylbenzene	78		83		70-130	6		30
Chloromethane	72		76		52-130	5		30
Bromomethane	86		90		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05 Batch: WG1789904-10 WG1789904-11								
Vinyl chloride	64	Q	66	Q	67-130	3		30
Chloroethane	75		78		50-151	4		30
1,1-Dichloroethene	69		72		65-135	4		30
trans-1,2-Dichloroethene	77		82		70-130	6		30
Trichloroethene	74		79		70-130	7		30
1,2-Dichlorobenzene	77		86		70-130	11		30
1,3-Dichlorobenzene	78		85		70-130	9		30
1,4-Dichlorobenzene	78		86		70-130	10		30
Methyl tert butyl ether	75		83		66-130	10		30
p/m-Xylene	80		86		70-130	7		30
o-Xylene	80		86		70-130	7		30
cis-1,2-Dichloroethene	76		82		70-130	8		30
Dibromomethane	75		83		70-130	10		30
Styrene	79		85		70-130	7		30
Dichlorodifluoromethane	63		65		30-146	3		30
Acetone	68		74		54-140	8		30
Carbon disulfide	66		69		59-130	4		30
2-Butanone	73		78		70-130	7		30
Vinyl acetate	76		79		70-130	4		30
4-Methyl-2-pentanone	73		80		70-130	9		30
1,2,3-Trichloropropane	74		81		68-130	9		30
2-Hexanone	71		78		70-130	9		30
Bromochloromethane	81		88		70-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05 Batch: WG1789904-10 WG1789904-11								
2,2-Dichloropropane	76		79		70-130	4		30
1,2-Dibromoethane	72		79		70-130	9		30
1,3-Dichloropropane	78		85		69-130	9		30
1,1,1,2-Tetrachloroethane	80		87		70-130	8		30
Bromobenzene	76		84		70-130	10		30
n-Butylbenzene	80		85		70-130	6		30
sec-Butylbenzene	80		84		70-130	5		30
tert-Butylbenzene	78		83		70-130	6		30
o-Chlorotoluene	86		93		70-130	8		30
p-Chlorotoluene	76		82		70-130	8		30
1,2-Dibromo-3-chloropropane	72		81		68-130	12		30
Hexachlorobutadiene	81		86		67-130	6		30
Isopropylbenzene	77		82		70-130	6		30
p-Isopropyltoluene	79		84		70-130	6		30
Naphthalene	72		79		70-130	9		30
Acrylonitrile	77		82		70-130	6		30
n-Propylbenzene	79		84		70-130	6		30
1,2,3-Trichlorobenzene	77		85		70-130	10		30
1,2,4-Trichlorobenzene	80		88		70-130	10		30
1,3,5-Trimethylbenzene	76		82		70-130	8		30
1,2,4-Trimethylbenzene	76		82		70-130	8		30
1,4-Dioxane	78		89		65-136	13		30
p-Diethylbenzene	78		84		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05 Batch: WG1789904-10 WG1789904-11								
p-Ethyltoluene	78		83		70-130	6		30
1,2,4,5-Tetramethylbenzene	76		82		70-130	8		30
Ethyl ether	76		82		67-130	8		30
trans-1,4-Dichloro-2-butene	76		83		70-130	9		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1789904-3 WG1789904-4								
Methylene chloride	81		80		70-130	1		30
1,1-Dichloroethane	90		89		70-130	1		30
Chloroform	87		86		70-130	1		30
Carbon tetrachloride	76		76		70-130	0		30
1,2-Dichloropropane	91		90		70-130	1		30
Dibromochloromethane	82		83		70-130	1		30
1,1,2-Trichloroethane	95		94		70-130	1		30
Tetrachloroethene	85		85		70-130	0		30
Chlorobenzene	91		91		70-130	0		30
Trichlorofluoromethane	82		83		70-139	1		30
1,2-Dichloroethane	86		86		70-130	0		30
1,1,1-Trichloroethane	78		79		70-130	1		30
Bromodichloromethane	88		88		70-130	0		30
trans-1,3-Dichloropropene	92		92		70-130	0		30
cis-1,3-Dichloropropene	90		90		70-130	0		30
1,1-Dichloropropene	82		82		70-130	0		30
Bromoform	89		90		70-130	1		30
1,1,1,2-Tetrachloroethane	91		90		70-130	1		30
Benzene	90		90		70-130	0		30
Toluene	88		88		70-130	0		30
Ethylbenzene	90		90		70-130	0		30
Chloromethane	88		86		52-130	2		30
Bromomethane	98		97		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1789904-3 WG1789904-4								
Vinyl chloride	75		74		67-130	1		30
Chloroethane	88		88		50-151	0		30
1,1-Dichloroethene	79		78		65-135	1		30
trans-1,2-Dichloroethene	89		88		70-130	1		30
Trichloroethene	83		84		70-130	1		30
1,2-Dichlorobenzene	92		90		70-130	2		30
1,3-Dichlorobenzene	92		90		70-130	2		30
1,4-Dichlorobenzene	91		90		70-130	1		30
Methyl tert butyl ether	88		89		66-130	1		30
p/m-Xylene	92		92		70-130	0		30
o-Xylene	92		92		70-130	0		30
cis-1,2-Dichloroethene	87		88		70-130	1		30
Dibromomethane	87		88		70-130	1		30
Styrene	92		91		70-130	1		30
Dichlorodifluoromethane	71		70		30-146	1		30
Acetone	82		80		54-140	2		30
Carbon disulfide	78		77		59-130	1		30
2-Butanone	88		90		70-130	2		30
Vinyl acetate	92		88		70-130	4		30
4-Methyl-2-pentanone	87		90		70-130	3		30
1,2,3-Trichloropropane	89		89		68-130	0		30
2-Hexanone	90		91		70-130	1		30
Bromochloromethane	91		91		70-130	0		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1789904-3 WG1789904-4								
2,2-Dichloropropane	85		84		70-130	1		30
1,2-Dibromoethane	84		85		70-130	1		30
1,3-Dichloropropane	92		94		69-130	2		30
1,1,1,2-Tetrachloroethane	90		91		70-130	1		30
Bromobenzene	89		88		70-130	1		30
n-Butylbenzene	94		92		70-130	2		30
sec-Butylbenzene	92		91		70-130	1		30
tert-Butylbenzene	90		88		70-130	2		30
o-Chlorotoluene	89		88		70-130	1		30
p-Chlorotoluene	90		89		70-130	1		30
1,2-Dibromo-3-chloropropane	83		84		68-130	1		30
Hexachlorobutadiene	89		90		67-130	1		30
Isopropylbenzene	90		89		70-130	1		30
p-Isopropyltoluene	91		89		70-130	2		30
Naphthalene	85		86		70-130	1		30
Acrylonitrile	93		94		70-130	1		30
n-Propylbenzene	92		92		70-130	0		30
1,2,3-Trichlorobenzene	90		90		70-130	0		30
1,2,4-Trichlorobenzene	94		93		70-130	1		30
1,3,5-Trimethylbenzene	90		88		70-130	2		30
1,2,4-Trimethylbenzene	89		88		70-130	1		30
1,4-Dioxane	87		78		65-136	11		30
p-Diethylbenzene	92		90		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1789904-3 WG1789904-4								
p-Ethyltoluene	91		90		70-130	1		30
1,2,4,5-Tetramethylbenzene	89		88		70-130	1		30
Ethyl ether	90		92		67-130	2		30
trans-1,4-Dichloro-2-butene	90		92		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	94		95		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1790082-3 WG1790082-4								
Methylene chloride	88		96		70-130	9		30
1,1-Dichloroethane	97		106		70-130	9		30
Chloroform	93		98		70-130	5		30
Carbon tetrachloride	83		89		70-130	7		30
1,2-Dichloropropane	104		114		70-130	9		30
Dibromochloromethane	98		108		70-130	10		30
1,1,2-Trichloroethane	103		114		70-130	10		30
Tetrachloroethene	86		94		70-130	9		30
Chlorobenzene	93		102		70-130	9		30
Trichlorofluoromethane	78		85		70-139	9		30
1,2-Dichloroethane	92		101		70-130	9		30
1,1,1-Trichloroethane	88		96		70-130	9		30
Bromodichloromethane	96		103		70-130	7		30
trans-1,3-Dichloropropene	103		112		70-130	8		30
cis-1,3-Dichloropropene	102		111		70-130	8		30
1,1-Dichloropropene	94		100		70-130	6		30
Bromoform	96		102		70-130	6		30
1,1,2,2-Tetrachloroethane	107		113		70-130	5		30
Benzene	95		104		70-130	9		30
Toluene	90		98		70-130	9		30
Ethylbenzene	93		101		70-130	8		30
Chloromethane	99		109		52-130	10		30
Bromomethane	72		80		57-147	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1790082-3 WG1790082-4								
Vinyl chloride	89		99		67-130	11		30
Chloroethane	82		90		50-151	9		30
1,1-Dichloroethene	80		89		65-135	11		30
trans-1,2-Dichloroethene	90		96		70-130	6		30
Trichloroethene	95		104		70-130	9		30
1,2-Dichlorobenzene	99		104		70-130	5		30
1,3-Dichlorobenzene	96		102		70-130	6		30
1,4-Dichlorobenzene	96		102		70-130	6		30
Methyl tert butyl ether	100		109		66-130	9		30
p/m-Xylene	91		100		70-130	9		30
o-Xylene	95		104		70-130	9		30
cis-1,2-Dichloroethene	92		102		70-130	10		30
Dibromomethane	95		104		70-130	9		30
Styrene	97		106		70-130	9		30
Dichlorodifluoromethane	80		86		30-146	7		30
Acetone	88		103		54-140	16		30
Carbon disulfide	83		91		59-130	9		30
2-Butanone	94		110		70-130	16		30
Vinyl acetate	99		106		70-130	7		30
4-Methyl-2-pentanone	107		120		70-130	11		30
1,2,3-Trichloropropane	106		112		68-130	6		30
2-Hexanone	104		117		70-130	12		30
Bromochloromethane	92		99		70-130	7		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1790082-3 WG1790082-4								
2,2-Dichloropropane	89		97		70-130	9		30
1,2-Dibromoethane	103		112		70-130	8		30
1,3-Dichloropropane	104		113		69-130	8		30
1,1,1,2-Tetrachloroethane	97		105		70-130	8		30
Bromobenzene	95		100		70-130	5		30
n-Butylbenzene	100		105		70-130	5		30
sec-Butylbenzene	97		102		70-130	5		30
tert-Butylbenzene	93		98		70-130	5		30
o-Chlorotoluene	101		108		70-130	7		30
p-Chlorotoluene	100		105		70-130	5		30
1,2-Dibromo-3-chloropropane	96		104		68-130	8		30
Hexachlorobutadiene	94		100		67-130	6		30
Isopropylbenzene	95		100		70-130	5		30
p-Isopropyltoluene	97		102		70-130	5		30
Naphthalene	103		110		70-130	7		30
Acrylonitrile	103		112		70-130	8		30
n-Propylbenzene	98		103		70-130	5		30
1,2,3-Trichlorobenzene	104		111		70-130	7		30
1,2,4-Trichlorobenzene	103		109		70-130	6		30
1,3,5-Trimethylbenzene	97		103		70-130	6		30
1,2,4-Trimethylbenzene	99		106		70-130	7		30
1,4-Dioxane	99		111		65-136	11		30
p-Diethylbenzene	97		104		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1790082-3 WG1790082-4								
p-Ethyltoluene	97		102		70-130	5		30
1,2,4,5-Tetramethylbenzene	102		109		70-130	7		30
Ethyl ether	93		100		67-130	7		30
trans-1,4-Dichloro-2-butene	106		114		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		104		70-130
Toluene-d8	100		102		70-130
4-Bromofluorobenzene	110		106		70-130
Dibromofluoromethane	98		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1789904-6 WG1789904-7 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
Methylene chloride	ND	136	86	63	Q	92	67	Q	70-130	7		30
1,1-Dichloroethane	ND	136	98	72		110	76		70-130	7		30
Chloroform	ND	136	93	68	Q	99	72		70-130	6		30
Carbon tetrachloride	ND	136	84	62	Q	90	66	Q	70-130	7		30
1,2-Dichloropropane	ND	136	96	70		100	74		70-130	6		30
Dibromochloromethane	ND	136	84	62	Q	86	62	Q	70-130	2		30
1,1,2-Trichloroethane	ND	136	95	70		98	71		70-130	3		30
Tetrachloroethene	1.0	136	86	62	Q	86	62	Q	70-130	0		30
Chlorobenzene	ND	136	85	62	Q	85	61	Q	70-130	1		30
Trichlorofluoromethane	ND	136	97	71		110	76		70-139	8		30
1,2-Dichloroethane	ND	136	90	66	Q	94	68	Q	70-130	5		30
1,1,1-Trichloroethane	ND	136	88	64	Q	95	69	Q	70-130	7		30
Bromodichloromethane	ND	136	94	69	Q	98	71		70-130	5		30
trans-1,3-Dichloropropene	ND	136	88	64	Q	90	65	Q	70-130	2		30
cis-1,3-Dichloropropene	ND	136	91	66	Q	94	68	Q	70-130	3		30
1,1-Dichloropropene	ND	136	86	63	Q	91	66	Q	70-130	6		30
Bromoform	ND	136	88	64	Q	90	66	Q	70-130	3		30
1,1,2,2-Tetrachloroethane	ND	136	87	64	Q	90	65	Q	70-130	3		30
Benzene	ND	136	95	70		100	73		70-130	6		30
Toluene	ND	136	90	66	Q	92	67	Q	70-130	2		30
Ethylbenzene	ND	136	87	64	Q	86	62	Q	70-130	2		30
Chloromethane	ND	136	95	69		110	76		52-130	10		30
Bromomethane	ND	136	110	78		120	84		57-147	9		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1789904-6 WG1789904-7 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
Vinyl chloride	ND	136	85	62	Q	93	68		67-130	10		30
Chloroethane	ND	136	99	72		110	79		50-151	10		30
1,1-Dichloroethene	ND	136	86	63	Q	95	69		65-135	9		30
trans-1,2-Dichloroethene	ND	136	92	68	Q	98	71		70-130	7		30
Trichloroethene	ND	136	85	62	Q	88	64	Q	70-130	4		30
1,2-Dichlorobenzene	ND	136	71	52	Q	68	49	Q	70-130	4		30
1,3-Dichlorobenzene	ND	136	71	52	Q	67	48	Q	70-130	6		30
1,4-Dichlorobenzene	ND	136	70	51	Q	65	47	Q	70-130	7		30
Methyl tert butyl ether	ND	136	92	67		98	71		66-130	7		30
p/m-Xylene	ND	273	180	64	Q	170	62	Q	70-130	2		30
o-Xylene	ND	273	180	65	Q	180	64	Q	70-130	2		30
cis-1,2-Dichloroethene	ND	136	91	67	Q	97	70		70-130	6		30
Dibromomethane	ND	136	88	64	Q	90	66	Q	70-130	3		30
Styrene	ND	273	170	60	Q	160	58	Q	70-130	3		30
Dichlorodifluoromethane	ND	136	80	58		65	47		30-146	21		30
Acetone	ND	136	81	59		86	62		54-140	6		30
Carbon disulfide	ND	136	78	57	Q	86	62		59-130	10		30
2-Butanone	ND	136	85	62	Q	90	65	Q	70-130	6		30
Vinyl acetate	ND	136	67	49	Q	65	47	Q	70-130	4		30
4-Methyl-2-pentanone	ND	136	86	63	Q	89	65	Q	70-130	3		30
1,2,3-Trichloropropane	ND	136	84	62	Q	87	63	Q	68-130	3		30
2-Hexanone	ND	136	85	62	Q	89	64	Q	70-130	4		30
Bromochloromethane	ND	136	95	70		100	72		70-130	5		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1789904-6 WG1789904-7 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
2,2-Dichloropropane	ND	136	98	72		110	76		70-130	7		30
1,2-Dibromoethane	ND	136	82	60	Q	83	60	Q	70-130	1		30
1,3-Dichloropropane	ND	136	92	67	Q	95	69		69-130	3		30
1,1,1,2-Tetrachloroethane	ND	136	95	70		97	71		70-130	2		30
Bromobenzene	ND	136	78	57	Q	76	55	Q	70-130	3		30
n-Butylbenzene	ND	136	67	49	Q	60	44	Q	70-130	11		30
sec-Butylbenzene	ND	136	74	54	Q	71	51	Q	70-130	5		30
tert-Butylbenzene	ND	136	78	57	Q	77	56	Q	70-130	2		30
o-Chlorotoluene	ND	136	88	65	Q	85	61	Q	70-130	4		30
p-Chlorotoluene	ND	136	74	54	Q	70	51	Q	70-130	6		30
1,2-Dibromo-3-chloropropane	ND	136	77	56	Q	79	58	Q	68-130	3		30
Hexachlorobutadiene	ND	136	50	36	Q	46	33	Q	67-130	8		30
Isopropylbenzene	ND	136	84	62	Q	82	60	Q	70-130	2		30
p-Isopropyltoluene	ND	136	73	53	Q	68	49	Q	70-130	7		30
Naphthalene	1.5J	136	56	41	Q	54	39	Q	70-130	4		30
Acrylonitrile	ND	136	87	64	Q	94	68	Q	70-130	8		30
n-Propylbenzene	ND	136	80	59	Q	76	55	Q	70-130	5		30
1,2,3-Trichlorobenzene	ND	136	49	36	Q	47	34	Q	70-130	4		30
1,2,4-Trichlorobenzene	ND	136	52	38	Q	49	36	Q	70-130	6		30
1,3,5-Trimethylbenzene	ND	136	78	57	Q	75	54	Q	70-130	4		30
1,2,4-Trimethylbenzene	ND	136	76	56	Q	72	52	Q	70-130	5		30
1,4-Dioxane	ND	6830	5300	78		5800	85		65-136	10		30
p-Diethylbenzene	ND	136	68	50	Q	62	45	Q	70-130	10		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1789904-6 WG1789904-7 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
p-Ethyltoluene	ND	136	78	57	Q	74	54	Q	70-130	6		30
1,2,4,5-Tetramethylbenzene	ND	136	64	47	Q	60	44	Q	70-130	6		30
Ethyl ether	ND	136	93	68		100	73		67-130	8		30
trans-1,4-Dichloro-2-butene	ND	136	82	60	Q	82	60	Q	70-130	0		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	96		96		70-130
Toluene-d8	103		102		70-130

SEMIVOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 17:42
Analyst: EK
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	24.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
1,2-Dichlorobenzene	ND		ug/kg	210	38.	1
1,3-Dichlorobenzene	ND		ug/kg	210	36.	1
1,4-Dichlorobenzene	ND		ug/kg	210	37.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	56.	1
2,4-Dinitrotoluene	ND		ug/kg	210	42.	1
2,6-Dinitrotoluene	ND		ug/kg	210	36.	1
Fluoranthene	1900		ug/kg	130	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	32.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	36.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	21.	1
Hexachlorobutadiene	ND		ug/kg	210	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	600	190	1
Hexachloroethane	ND		ug/kg	170	34.	1
Isophorone	ND		ug/kg	190	27.	1
Naphthalene	70	J	ug/kg	210	26.	1
Nitrobenzene	ND		ug/kg	190	31.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Bis(2-ethylhexyl)phthalate	110	J	ug/kg	210	73.	1
Butyl benzyl phthalate	ND		ug/kg	210	53.	1
Di-n-butylphthalate	ND		ug/kg	210	40.	1
Di-n-octylphthalate	ND		ug/kg	210	72.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	210	20.	1
Dimethyl phthalate	ND		ug/kg	210	44.	1
Benzo(a)anthracene	750		ug/kg	130	24.	1
Benzo(a)pyrene	810		ug/kg	170	52.	1
Benzo(b)fluoranthene	1000		ug/kg	130	36.	1
Benzo(k)fluoranthene	330		ug/kg	130	34.	1
Chrysene	870		ug/kg	130	22.	1
Acenaphthylene	110	J	ug/kg	170	33.	1
Anthracene	270		ug/kg	130	41.	1
Benzo(ghi)perylene	580		ug/kg	170	25.	1
Fluorene	130	J	ug/kg	210	20.	1
Phenanthrene	2100		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	120	J	ug/kg	130	24.	1
Indeno(1,2,3-cd)pyrene	450		ug/kg	170	29.	1
Pyrene	2000		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	480	28.	1
4-Chloroaniline	ND		ug/kg	210	38.	1
2-Nitroaniline	ND		ug/kg	210	41.	1
3-Nitroaniline	ND		ug/kg	210	40.	1
4-Nitroaniline	ND		ug/kg	210	88.	1
Dibenzofuran	68	J	ug/kg	210	20.	1
2-Methylnaphthalene	70	J	ug/kg	250	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	40.	1
p-Chloro-m-cresol	ND		ug/kg	210	32.	1
2-Chlorophenol	ND		ug/kg	210	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	210	70.	1
2-Nitrophenol	ND		ug/kg	460	80.	1
4-Nitrophenol	ND		ug/kg	300	86.	1
2,4-Dinitrophenol	ND		ug/kg	1000	99.	1
4,6-Dinitro-o-cresol	ND		ug/kg	550	100	1
Pentachlorophenol	ND		ug/kg	170	46.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	33.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	210	40.	1
Benzoic Acid	ND		ug/kg	680	210	1
Benzyl Alcohol	ND		ug/kg	210	65.	1
Carbazole	120	J	ug/kg	210	20.	1
1,4-Dioxane	ND		ug/kg	32	9.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	42		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 18:32
Analyst: EK
Percent Solids: 76%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	24	J	ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	24.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
1,2-Dichlorobenzene	ND		ug/kg	210	38.	1
1,3-Dichlorobenzene	ND		ug/kg	210	37.	1
1,4-Dichlorobenzene	ND		ug/kg	210	37.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	57.	1
2,4-Dinitrotoluene	ND		ug/kg	210	43.	1
2,6-Dinitrotoluene	ND		ug/kg	210	37.	1
Fluoranthene	650		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	210	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	610	190	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	ND		ug/kg	210	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	74.	1
Butyl benzyl phthalate	ND		ug/kg	210	54.	1
Di-n-butylphthalate	ND		ug/kg	210	41.	1
Di-n-octylphthalate	ND		ug/kg	210	73.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	210	20.	1
Dimethyl phthalate	ND		ug/kg	210	45.	1
Benzo(a)anthracene	320		ug/kg	130	24.	1
Benzo(a)pyrene	320		ug/kg	170	52.	1
Benzo(b)fluoranthene	410		ug/kg	130	36.	1
Benzo(k)fluoranthene	130		ug/kg	130	34.	1
Chrysene	290		ug/kg	130	22.	1
Acenaphthylene	48	J	ug/kg	170	33.	1
Anthracene	95	J	ug/kg	130	42.	1
Benzo(ghi)perylene	240		ug/kg	170	25.	1
Fluorene	24	J	ug/kg	210	21.	1
Phenanthrene	320		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	59	J	ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	170	30.	1
Pyrene	550		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	28.	1
4-Chloroaniline	ND		ug/kg	210	39.	1
2-Nitroaniline	ND		ug/kg	210	41.	1
3-Nitroaniline	ND		ug/kg	210	40.	1
4-Nitroaniline	ND		ug/kg	210	89.	1
Dibenzofuran	ND		ug/kg	210	20.	1
2-Methylnaphthalene	ND		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	210	32.	1
2-Chlorophenol	ND		ug/kg	210	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	210	71.	1
2-Nitrophenol	ND		ug/kg	460	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	210	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	210	66.	1
Carbazole	45	J	ug/kg	210	21.	1
1,4-Dioxane	ND		ug/kg	32	9.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	14	Q	25-120
Phenol-d6	45		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	52		30-120
2,4,6-Tribromophenol	10		10-136
4-Terphenyl-d14	44		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 18:49
Analyst: EK
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	33	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	840		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	410		ug/kg	120	22.	1
Benzo(a)pyrene	440		ug/kg	150	47.	1
Benzo(b)fluoranthene	520		ug/kg	120	32.	1
Benzo(k)fluoranthene	170		ug/kg	120	31.	1
Chrysene	380		ug/kg	120	20.	1
Acenaphthylene	63	J	ug/kg	150	30.	1
Anthracene	120		ug/kg	120	37.	1
Benzo(ghi)perylene	240		ug/kg	150	23.	1
Fluorene	34	J	ug/kg	190	19.	1
Phenanthrene	440		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	60	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	27.	1
Pyrene	700		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	25.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	20	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	48	J	ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	17	Q	25-120
Phenol-d6	48		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	15		10-136
4-Terphenyl-d14	56		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 19:06
Analyst: EK
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	690		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	100	J	ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	190	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	98	J	ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	74.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	56	J	ug/kg	130	24.	1
Benzo(a)pyrene	ND		ug/kg	170	52.	1
Benzo(b)fluoranthene	ND		ug/kg	130	36.	1
Benzo(k)fluoranthene	ND		ug/kg	130	34.	1
Chrysene	66	J	ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	290		ug/kg	130	42.	1
Benzo(ghi)perylene	ND		ug/kg	170	25.	1
Fluorene	280		ug/kg	220	21.	1
Phenanthrene	1300		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	30.	1
Pyrene	240		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	28.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	41.	1
3-Nitroaniline	ND		ug/kg	220	40.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	97	J	ug/kg	220	20.	1
2-Methylnaphthalene	370		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	220	71.	1
2-Nitrophenol	ND		ug/kg	460	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	220	32.	1
2-Methylphenol	ND		ug/kg	220	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	ND		ug/kg	220	21.	1
1,4-Dioxane	ND		ug/kg	32	9.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	58		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/07/23 19:23
Analyst: EK
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	31.	1
2-Chloronaphthalene	ND		ug/kg	230	22.	1
1,2-Dichlorobenzene	ND		ug/kg	230	40.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	39.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	60.	1
2,4-Dinitrotoluene	ND		ug/kg	230	45.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	330		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	23.	1
Hexachlorobutadiene	ND		ug/kg	230	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	45	J	ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	78.	1
Butyl benzyl phthalate	ND		ug/kg	230	57.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	77.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	47.	1
Benzo(a)anthracene	220		ug/kg	140	25.	1
Benzo(a)pyrene	290		ug/kg	180	55.	1
Benzo(b)fluoranthene	280		ug/kg	140	38.	1
Benzo(k)fluoranthene	93	J	ug/kg	140	36.	1
Chrysene	230		ug/kg	140	24.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	76	J	ug/kg	140	44.	1
Benzo(ghi)perylene	130	J	ug/kg	180	26.	1
Fluorene	ND		ug/kg	230	22.	1
Phenanthrene	220		ug/kg	140	27.	1
Dibenzo(a,h)anthracene	43	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	100	J	ug/kg	180	32.	1
Pyrene	500		ug/kg	140	22.	1
Biphenyl	ND		ug/kg	520	29.	1
4-Chloroaniline	ND		ug/kg	230	41.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	94.	1
Dibenzofuran	ND		ug/kg	230	21.	1
2-Methylnaphthalene	34	J	ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	230	74.	1
2-Nitrophenol	ND		ug/kg	490	85.	1
4-Nitrophenol	ND		ug/kg	320	92.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	590	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	34.	1
2-Methylphenol	ND		ug/kg	230	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	230	43.	1
Benzoic Acid	ND		ug/kg	730	230	1
Benzyl Alcohol	ND		ug/kg	230	69.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ug/kg	34	10.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	62		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8270E
Analytical Date: 06/09/23 22:09
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	55		41-149

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8270E-SIM
Analytical Date: 06/10/23 21:41
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-06
Client ID: FB_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:10
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	85		41-149

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/07/23 09:51
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1787902-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/07/23 09:51
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1787902-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/07/23 09:51
Analyst: SLR

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1787902-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	72		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/11/23 17:06
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1789052-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/11/23 17:06
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1789052-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/11/23 17:06
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1789052-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	82		41-149

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/09/23 17:58
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06 Batch: WG1789053-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	0.02	J	ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/09/23 17:58
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 06/09/23 02:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06 Batch: WG1789053-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	83		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1787902-2 WG1787902-3								
Acenaphthene	66		65		31-137	2		50
1,2,4-Trichlorobenzene	61		60		38-107	2		50
Hexachlorobenzene	63		61		40-140	3		50
Bis(2-chloroethyl)ether	61		60		40-140	2		50
2-Chloronaphthalene	65		64		40-140	2		50
1,2-Dichlorobenzene	63		61		40-140	3		50
1,3-Dichlorobenzene	61		62		40-140	2		50
1,4-Dichlorobenzene	60		61		28-104	2		50
3,3'-Dichlorobenzidine	64		62		40-140	3		50
2,4-Dinitrotoluene	98		94		40-132	4		50
2,6-Dinitrotoluene	81		78		40-140	4		50
Fluoranthene	72		68		40-140	6		50
4-Chlorophenyl phenyl ether	67		65		40-140	3		50
4-Bromophenyl phenyl ether	66		63		40-140	5		50
Bis(2-chloroisopropyl)ether	62		61		40-140	2		50
Bis(2-chloroethoxy)methane	63		62		40-117	2		50
Hexachlorobutadiene	63		63		40-140	0		50
Hexachlorocyclopentadiene	16	Q	18	Q	40-140	12		50
Hexachloroethane	66		65		40-140	2		50
Isophorone	61		60		40-140	2		50
Naphthalene	64		64		40-140	0		50
Nitrobenzene	69		67		40-140	3		50
NDPA/DPA	70		67		36-157	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1787902-2 WG1787902-3								
n-Nitrosodi-n-propylamine	64		64		32-121	0		50
Bis(2-ethylhexyl)phthalate	90		88		40-140	2		50
Butyl benzyl phthalate	82		74		40-140	10		50
Di-n-butylphthalate	82		80		40-140	2		50
Di-n-octylphthalate	94		93		40-140	1		50
Diethyl phthalate	71		69		40-140	3		50
Dimethyl phthalate	66		65		40-140	2		50
Benzo(a)anthracene	74		74		40-140	0		50
Benzo(a)pyrene	79		79		40-140	0		50
Benzo(b)fluoranthene	68		69		40-140	1		50
Benzo(k)fluoranthene	77		74		40-140	4		50
Chrysene	72		71		40-140	1		50
Acenaphthylene	70		69		40-140	1		50
Anthracene	73		73		40-140	0		50
Benzo(ghi)perylene	76		72		40-140	5		50
Fluorene	66		64		40-140	3		50
Phenanthrene	70		70		40-140	0		50
Dibenzo(a,h)anthracene	72		69		40-140	4		50
Indeno(1,2,3-cd)pyrene	76		73		40-140	4		50
Pyrene	70		68		35-142	3		50
Biphenyl	66		64		37-127	3		50
4-Chloroaniline	47		42		40-140	11		50
2-Nitroaniline	84		82		47-134	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1787902-2 WG1787902-3								
3-Nitroaniline	67		64		26-129	5		50
4-Nitroaniline	72		66		41-125	9		50
Dibenzofuran	68		65		40-140	5		50
2-Methylnaphthalene	66		66		40-140	0		50
1,2,4,5-Tetrachlorobenzene	64		64		40-117	0		50
Acetophenone	69		68		14-144	1		50
2,4,6-Trichlorophenol	72		69		30-130	4		50
p-Chloro-m-cresol	74		74		26-103	0		50
2-Chlorophenol	68		68		25-102	0		50
2,4-Dichlorophenol	69		68		30-130	1		50
2,4-Dimethylphenol	64		65		30-130	2		50
2-Nitrophenol	86		84		30-130	2		50
4-Nitrophenol	63		61		11-114	3		50
2,4-Dinitrophenol	41		41		4-130	0		50
4,6-Dinitro-o-cresol	83		79		10-130	5		50
Pentachlorophenol	42		41		17-109	2		50
Phenol	66		65		26-90	2		50
2-Methylphenol	64		62		30-130.	3		50
3-Methylphenol/4-Methylphenol	65		63		30-130	3		50
2,4,5-Trichlorophenol	72		72		30-130	0		50
Benzoic Acid	16		17		10-110	6		50
Benzyl Alcohol	66		66		40-140	0		50
Carbazole	72		71		54-128	1		50

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1787902-2 WG1787902-3								
1,4-Dioxane	55		52		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	71		71		25-120
Phenol-d6	68		69		10-120
Nitrobenzene-d5	70		72		23-120
2-Fluorobiphenyl	63		64		30-120
2,4,6-Tribromophenol	66		62		10-136
4-Terphenyl-d14	63		61		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1789052-2 WG1789052-3								
Acenaphthene	69		77		37-111	11		30
1,2,4-Trichlorobenzene	72		83		39-98	14		30
Hexachlorobenzene	85		97		40-140	13		30
Bis(2-chloroethyl)ether	57		77		40-140	30		30
2-Chloronaphthalene	79		86		40-140	8		30
1,2-Dichlorobenzene	68		75		40-140	10		30
1,3-Dichlorobenzene	65		72		40-140	10		30
1,4-Dichlorobenzene	69		74		36-97	7		30
3,3'-Dichlorobenzidine	76		83		40-140	9		30
2,4-Dinitrotoluene	73		86		48-143	16		30
2,6-Dinitrotoluene	86		93		40-140	8		30
Fluoranthene	77		85		40-140	10		30
4-Chlorophenyl phenyl ether	74		86		40-140	15		30
4-Bromophenyl phenyl ether	79		90		40-140	13		30
Bis(2-chloroisopropyl)ether	54		60		40-140	11		30
Bis(2-chloroethoxy)methane	61		73		40-140	18		30
Hexachlorobutadiene	77		82		40-140	6		30
Hexachlorocyclopentadiene	73		76		40-140	4		30
Hexachloroethane	66		69		40-140	4		30
Isophorone	64		75		40-140	16		30
Naphthalene	70		76		40-140	8		30
Nitrobenzene	66		77		40-140	15		30
NDPA/DPA	73		84		40-140	14		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1789052-2 WG1789052-3								
n-Nitrosodi-n-propylamine	69		77		29-132	11		30
Bis(2-ethylhexyl)phthalate	90		102		40-140	13		30
Butyl benzyl phthalate	84		94		40-140	11		30
Di-n-butylphthalate	79		89		40-140	12		30
Di-n-octylphthalate	85		96		40-140	12		30
Diethyl phthalate	75		87		40-140	15		30
Dimethyl phthalate	87		93		40-140	7		30
Benzo(a)anthracene	74		84		40-140	13		30
Benzo(a)pyrene	84		94		40-140	11		30
Benzo(b)fluoranthene	76		81		40-140	6		30
Benzo(k)fluoranthene	76		92		40-140	19		30
Chrysene	78		86		40-140	10		30
Acenaphthylene	89		96		45-123	8		30
Anthracene	78		84		40-140	7		30
Benzo(ghi)perylene	75		81		40-140	8		30
Fluorene	74		83		40-140	11		30
Phenanthrene	75		81		40-140	8		30
Dibenzo(a,h)anthracene	74		78		40-140	5		30
Indeno(1,2,3-cd)pyrene	67		75		40-140	11		30
Pyrene	76		86		26-127	12		30
Biphenyl	76		83		40-140	9		30
4-Chloroaniline	0	Q	0	Q	40-140	NC		30
2-Nitroaniline	87		94		52-143	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1789052-2 WG1789052-3								
3-Nitroaniline	56		68		25-145	19		30
4-Nitroaniline	68		79		51-143	15		30
Dibenzofuran	75		84		40-140	11		30
2-Methylnaphthalene	77		84		40-140	9		30
1,2,4,5-Tetrachlorobenzene	72		80		2-134	11		30
Acetophenone	60		70		39-129	15		30
2,4,6-Trichlorophenol	90		85		30-130	6		30
p-Chloro-m-cresol	78		90		23-97	14		30
2-Chlorophenol	66		77		27-123	15		30
2,4-Dichlorophenol	82		90		30-130	9		30
2,4-Dimethylphenol	78		78		30-130	0		30
2-Nitrophenol	74		84		30-130	13		30
4-Nitrophenol	66		70		10-80	6		30
2,4-Dinitrophenol	66		67		20-130	2		30
4,6-Dinitro-o-cresol	88		94		20-164	7		30
Pentachlorophenol	85		86		9-103	1		30
Phenol	38		46		12-110	19		30
2-Methylphenol	64		68		30-130	6		30
3-Methylphenol/4-Methylphenol	66		71		30-130	7		30
2,4,5-Trichlorophenol	92		111		30-130	19		30
Benzoic Acid	0	Q	0	Q	10-164	NC		30
Benzyl Alcohol	31		48		26-116	43	Q	30
Carbazole	79		87		55-144	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1789052-2 WG1789052-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		61		21-120
Phenol-d6	41		48		10-120
Nitrobenzene-d5	71		77		23-120
2-Fluorobiphenyl	86		91		15-120
2,4,6-Tribromophenol	109		115		10-120
4-Terphenyl-d14	81		87		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06 Batch: WG1789053-2 WG1789053-3								
Acenaphthene	69		78		40-140	12		40
2-Chloronaphthalene	78		87		40-140	11		40
Fluoranthene	80		90		40-140	12		40
Hexachlorobutadiene	86		98		40-140	13		40
Naphthalene	66		76		40-140	14		40
Benzo(a)anthracene	79		88		40-140	11		40
Benzo(a)pyrene	82		93		40-140	13		40
Benzo(b)fluoranthene	83		90		40-140	8		40
Benzo(k)fluoranthene	78		88		40-140	12		40
Chrysene	71		81		40-140	13		40
Acenaphthylene	83		93		40-140	11		40
Anthracene	74		82		40-140	10		40
Benzo(ghi)perylene	73		81		40-140	10		40
Fluorene	75		84		40-140	11		40
Phenanthrene	68		76		40-140	11		40
Dibenzo(a,h)anthracene	76		85		40-140	11		40
Indeno(1,2,3-cd)pyrene	70		79		40-140	12		40
Pyrene	81		91		40-140	12		40
2-Methylnaphthalene	74		85		40-140	14		40
Pentachlorophenol	94		96		40-140	2		40
Hexachlorobenzene	81		92		40-140	13		40
Hexachloroethane	62		70		40-140	12		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06 Batch: WG1789053-2 WG1789053-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	52		59		21-120
Phenol-d6	44		50		10-120
Nitrobenzene-d5	77		87		23-120
2-Fluorobiphenyl	82		92		15-120
2,4,6-Tribromophenol	128	Q	140	Q	10-120
4-Terphenyl-d14	90		98		41-149

Matrix Spike Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787902-4 WG1787902-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
Acenaphthene	120J	1680	1300	78		920	54		31-137	34		50
1,2,4-Trichlorobenzene	ND	1680	1100	66		800	47		38-107	32		50
Hexachlorobenzene	ND	1680	1100	66		790	46		40-140	33		50
Bis(2-chloroethyl)ether	ND	1680	1200	72		850	49		40-140	34		50
2-Chloronaphthalene	ND	1680	1100	66		840	49		40-140	27		50
1,2-Dichlorobenzene	ND	1680	1100	66		840	49		40-140	27		50
1,3-Dichlorobenzene	ND	1680	1100	66		840	49		40-140	27		50
1,4-Dichlorobenzene	ND	1680	1200	72		830	48		28-104	36		50
3,3'-Dichlorobenzidine	ND	1680	790	47		500	29	Q	40-140	45		50
2,4-Dinitrotoluene	ND	1680	1500	90		1000	58		40-132	40		50
2,6-Dinitrotoluene	ND	1680	1200	72		880	51		40-140	31		50
Fluoranthene	1900	1680	4900	180	Q	2700	47		40-140	58	Q	50
4-Chlorophenyl phenyl ether	ND	1680	1100	66		790	46		40-140	33		50
4-Bromophenyl phenyl ether	ND	1680	1100	66		800	47		40-140	32		50
Bis(2-chloroisopropyl)ether	ND	1680	1200	72		850	49		40-140	34		50
Bis(2-chloroethoxy)methane	ND	1680	1100	66		820	48		40-117	29		50
Hexachlorobutadiene	ND	1680	1200	72		830	48		40-140	36		50
Hexachlorocyclopentadiene	ND	1680	ND	0	Q	ND	0	Q	40-140	NC		50
Hexachloroethane	ND	1680	1100	66		710	41		40-140	43		50
Isophorone	ND	1680	1100	66		810	47		40-140	30		50
Naphthalene	70J	1680	1300	78		940	55		40-140	32		50
Nitrobenzene	ND	1680	1200	72		910	53		40-140	27		50
NDPA/DPA	ND	1680	1100	66		860	50		36-157	24		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787902-4 WG1787902-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
n-Nitrosodi-n-propylamine	ND	1680	1200	72		860	50		32-121	33		50
Bis(2-ethylhexyl)phthalate	110J	1680	1600	95		1200	70		40-140	29		50
Butyl benzyl phthalate	ND	1680	1600	95		1000	58		40-140	46		50
Di-n-butylphthalate	ND	1680	1400	84		960	56		40-140	37		50
Di-n-octylphthalate	ND	1680	1600	95		1100	64		40-140	37		50
Diethyl phthalate	ND	1680	1200	72		900	52		40-140	29		50
Dimethyl phthalate	ND	1680	1200	72		870	51		40-140	32		50
Benzo(a)anthracene	750	1680	2600	110		1600	49		40-140	48		50
Benzo(a)pyrene	810	1680	2900	120		1900	63		40-140	42		50
Benzo(b)fluoranthene	1000	1680	3100	130		1900	52		40-140	48		50
Benzo(k)fluoranthene	330	1680	1800	88		1300	56		40-140	32		50
Chrysene	870	1680	2700	110		1700	48		40-140	45		50
Acenaphthylene	110J	1680	1300	78		1000	58		40-140	26		50
Anthracene	270	1680	1800	91		1100	48		40-140	48		50
Benzo(ghi)perylene	580	1680	2200	97		1400	48		40-140	44		50
Fluorene	130J	1680	1200	72		920	54		40-140	26		50
Phenanthrene	2100	1680	4400	140		2400	17	Q	40-140	59	Q	50
Dibenzo(a,h)anthracene	120J	1680	1400	84		890	52		40-140	45		50
Indeno(1,2,3-cd)pyrene	450	1680	2200	100		1300	49		40-140	51	Q	50
Pyrene	2000	1680	4800	170	Q	2700	41		35-142	56	Q	50
Biphenyl	ND	1680	1100	66		860	50		37-127	24		50
4-Chloroaniline	ND	1680	710	42		630	37	Q	40-140	12		50
2-Nitroaniline	ND	1680	1500	90		1200	70		47-134	22		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787902-4 WG1787902-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
3-Nitroaniline	ND	1680	1400	84		1000	58		26-129	33		50
4-Nitroaniline	ND	1680	1400	84		1000	58		41-125	33		50
Dibenzofuran	68J	1680	1300	78		900	52		40-140	36		50
2-Methylnaphthalene	70J	1680	1200	72		920	54		40-140	26		50
1,2,4,5-Tetrachlorobenzene	ND	1680	1100	66		840	49		40-117	27		50
Acetophenone	ND	1680	1300	78		900	52		14-144	36		50
2,4,6-Trichlorophenol	ND	1680	1300	78		1000	58		30-130	26		50
p-Chloro-m-cresol	ND	1680	1200	72		1000	58		26-103	18		50
2-Chlorophenol	ND	1680	1200	72		900	52		25-102	29		50
2,4-Dichlorophenol	ND	1680	1200	72		880	51		30-130	31		50
2,4-Dimethylphenol	ND	1680	1000	60		790	46		30-130	23		50
2-Nitrophenol	ND	1680	1200	72		750	44		30-130	46		50
4-Nitrophenol	ND	1680	1000	60		810	47		11-114	21		50
2,4-Dinitrophenol	ND	1680	ND	0	Q	ND	0	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	1680	ND	0	Q	ND	0	Q	10-130	NC		50
Pentachlorophenol	ND	1680	1000	60		830	48		17-109	19		50
Phenol	ND	1680	1200	72		920	54		26-90	26		50
2-Methylphenol	ND	1680	1000	60		820	48		30-130	20		50
3-Methylphenol/4-Methylphenol	ND	1680	1100	66		840	49		30-130	27		50
2,4,5-Trichlorophenol	ND	1680	1200	72		990	58		30-130	19		50
Benzoic Acid	ND	1680	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1680	1200	72		870	51		40-140	32		50
Carbazole	120J	1680	1500	90		1000	58		54-128	40		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787902-4 WG1787902-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
1,4-Dioxane	ND	1680	940	56		700	41		40-140	29		50

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	74		55		10-136
2-Fluorobiphenyl	64		46		30-120
2-Fluorophenol	74		52		25-120
4-Terphenyl-d14	63		42		18-120
Nitrobenzene-d5	77		56		23-120
Phenol-d6	68		51		10-120

PCBS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/23 22:36
Analyst: JM
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	59.3	5.27	1	A
Aroclor 1221	ND		ug/kg	59.3	5.94	1	A
Aroclor 1232	ND		ug/kg	59.3	12.6	1	A
Aroclor 1242	ND		ug/kg	59.3	8.00	1	A
Aroclor 1248	ND		ug/kg	59.3	8.90	1	A
Aroclor 1254	268		ug/kg	59.3	6.49	1	B
Aroclor 1260	ND		ug/kg	59.3	11.0	1	A
Aroclor 1262	ND		ug/kg	59.3	7.53	1	A
Aroclor 1268	ND		ug/kg	59.3	6.14	1	A
PCBs, Total	268		ug/kg	59.3	5.27	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/08/23 04:23
Analyst: JM
Percent Solids: 76%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	65.4	5.80	1	A
Aroclor 1221	ND		ug/kg	65.4	6.55	1	A
Aroclor 1232	ND		ug/kg	65.4	13.8	1	A
Aroclor 1242	ND		ug/kg	65.4	8.81	1	A
Aroclor 1248	ND		ug/kg	65.4	9.81	1	A
Aroclor 1254	ND		ug/kg	65.4	7.15	1	A
Aroclor 1260	ND		ug/kg	65.4	12.1	1	A
Aroclor 1262	ND		ug/kg	65.4	8.30	1	A
Aroclor 1268	ND		ug/kg	65.4	6.77	1	A
PCBs, Total	ND		ug/kg	65.4	5.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/08/23 04:35
Analyst: JM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.6	4.76	1	A
Aroclor 1221	ND		ug/kg	53.6	5.37	1	A
Aroclor 1232	ND		ug/kg	53.6	11.4	1	A
Aroclor 1242	ND		ug/kg	53.6	7.23	1	A
Aroclor 1248	ND		ug/kg	53.6	8.04	1	A
Aroclor 1254	11.0	J	ug/kg	53.6	5.87	1	B
Aroclor 1260	ND		ug/kg	53.6	9.91	1	A
Aroclor 1262	ND		ug/kg	53.6	6.81	1	A
Aroclor 1268	ND		ug/kg	53.6	5.56	1	A
PCBs, Total	11.0	J	ug/kg	53.6	4.76	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/08/23 04:48
Analyst: JM
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	64.7	5.74	1	A
Aroclor 1221	ND		ug/kg	64.7	6.48	1	A
Aroclor 1232	ND		ug/kg	64.7	13.7	1	A
Aroclor 1242	ND		ug/kg	64.7	8.72	1	A
Aroclor 1248	ND		ug/kg	64.7	9.70	1	A
Aroclor 1254	ND		ug/kg	64.7	7.08	1	A
Aroclor 1260	ND		ug/kg	64.7	12.0	1	A
Aroclor 1262	ND		ug/kg	64.7	8.22	1	A
Aroclor 1268	ND		ug/kg	64.7	6.70	1	A
PCBs, Total	ND		ug/kg	64.7	5.74	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/08/23 05:01
Analyst: JM
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	66.9	5.94	1	A
Aroclor 1221	ND		ug/kg	66.9	6.70	1	A
Aroclor 1232	ND		ug/kg	66.9	14.2	1	A
Aroclor 1242	ND		ug/kg	66.9	9.01	1	A
Aroclor 1248	ND		ug/kg	66.9	10.0	1	A
Aroclor 1254	ND		ug/kg	66.9	7.31	1	A
Aroclor 1260	ND		ug/kg	66.9	12.4	1	A
Aroclor 1262	ND		ug/kg	66.9	8.49	1	A
Aroclor 1268	ND		ug/kg	66.9	6.93	1	A
PCBs, Total	ND		ug/kg	66.9	5.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/08/23 03:18
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 06/06/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1787848-1						
Aroclor 1016	ND		ug/kg	49.0	4.35	A
Aroclor 1221	ND		ug/kg	49.0	4.91	A
Aroclor 1232	ND		ug/kg	49.0	10.4	A
Aroclor 1242	ND		ug/kg	49.0	6.60	A
Aroclor 1248	ND		ug/kg	49.0	7.34	A
Aroclor 1254	ND		ug/kg	49.0	5.36	A
Aroclor 1260	ND		ug/kg	49.0	9.05	A
Aroclor 1262	ND		ug/kg	49.0	6.22	A
Aroclor 1268	ND		ug/kg	49.0	5.07	A
PCBs, Total	ND		ug/kg	49.0	4.35	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	56		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1787848-2 WG1787848-3									
Aroclor 1016	61		57		40-140	7		50	A
Aroclor 1260	59		54		40-140	9		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		59		30-150	A
Decachlorobiphenyl	53		52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		60		30-150	B
Decachlorobiphenyl	57		53		30-150	B

Matrix Spike Analysis**Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787848-4 WG1787848-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)													
Aroclor 1016	ND	367	217	59		214	55		40-140	1		50	A
Aroclor 1260	ND	367	247	67		269	69		40-140	9		50	A

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		55		30-150	A
Decachlorobiphenyl	52		49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		55		30-150	B
Decachlorobiphenyl	55		56		30-150	B

PESTICIDES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 15:21
Analyst: MMG
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.04	0.399	1	A
Lindane	ND		ug/kg	0.849	0.379	1	A
Alpha-BHC	ND		ug/kg	0.849	0.241	1	A
Beta-BHC	ND		ug/kg	2.04	0.772	1	A
Heptachlor	ND		ug/kg	1.02	0.457	1	A
Aldrin	ND		ug/kg	2.04	0.717	1	A
Heptachlor epoxide	ND		ug/kg	3.82	1.14	1	A
Endrin	ND		ug/kg	0.849	0.348	1	A
Endrin aldehyde	ND		ug/kg	2.55	0.891	1	A
Endrin ketone	ND		ug/kg	2.04	0.525	1	A
Dieldrin	ND		ug/kg	1.27	0.637	1	A
4,4'-DDE	ND		ug/kg	2.04	0.471	1	A
4,4'-DDD	ND		ug/kg	2.04	0.727	1	A
4,4'-DDT	43.1		ug/kg	2.04	1.64	1	B
Endosulfan I	ND		ug/kg	2.04	0.481	1	A
Endosulfan II	ND		ug/kg	2.04	0.681	1	A
Endosulfan sulfate	ND		ug/kg	0.849	0.404	1	A
Methoxychlor	ND		ug/kg	3.82	1.19	1	A
Toxaphene	ND		ug/kg	38.2	10.7	1	A
cis-Chlordane	2.19	J	ug/kg	2.55	0.710	1	B
trans-Chlordane	ND		ug/kg	2.55	0.672	1	A
Chlordane	ND		ug/kg	17.0	6.75	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/10/23 19:56
Analyst: ER
Percent Solids: 77%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	211	13.3	1	A
2,4,5-T	ND		ug/kg	211	6.54	1	A
2,4,5-TP (Silvex)	ND		ug/kg	211	5.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	93		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 16:28
Analyst: MMG
Percent Solids: 76%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.97	0.386	1	A
Lindane	ND		ug/kg	0.822	0.367	1	A
Alpha-BHC	ND		ug/kg	0.822	0.233	1	A
Beta-BHC	ND		ug/kg	1.97	0.748	1	A
Heptachlor	ND		ug/kg	0.986	0.442	1	A
Aldrin	ND		ug/kg	1.97	0.694	1	A
Heptachlor epoxide	ND		ug/kg	3.70	1.11	1	A
Endrin	ND		ug/kg	0.822	0.337	1	A
Endrin aldehyde	ND		ug/kg	2.46	0.863	1	A
Endrin ketone	ND		ug/kg	1.97	0.508	1	A
Dieldrin	2.24		ug/kg	1.23	0.616	1	B
4,4'-DDE	8.00		ug/kg	1.97	0.456	1	B
4,4'-DDD	3.46		ug/kg	1.97	0.703	1	B
4,4'-DDT	41.5		ug/kg	1.97	1.59	1	A
Endosulfan I	ND		ug/kg	1.97	0.466	1	A
Endosulfan II	ND		ug/kg	1.97	0.659	1	A
Endosulfan sulfate	ND		ug/kg	0.822	0.391	1	A
Methoxychlor	ND		ug/kg	3.70	1.15	1	A
Toxaphene	ND		ug/kg	37.0	10.4	1	A
cis-Chlordane	5.25	P	ug/kg	2.46	0.687	1	B
trans-Chlordane	2.81	IP	ug/kg	2.46	0.651	1	B
Chlordane	32.3		ug/kg	16.4	6.53	1	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/10/23 20:15
Analyst: ER
Percent Solids: 76%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	218	13.7	1	A
2,4,5-T	ND		ug/kg	218	6.75	1	A
2,4,5-TP (Silvex)	ND		ug/kg	218	5.79	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	98		30-150	A
DCAA	92		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 16:40
Analyst: MMG
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.350	1	A
Lindane	ND		ug/kg	0.745	0.333	1	A
Alpha-BHC	ND		ug/kg	0.745	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.678	1	A
Heptachlor	ND		ug/kg	0.894	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.630	1	A
Heptachlor epoxide	ND		ug/kg	3.35	1.01	1	A
Endrin	ND		ug/kg	0.745	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.783	1	A
Endrin ketone	ND		ug/kg	1.79	0.461	1	A
Dieldrin	2.41		ug/kg	1.12	0.559	1	B
4,4'-DDE	6.73		ug/kg	1.79	0.414	1	B
4,4'-DDD	2.21		ug/kg	1.79	0.638	1	B
4,4'-DDT	27.7		ug/kg	1.79	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.423	1	A
Endosulfan II	ND		ug/kg	1.79	0.598	1	A
Endosulfan sulfate	ND		ug/kg	0.745	0.355	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.39	1	A
cis-Chlordane	3.27		ug/kg	2.24	0.623	1	A
trans-Chlordane	4.36		ug/kg	2.24	0.590	1	A
Chlordane	18.6		ug/kg	14.9	5.93	1	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/10/23 20:52
Analyst: ER
Percent Solids: 86%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	189	11.9	1	A
2,4,5-T	ND		ug/kg	189	5.86	1	A
2,4,5-TP (Silvex)	ND		ug/kg	189	5.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	104		30-150	A
DCAA	99		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 16:51
Analyst: MMG
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.04	0.399	1	A
Lindane	ND		ug/kg	0.849	0.379	1	A
Alpha-BHC	ND		ug/kg	0.849	0.241	1	A
Beta-BHC	ND		ug/kg	2.04	0.772	1	A
Heptachlor	ND		ug/kg	1.02	0.457	1	A
Aldrin	ND		ug/kg	2.04	0.717	1	A
Heptachlor epoxide	ND		ug/kg	3.82	1.14	1	A
Endrin	ND		ug/kg	0.849	0.348	1	A
Endrin aldehyde	ND		ug/kg	2.55	0.891	1	A
Endrin ketone	ND		ug/kg	2.04	0.524	1	A
Dieldrin	ND		ug/kg	1.27	0.637	1	A
4,4'-DDE	ND		ug/kg	2.04	0.471	1	A
4,4'-DDD	ND		ug/kg	2.04	0.726	1	A
4,4'-DDT	ND		ug/kg	2.04	1.64	1	A
Endosulfan I	ND		ug/kg	2.04	0.481	1	A
Endosulfan II	ND		ug/kg	2.04	0.681	1	A
Endosulfan sulfate	ND		ug/kg	0.849	0.404	1	A
Methoxychlor	ND		ug/kg	3.82	1.19	1	A
Toxaphene	ND		ug/kg	38.2	10.7	1	A
cis-Chlordane	ND		ug/kg	2.55	0.710	1	A
trans-Chlordane	ND		ug/kg	2.55	0.672	1	A
Chlordane	ND		ug/kg	17.0	6.75	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/10/23 21:10
Analyst: ER
Percent Solids: 77%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	212	13.4	1	A
2,4,5-T	ND		ug/kg	212	6.58	1	A
2,4,5-TP (Silvex)	ND		ug/kg	212	5.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	103		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/08/23 17:02
Analyst: MMG
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:11
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.16	0.424	1	B
Lindane	ND		ug/kg	0.901	0.403	1	B
Alpha-BHC	ND		ug/kg	0.901	0.256	1	B
Beta-BHC	ND		ug/kg	2.16	0.820	1	B
Heptachlor	ND		ug/kg	1.08	0.485	1	B
Aldrin	ND		ug/kg	2.16	0.761	1	B
Heptachlor epoxide	ND		ug/kg	4.06	1.22	1	B
Endrin	ND		ug/kg	0.901	0.369	1	B
Endrin aldehyde	ND		ug/kg	2.70	0.946	1	B
Endrin ketone	ND		ug/kg	2.16	0.557	1	B
Dieldrin	ND		ug/kg	1.35	0.676	1	B
4,4'-DDE	ND		ug/kg	2.16	0.500	1	B
4,4'-DDD	ND		ug/kg	2.16	0.771	1	B
4,4'-DDT	ND		ug/kg	2.16	1.74	1	B
Endosulfan I	ND		ug/kg	2.16	0.511	1	B
Endosulfan II	ND		ug/kg	2.16	0.723	1	B
Endosulfan sulfate	ND		ug/kg	0.901	0.429	1	B
Methoxychlor	ND		ug/kg	4.06	1.26	1	B
Toxaphene	ND		ug/kg	40.6	11.4	1	B
cis-Chlordane	ND		ug/kg	2.70	0.753	1	B
trans-Chlordane	ND		ug/kg	2.70	0.714	1	B
Chlordane	ND		ug/kg	18.0	7.16	1	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	40		30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/10/23 21:29
Analyst: ER
Percent Solids: 73%
Methylation Date: 06/10/23 06:17

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	225	14.2	1	A
2,4,5-T	ND		ug/kg	225	6.97	1	A
2,4,5-TP (Silvex)	ND		ug/kg	225	5.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	92		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/07/23 14:13
Analyst: MMG

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:03
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1787868-1						
Delta-BHC	ND		ug/kg	1.57	0.307	A
Lindane	ND		ug/kg	0.653	0.292	A
Alpha-BHC	ND		ug/kg	0.653	0.185	A
Beta-BHC	ND		ug/kg	1.57	0.594	A
Heptachlor	ND		ug/kg	0.783	0.351	A
Aldrin	ND		ug/kg	1.57	0.552	A
Heptachlor epoxide	ND		ug/kg	2.94	0.881	A
Endrin	ND		ug/kg	0.653	0.268	A
Endrin aldehyde	ND		ug/kg	1.96	0.685	A
Endrin ketone	ND		ug/kg	1.57	0.403	A
Dieldrin	ND		ug/kg	0.979	0.490	A
4,4'-DDE	ND		ug/kg	1.57	0.362	A
4,4'-DDD	ND		ug/kg	1.57	0.559	A
4,4'-DDT	ND		ug/kg	1.57	1.26	A
Endosulfan I	ND		ug/kg	1.57	0.370	A
Endosulfan II	ND		ug/kg	1.57	0.523	A
Endosulfan sulfate	ND		ug/kg	0.653	0.311	A
Methoxychlor	ND		ug/kg	2.94	0.914	A
Toxaphene	ND		ug/kg	29.4	8.22	A
cis-Chlordane	ND		ug/kg	1.96	0.546	A
trans-Chlordane	ND		ug/kg	1.96	0.517	A
Chlordane	ND		ug/kg	13.0	5.19	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/07/23 14:13
Analyst: MMG

Extraction Method: EPA 3546
Extraction Date: 06/06/23 15:03
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1787868-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/10/23 17:29
Analyst: ER

Extraction Method: EPA 8151A
Extraction Date: 06/09/23 03:19

Methylation Date: 06/10/23 06:17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1789075-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.31	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	119		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1787868-2 WG1787868-3									
Delta-BHC	93		86		30-150	8		30	A
Lindane	85		78		30-150	9		30	A
Alpha-BHC	89		82		30-150	8		30	A
Beta-BHC	94		88		30-150	7		30	A
Heptachlor	85		78		30-150	9		30	A
Aldrin	86		79		30-150	8		30	A
Heptachlor epoxide	81		75		30-150	8		30	A
Endrin	86		79		30-150	8		30	A
Endrin aldehyde	70		65		30-150	7		30	A
Endrin ketone	85		81		30-150	5		30	A
Dieldrin	93		85		30-150	9		30	A
4,4'-DDE	84		78		30-150	7		30	A
4,4'-DDD	91		84		30-150	8		30	A
4,4'-DDT	93		87		30-150	7		30	A
Endosulfan I	83		77		30-150	8		30	A
Endosulfan II	88		81		30-150	8		30	A
Endosulfan sulfate	80		75		30-150	6		30	A
Methoxychlor	82		79		30-150	4		30	A
cis-Chlordane	92		85		30-150	8		30	A
trans-Chlordane	96		89		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1787868-2 WG1787868-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		71		30-150	A
Decachlorobiphenyl	74		76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		70		30-150	B
Decachlorobiphenyl	76		77		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1789075-2 WG1789075-3									
2,4-D	109		98		30-150	11		30	A
2,4,5-T	105		94		30-150	11		30	A
2,4,5-TP (Silvex)	99		90		30-150	10		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	111		98		30-150	A
DCAA	112		103		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab ID: R-1 (5-7) Associated sample(s): 01-05 QC Batch ID: WG1787868-4 WG1787868-5 QC Sample: L2331289-01 Client													
Delta-BHC	ND	41.6	30.6	74		35.1	84		30-150	14		50	A
Lindane	ND	41.6	29.2	70		33.6	81		30-150	14		50	A
Alpha-BHC	ND	41.6	32.5	78		36.8	88		30-150	12		50	A
Beta-BHC	ND	41.6	28.7	69		29.9	72		30-150	4		50	A
Heptachlor	ND	41.6	29.9	72		34.0	82		30-150	13		50	A
Aldrin	ND	41.6	28.7	69		33.3	80		30-150	15		50	A
Heptachlor epoxide	ND	41.6	67.7	163	Q	32.8	79		30-150	69	Q	50	A
Endrin	ND	41.6	86.2P	207	Q	31.0	74		30-150	94	Q	50	A
Endrin aldehyde	ND	41.6	192P	462	Q	34.0	82		30-150	140	Q	50	A
Endrin ketone	ND	41.6	35.5	85		32.4	78		30-150	9		50	A
Dieldrin	ND	41.6	176	423	Q	39.9	96		30-150	126	Q	50	A
4,4'-DDE	ND	41.6	197	474	Q	41.0	98		30-150	131	Q	50	A
4,4'-DDD	ND	41.6	32.8	79		37.7	91		30-150	14		50	A
4,4'-DDT	43.1	41.6	456PE	993	Q	72.3	70		30-150	145	Q	50	B
Endosulfan I	ND	41.6	89.1P	214	Q	34.2	82		30-150	89	Q	50	A
Endosulfan II	ND	41.6	25.3	61		32.8	79		30-150	26		50	A
Endosulfan sulfate	ND	41.6	30.8	74		31.9	77		30-150	4		50	A
Methoxychlor	ND	41.6	33.2	80		44.1	106		30-150	28		50	A
cis-Chlordane	2.19J	41.6	33.4	80		31.9	77		30-150	5		50	B
trans-Chlordane	ND	41.6	32.3	78		44.9	108		30-150	33		50	A

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787868-4 WG1787868-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)												

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	64		69		30-150	A
Decachlorobiphenyl	70		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		66		30-150	B
Decachlorobiphenyl	81		71		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1789075-4 WG1789075-5 QC Sample: L2331289-01 Client ID: R-1 (5-7)													
2,4-D	ND	211	240	114		203J	96		30-150	17		30	A
2,4,5-T	ND	211	205J	97		173J	82		30-150	17		30	A
2,4,5-TP (Silvex)	ND	211	195J	93		193J	91		30-150	1		30	A

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		91		30-150	A
DCAA	112		94		30-150	B

METALS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8020		mg/kg	9.88	2.67	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Antimony, Total	4.61	J	mg/kg	4.94	0.375	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Arsenic, Total	6.09		mg/kg	0.988	0.205	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Barium, Total	217		mg/kg	0.988	0.172	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Beryllium, Total	0.525		mg/kg	0.494	0.033	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Cadmium, Total	0.937	J	mg/kg	0.988	0.097	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Calcium, Total	30400		mg/kg	9.88	3.46	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Chromium, Total	28.1		mg/kg	0.988	0.095	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Cobalt, Total	6.77		mg/kg	1.98	0.164	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Copper, Total	143		mg/kg	0.988	0.255	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Iron, Total	21100		mg/kg	4.94	0.892	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Lead, Total	1600		mg/kg	4.94	0.265	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Magnesium, Total	4480		mg/kg	9.88	1.52	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Manganese, Total	272		mg/kg	0.988	0.157	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Mercury, Total	1.57		mg/kg	0.092	0.060	1	06/08/23 02:10	06/12/23 10:58	EPA 7471B	1,7471B	DMB
Nickel, Total	18.8		mg/kg	2.47	0.239	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Potassium, Total	1090		mg/kg	247	14.2	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Selenium, Total	ND		mg/kg	1.98	0.255	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Silver, Total	0.358	J	mg/kg	0.494	0.280	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Sodium, Total	246		mg/kg	198	3.11	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Thallium, Total	0.396	J	mg/kg	1.98	0.311	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Vanadium, Total	23.8		mg/kg	0.988	0.200	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC
Zinc, Total	452		mg/kg	4.94	0.289	2	06/08/23 01:42	06/10/23 08:08	EPA 3050B	1,6010D	MRC



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9830		mg/kg	9.99	2.70	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Antimony, Total	2.17	J	mg/kg	5.00	0.380	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Arsenic, Total	3.55		mg/kg	0.999	0.208	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Barium, Total	149		mg/kg	0.999	0.174	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Beryllium, Total	0.766		mg/kg	0.500	0.033	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Cadmium, Total	0.364	J	mg/kg	0.999	0.098	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Calcium, Total	25800		mg/kg	9.99	3.50	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Chromium, Total	37.6		mg/kg	0.999	0.096	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Cobalt, Total	8.24		mg/kg	2.00	0.166	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Copper, Total	39.7		mg/kg	0.999	0.258	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Iron, Total	30500		mg/kg	5.00	0.902	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Lead, Total	122		mg/kg	5.00	0.268	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Magnesium, Total	5700		mg/kg	9.99	1.54	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Manganese, Total	612		mg/kg	0.999	0.159	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Mercury, Total	0.155		mg/kg	0.093	0.061	1	06/08/23 02:10	06/12/23 11:21	EPA 7471B	1,7471B	DMB
Nickel, Total	23.1		mg/kg	2.50	0.242	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Potassium, Total	2440		mg/kg	250	14.4	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Selenium, Total	ND		mg/kg	2.00	0.258	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Silver, Total	ND		mg/kg	0.500	0.283	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Sodium, Total	569		mg/kg	200	3.15	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Thallium, Total	ND		mg/kg	2.00	0.315	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Vanadium, Total	35.3		mg/kg	0.999	0.203	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC
Zinc, Total	102		mg/kg	5.00	0.293	2	06/08/23 01:42	06/10/23 09:58	EPA 3050B	1,6010D	MRC



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9540		mg/kg	8.89	2.40	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Antimony, Total	1.66	J	mg/kg	4.45	0.338	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Arsenic, Total	2.59		mg/kg	0.889	0.185	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Barium, Total	142		mg/kg	0.889	0.155	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Beryllium, Total	0.678		mg/kg	0.445	0.029	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Cadmium, Total	0.245	J	mg/kg	0.889	0.087	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Calcium, Total	9580		mg/kg	8.89	3.11	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Chromium, Total	34.7		mg/kg	0.889	0.085	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Cobalt, Total	8.49		mg/kg	1.78	0.148	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Copper, Total	34.3		mg/kg	0.889	0.229	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Iron, Total	20900		mg/kg	4.45	0.803	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Lead, Total	114		mg/kg	4.45	0.238	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Magnesium, Total	4700		mg/kg	8.89	1.37	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Manganese, Total	457		mg/kg	0.889	0.141	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Mercury, Total	0.149		mg/kg	0.079	0.052	1	06/08/23 02:10	06/12/23 11:24	EPA 7471B	1,7471B	DMB
Nickel, Total	22.6		mg/kg	2.22	0.215	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Potassium, Total	3100		mg/kg	222	12.8	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Selenium, Total	ND		mg/kg	1.78	0.229	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Silver, Total	ND		mg/kg	0.445	0.252	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Sodium, Total	425		mg/kg	178	2.80	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Thallium, Total	0.479	J	mg/kg	1.78	0.280	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Vanadium, Total	31.9		mg/kg	0.889	0.180	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC
Zinc, Total	103		mg/kg	4.45	0.260	2	06/08/23 01:42	06/10/23 10:02	EPA 3050B	1,6010D	MRC



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9640		mg/kg	9.99	2.70	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Antimony, Total	1.19	J	mg/kg	4.99	0.380	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Arsenic, Total	ND		mg/kg	0.999	0.208	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Barium, Total	76.8		mg/kg	0.999	0.174	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Beryllium, Total	0.706		mg/kg	0.499	0.033	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Cadmium, Total	ND		mg/kg	0.999	0.098	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Calcium, Total	3950		mg/kg	9.99	3.50	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Chromium, Total	109		mg/kg	0.999	0.096	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Cobalt, Total	11.2		mg/kg	2.00	0.166	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Copper, Total	11.8		mg/kg	0.999	0.258	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Iron, Total	15200		mg/kg	4.99	0.902	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Lead, Total	1.04	J	mg/kg	4.99	0.268	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Magnesium, Total	9030		mg/kg	9.99	1.54	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Manganese, Total	94.3		mg/kg	0.999	0.159	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Mercury, Total	ND		mg/kg	0.088	0.057	1	06/08/23 02:10	06/12/23 11:28	EPA 7471B	1,7471B	DMB
Nickel, Total	50.0		mg/kg	2.50	0.242	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Potassium, Total	1920		mg/kg	250	14.4	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Selenium, Total	ND		mg/kg	2.00	0.258	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Silver, Total	ND		mg/kg	0.499	0.283	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Sodium, Total	918		mg/kg	200	3.15	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Thallium, Total	1.03	J	mg/kg	2.00	0.315	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Vanadium, Total	30.3		mg/kg	0.999	0.203	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC
Zinc, Total	22.0		mg/kg	4.99	0.293	2	06/08/23 01:42	06/10/23 10:07	EPA 3050B	1,6010D	MRC



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11200		mg/kg	10.4	2.82	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Antimony, Total	2.88	J	mg/kg	5.22	0.397	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Arsenic, Total	28.8		mg/kg	1.04	0.217	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Barium, Total	69.9		mg/kg	1.04	0.182	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Beryllium, Total	0.715		mg/kg	0.522	0.035	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Cadmium, Total	0.261	J	mg/kg	1.04	0.102	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Calcium, Total	1560		mg/kg	10.4	3.65	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Chromium, Total	84.6		mg/kg	1.04	0.100	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Cobalt, Total	16.3		mg/kg	2.09	0.173	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Copper, Total	286		mg/kg	1.04	0.269	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Iron, Total	30700		mg/kg	5.22	0.943	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Lead, Total	369		mg/kg	5.22	0.280	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Magnesium, Total	7060		mg/kg	10.4	1.61	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Manganese, Total	255		mg/kg	1.04	0.166	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Mercury, Total	0.834		mg/kg	0.10	0.065	1	06/08/23 02:10	06/12/23 11:31	EPA 7471B	1,7471B	DMB
Nickel, Total	241		mg/kg	2.61	0.253	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Potassium, Total	3640		mg/kg	261	15.0	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Selenium, Total	ND		mg/kg	2.09	0.269	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Silver, Total	ND		mg/kg	0.522	0.296	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Sodium, Total	3020		mg/kg	209	3.29	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Thallium, Total	0.752	J	mg/kg	2.09	0.329	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Vanadium, Total	51.7		mg/kg	1.04	0.212	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC
Zinc, Total	174		mg/kg	5.22	0.306	2	06/08/23 01:42	06/10/23 10:11	EPA 3050B	1,6010D	MRC



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1788785-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Barium, Total	ND		mg/kg	0.400	0.070	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Copper, Total	ND		mg/kg	0.400	0.103	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Iron, Total	ND		mg/kg	2.00	0.361	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Lead, Total	ND		mg/kg	2.00	0.107	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Potassium, Total	ND		mg/kg	100	5.76	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Silver, Total	ND		mg/kg	0.200	0.113	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Sodium, Total	2.41	J	mg/kg	80.0	1.26	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/08/23 01:42	06/10/23 07:46	1,6010D	MRC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1788788-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	06/08/23 02:10	06/12/23 10:51	1,7471B	DMB



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1788785-2 SRM Lot Number: D116-540								
Aluminum, Total	82		-		45-155	-		
Antimony, Total	161		-		2-205	-		
Arsenic, Total	101		-		82-119	-		
Barium, Total	92		-		82-118	-		
Beryllium, Total	97		-		82-118	-		
Cadmium, Total	98		-		82-118	-		
Calcium, Total	95		-		81-119	-		
Chromium, Total	99		-		81-118	-		
Cobalt, Total	98		-		83-117	-		
Copper, Total	98		-		83-117	-		
Iron, Total	107		-		58-142	-		
Lead, Total	99		-		83-117	-		
Magnesium, Total	94		-		75-125	-		
Manganese, Total	97		-		82-118	-		
Nickel, Total	98		-		82-118	-		
Potassium, Total	94		-		68-131	-		
Selenium, Total	104		-		78-122	-		
Silver, Total	102		-		79-121	-		
Sodium, Total	100		-		71-130	-		
Thallium, Total	103		-		80-120	-		
Vanadium, Total	99		-		78-122	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1788785-2 SRM Lot Number: D116-540					
Zinc, Total	96	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1788788-2 SRM Lot Number: D116-540					
Mercury, Total	88	-	58-142	-	

Matrix Spike Analysis Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1788785-3 WG1788785-4 QC Sample: L2331289-01 Client ID: R-1 (5-7)												
Aluminum, Total	8020	198	7580	0	Q	6490	0	Q	75-125	15		20
Antimony, Total	4.61J	49.4	49.3	100		51.5	104		75-125	4		20
Arsenic, Total	6.09	11.8	16.4	87		17.3	94		75-125	5		20
Barium, Total	217	198	406	96		393	89		75-125	3		20
Beryllium, Total	0.525	4.94	5.76	106		5.68	104		75-125	1		20
Cadmium, Total	0.937J	5.24	6.09	116		6.08	116		75-125	0		20
Calcium, Total	30400	988	24400	0	Q	29300	0	Q	75-125	18		20
Chromium, Total	28.1	19.8	46.4	93		43.9	80		75-125	6		20
Cobalt, Total	6.77	49.4	56.5	101		56.1	100		75-125	1		20
Copper, Total	143	24.7	126	0	Q	175	129	Q	75-125	33	Q	20
Iron, Total	21100	98.8	17600	0	Q	22400	1310	Q	75-125	24	Q	20
Lead, Total	1600	52.4	941	0	Q	1080	0	Q	75-125	14		20
Magnesium, Total	4480	988	6390	193	Q	4560	8	Q	75-125	33	Q	20
Manganese, Total	272	49.4	275	6	Q	246	0	Q	75-125	11		20
Nickel, Total	18.8	49.4	67.1	98		66.2	96		75-125	1		20
Potassium, Total	1090	988	2050	97		1910	83		75-125	7		20
Selenium, Total	ND	11.8	11.3	95		11.0	93		75-125	3		20
Silver, Total	0.358J	4.94	5.59	113		5.24	106		75-125	6		20
Sodium, Total	246	988	1290	106		1230	99		75-125	5		20
Thallium, Total	0.396J	11.8	11.8	100		11.4	96		75-125	3		20
Vanadium, Total	23.8	49.4	75.6	105		72.7	99		75-125	4		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01-05			QC Batch ID: WG1788785-3		WG1788785-4	QC Sample: L2331289-01		Client ID: R-1 (5-7)			
Zinc, Total	452	49.4	366	0	Q	377	0	Q	75-125	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-05			QC Batch ID: WG1788788-3		WG1788788-4	QC Sample: L2331289-01		Client ID: R-1 (5-7)			
Mercury, Total	1.57	1.82	3.96	131	Q	4.32	149	Q	80-120	9	20

INORGANICS & MISCELLANEOUS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-01
Client ID: R-1 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.4		%	0.100	NA	1	-	06/06/23 14:10	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-02
Client ID: R-2 (5-7)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 13:50
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.1		%	0.100	NA	1	-	06/06/23 14:10	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-03
Client ID: DUP_060523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:00
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.1		%	0.100	NA	1	-	06/06/23 14:10	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-04
Client ID: R-6 (7-9)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:20
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.6		%	0.100	NA	1	-	06/06/23 14:10	121,2540G	ROI



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

SAMPLE RESULTS

Lab ID: L2331289-05
Client ID: R-2 (12-14)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/05/23 14:30
Date Received: 06/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.1		%	0.100	NA	1	-	06/06/23 14:10	121,2540G	ROI



Lab Duplicate Analysis
Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1787812-1 QC Sample: L2331289-01 Client ID: R-1 (5-7)						
Solids, Total	77.4	78.5	%	1		20

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Serial_No: 06122316:18
Lab Number: L2331289
Report Date: 06/12/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331289-01A	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01A1	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01A2	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01B	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01B1	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01B2	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01C	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01C1	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01C2	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-01D1	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-01D2	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),ZN-Ti(180),SE-Ti(180),SB-Ti(180),CO-Ti(180),V-Ti(180),HG-T(28),FE-Ti(180),MG-Ti(180),MN-Ti(180),K-Ti(180),CA-Ti(180),CD-Ti(180),NA-Ti(180)
L2331289-01E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),ZN-Ti(180),SE-Ti(180),SB-Ti(180),CO-Ti(180),V-Ti(180),HG-T(28),FE-Ti(180),MG-Ti(180),MN-Ti(180),K-Ti(180),CA-Ti(180),CD-Ti(180),NA-Ti(180)
L2331289-01E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),ZN-Ti(180),SE-Ti(180),SB-Ti(180),CO-Ti(180),V-Ti(180),HG-T(28),FE-Ti(180),MG-Ti(180),MN-Ti(180),K-Ti(180),CA-Ti(180),CD-Ti(180),NA-Ti(180)

Project Name: HLP 40/50**Lab Number:** L2331289**Project Number:** 1338.0013Y000**Report Date:** 06/12/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331289-01F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01F1	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01F2	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01G	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01G1	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01G2	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-01X	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01X1	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01X2	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-01Y	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-01Y1	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-01Y2	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-01Z	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-01Z1	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-01Z2	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-02A	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-02B	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-02C	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-02D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),TL-Ti(180),NI-Ti(180),PB-Ti(180),ZN-Ti(180),CU-Ti(180),SB-Ti(180),SE-Ti(180),V-Ti(180),CO-Ti(180),HG-T(28),MN-Ti(180),MG-Ti(180),FE-Ti(180),CD-Ti(180),CA-Ti(180),NA-Ti(180),K-Ti(180)
L2331289-02F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-02G	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-02X	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Serial_No: 06122316:18
Lab Number: L2331289
Report Date: 06/12/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331289-02Y	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-02Z	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-03A	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-03B	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-03C	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-03D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),NI-Ti(180),AL-Ti(180),TL-Ti(180),CR-Ti(180),SE-Ti(180),ZN-Ti(180),PB-Ti(180),SB-Ti(180),CU-Ti(180),V-Ti(180),CO-Ti(180),HG-T(28),MN-Ti(180),FE-Ti(180),MG-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180),CA-Ti(180)
L2331289-03F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-03G	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-03X	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-03Y	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-03Z	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-04A	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-04B	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-04C	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-04D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),BA-Ti(180),AS-Ti(180),AG-Ti(180),TL-Ti(180),CR-Ti(180),AL-Ti(180),NI-Ti(180),ZN-Ti(180),CU-Ti(180),SB-Ti(180),PB-Ti(180),SE-Ti(180),V-Ti(180),CO-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),K-Ti(180),CD-Ti(180),NA-Ti(180),CA-Ti(180)
L2331289-04F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-04G	Glass 500ml/16oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-04X	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-04Y	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-04Z	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Serial_No: 06122316:18
Lab Number: L2331289
Report Date: 06/12/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331289-05A	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-05B	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-05C	5 gram Encore Sampler	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-05D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L2331289-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-Ti(180),BA-Ti(180),AS-Ti(180),AG-Ti(180),AL-Ti(180),TL-Ti(180),NI-Ti(180),CR-Ti(180),SE-Ti(180),PB-Ti(180),SB-Ti(180),CU-Ti(180),ZN-Ti(180),V-Ti(180),CO-Ti(180),HG-T(28),MG-Ti(180),FE-Ti(180),MN-Ti(180),NA-Ti(180),CA-Ti(180),K-Ti(180),CD-Ti(180)
L2331289-05F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-05G	Glass 500ml/16oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331289-05X	Vial MeOH preserved split	A	NA		4.4	Y	Absent		NYTCL-8260HLW(14)
L2331289-05Y	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-05Z	Vial Water preserved split	A	NA		4.4	Y	Absent	07-JUN-23 10:05	NYTCL-8260HLW(14)
L2331289-06A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2331289-06B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2331289-06C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2331289-06D	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2331289-06E	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331289
Report Date: 06/12/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B**The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

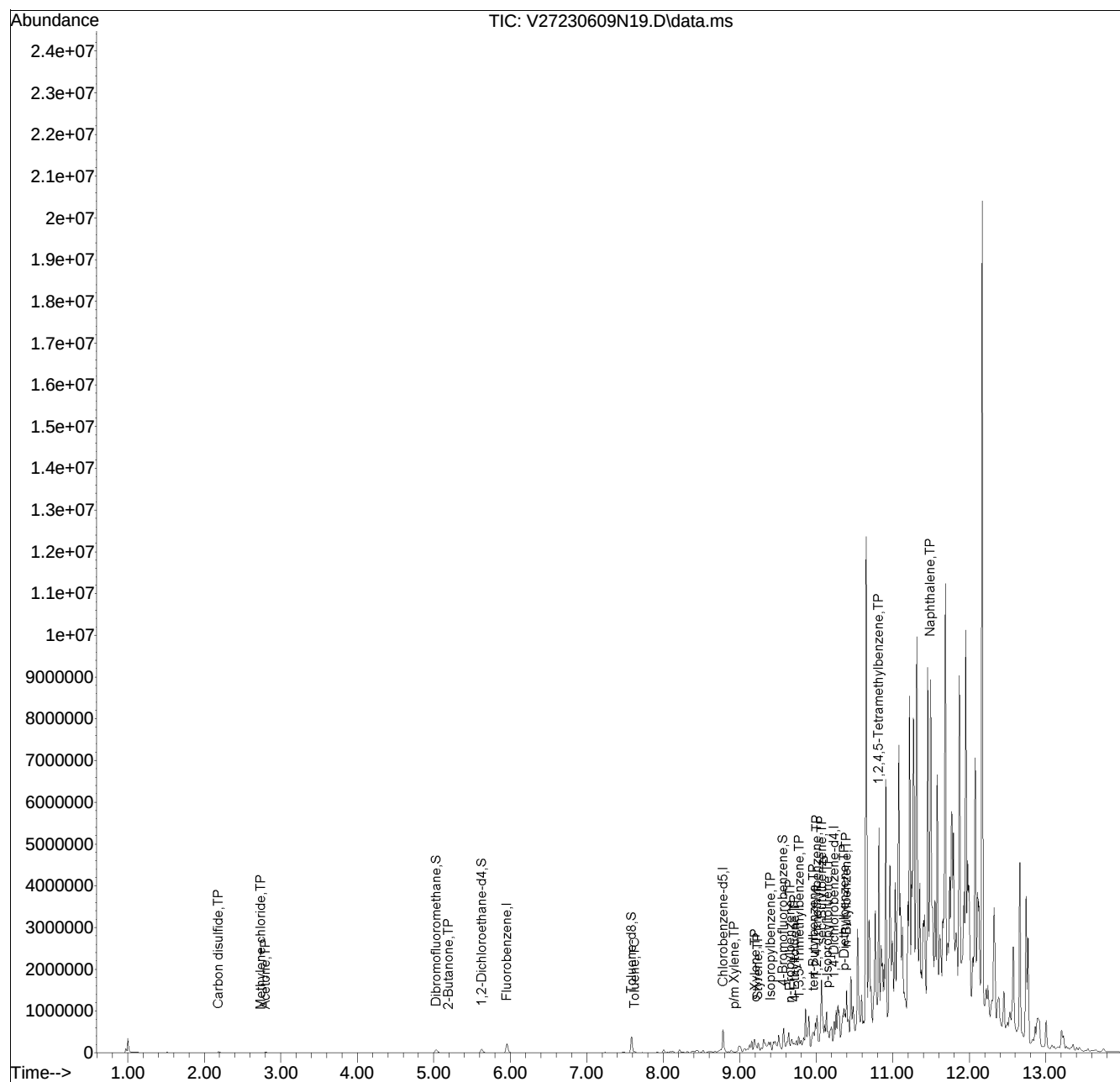
 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1	Date Rec'd in Lab 6/6/23	ALPHA Job # 2331289	
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: HLP 40/50 Project Location: 27-02 1st Street, Astor, NY Project # 1338.0013Y000 (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☐ ASP-B ☐ EQuIS (1 File) ☐ EQuIS (4 File) ☐ Other	Billing Information ☐ Same as Client Info PO #
Client Information Client: Roux Address: 209 Shaffer St Islandia, NY 11749 Phone: Fax: Email: gmiller@rouxinc.com		Project Manager: Rachel Miller ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:	
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments:				ANALYSIS TCL Vols - EPA 8260/150 MTCL Vols - EPA 8710/6 Total Metals + Total Hb H-erb APA MTCL - 8081 NMTCL - 8082		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)	
Please specify Metals or TAL.				Sample Specific Comments			
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	Total Bottles		
31289-01	R-1 (5-7)	6/5/23 1330	S ₀	JR	X	21	
02	R-2 (5-7)	↓ 1350	S ₀	↓	↓	7	
03	DUP-060523	↓ 1400	S ₀	↓	↓	7	
04	R-6 (7-9)	↓ 1420	S ₀	↓	↓	7	
05	R-2 (12-14)	↓ 1430	S ₁	↓	↓	7	
06	FB-060523	1410	FB	↓	↓	5	
Preservative Code:		Container Code		Westboro: Certification No: MA935		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Mansfield: Certification No: MA015			
Container Type		Preservative		Relinquished By: [Signature] Date/Time: 6/5/23 1620 Received By: [Signature] Date/Time: 6/5/23 1620			
Relinquished By: [Signature] Date/Time: 6/5/23 18:55		Received By: [Signature] Date/Time: 6/5/23 2100		Relinquished By: [Signature] Date/Time: 6/6/23 0150			
Relinquished By: [Signature] Date/Time: 6/6/23 0150		Received By: [Signature] Date/Time: 6/6/23 0150		Relinquished By: [Signature] Date/Time: 6/6/23 0150			

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA127\2023\230609N\
 Data File : V27230609N19.D
 Acq On : 09 Jun 2023 10:16 pm
 Operator : VOA127:AJK
 Sample : L2331289-04,31,4.82,5,,Y
 Misc : WG1790082,ICAL20061
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 14:39:00 2023
 Quant Method : I:\VOLATILES\VOA127\2023\230609N\V127_230601A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 02 07:52:18 2023
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox30609N\V27230609N01.D•

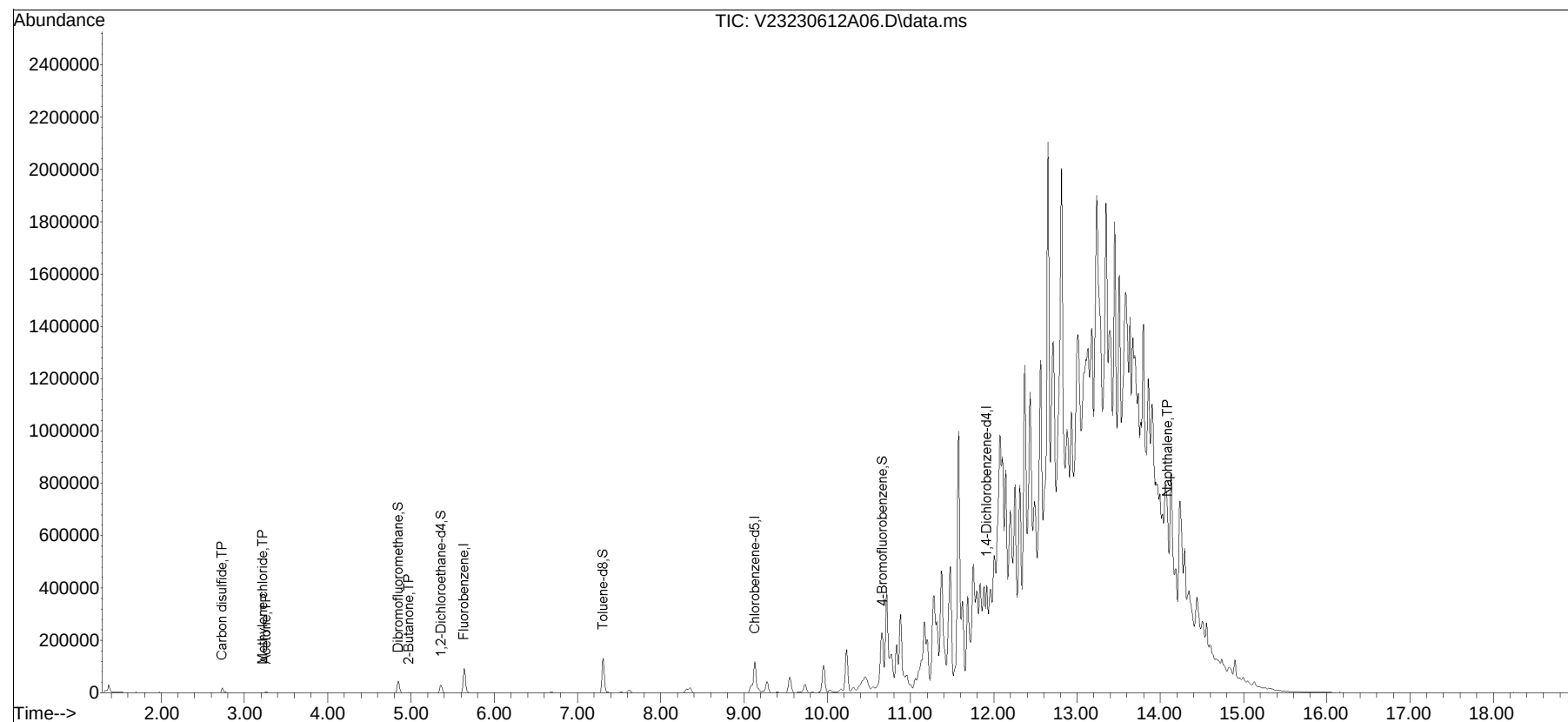


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2023\230612A\
Data File : V23230612A06.D
Acq On : 12 Jun 2023 09:29 am
Operator : VOA123:AJK
Sample : L2331289-05,31,4.72,5,,Y
Misc : WG1789904,ICAL20024
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 12 11:50:28 2023
Quant Method : I:\VOLATILES\VOA123\2023\230612A\V123_230518A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue May 23 09:22:30 2023
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox30612A\V23230612A01.D•





ANALYTICAL REPORT

Lab Number:	L2331849
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 40/50
Project Number:	1338.0013Y000
Report Date:	06/15/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2331849-01	R-6_(9-11)	SOIL	27-02 1ST STREET, ASTORIA, NY	06/07/23 13:00	06/07/23
L2331849-02	FB_060723	FIELD BLANK	27-02 1ST STREET, ASTORIA, NY	06/07/23 14:00	06/07/23

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Case Narrative (continued)

Report Submission

June 15, 2023: This final report includes the results of all requested analyses.

June 14, 2023: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2331849-01: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (151%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

The WG1790226-2/-3 LCS/LCSD recoveries, associated with L2331849-01 and -01D, are below the acceptance criteria for benzoic acid (3%/9%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Pesticides

L2331849-02 The Field Blank has a result for alpha-BHC present above the reporting limit. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required.

Total Metals

L2331849-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

L2331849-02: The Field Blank has results for barium and sodium present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Case Narrative (continued)

no potential for carry over.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/15/23

ORGANICS

VOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 06/12/23 12:05
Analyst: JIC
Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	500	230	1
1,1-Dichloroethane	ND		ug/kg	99	14.	1
Chloroform	ND		ug/kg	150	14.	1
Carbon tetrachloride	ND		ug/kg	99	23.	1
1,2-Dichloropropane	ND		ug/kg	99	12.	1
Dibromochloromethane	ND		ug/kg	99	14.	1
1,1,2-Trichloroethane	ND		ug/kg	99	26.	1
Tetrachloroethene	ND		ug/kg	50	19.	1
Chlorobenzene	ND		ug/kg	50	13.	1
Trichlorofluoromethane	ND		ug/kg	400	69.	1
1,2-Dichloroethane	ND		ug/kg	99	26.	1
1,1,1-Trichloroethane	ND		ug/kg	50	16.	1
Bromodichloromethane	ND		ug/kg	50	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	99	27.	1
cis-1,3-Dichloropropene	ND		ug/kg	50	16.	1
1,3-Dichloropropene, Total	ND		ug/kg	50	16.	1
1,1-Dichloropropene	ND		ug/kg	50	16.	1
Bromoform	ND		ug/kg	400	24.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	16.	1
Benzene	ND		ug/kg	50	16.	1
Toluene	210		ug/kg	99	54.	1
Ethylbenzene	69	J	ug/kg	99	14.	1
Chloromethane	ND		ug/kg	400	92.	1
Bromomethane	ND		ug/kg	200	58.	1
Vinyl chloride	ND		ug/kg	99	33.	1
Chloroethane	ND		ug/kg	200	45.	1
1,1-Dichloroethene	ND		ug/kg	99	24.	1
trans-1,2-Dichloroethene	ND		ug/kg	150	14.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	50	14.	1
1,2-Dichlorobenzene	ND		ug/kg	200	14.	1
1,3-Dichlorobenzene	ND		ug/kg	200	15.	1
1,4-Dichlorobenzene	ND		ug/kg	200	17.	1
Methyl tert butyl ether	ND		ug/kg	200	20.	1
p/m-Xylene	ND		ug/kg	200	56.	1
o-Xylene	280		ug/kg	99	29.	1
Xylenes, Total	280		ug/kg	99	29.	1
cis-1,2-Dichloroethene	ND		ug/kg	99	17.	1
1,2-Dichloroethene, Total	ND		ug/kg	99	14.	1
Dibromomethane	ND		ug/kg	200	24.	1
Styrene	20	J	ug/kg	99	19.	1
Dichlorodifluoromethane	ND		ug/kg	990	91.	1
Acetone	ND		ug/kg	990	480	1
Carbon disulfide	ND		ug/kg	990	450	1
2-Butanone	ND		ug/kg	990	220	1
Vinyl acetate	ND		ug/kg	990	210	1
4-Methyl-2-pentanone	ND		ug/kg	990	130	1
1,2,3-Trichloropropane	ND		ug/kg	200	13.	1
2-Hexanone	ND		ug/kg	990	120	1
Bromochloromethane	ND		ug/kg	200	20.	1
2,2-Dichloropropane	ND		ug/kg	200	20.	1
1,2-Dibromoethane	ND		ug/kg	99	28.	1
1,3-Dichloropropane	ND		ug/kg	200	16.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	13.	1
Bromobenzene	ND		ug/kg	200	14.	1
n-Butylbenzene	7800		ug/kg	99	16.	1
sec-Butylbenzene	6200		ug/kg	99	14.	1
tert-Butylbenzene	500		ug/kg	200	12.	1
o-Chlorotoluene	ND		ug/kg	200	19.	1
p-Chlorotoluene	ND		ug/kg	200	11.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	99.	1
Hexachlorobutadiene	ND		ug/kg	400	17.	1
Isopropylbenzene	10000		ug/kg	99	11.	1
p-Isopropyltoluene	8000		ug/kg	99	11.	1
Naphthalene	3000		ug/kg	400	64.	1
Acrylonitrile	ND		ug/kg	400	110	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	7100		ug/kg	99	17.	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	1
1,3,5-Trimethylbenzene	190	J	ug/kg	200	19.	1
1,2,4-Trimethylbenzene	6200		ug/kg	200	33.	1
1,4-Dioxane	ND		ug/kg	7900	3500	1
p-Diethylbenzene	7400		ug/kg	200	18.	1
p-Ethyltoluene	1500		ug/kg	200	38.	1
1,2,4,5-Tetramethylbenzene	14000		ug/kg	200	19.	1
Ethyl ether	ND		ug/kg	200	34.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	500	140	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	151	Q	70-130
Dibromofluoromethane	93		70-130

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1790715-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1790715-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/12/23 09:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1790715-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1790715-3 WG1790715-4								
Methylene chloride	71		77		70-130	8		30
1,1-Dichloroethane	77		82		70-130	6		30
Chloroform	75		82		70-130	9		30
Carbon tetrachloride	70		73		70-130	4		30
1,2-Dichloropropane	76		82		70-130	8		30
Dibromochloromethane	72		79		70-130	9		30
1,1,2-Trichloroethane	80		88		70-130	10		30
Tetrachloroethene	78		81		70-130	4		30
Chlorobenzene	79		84		70-130	6		30
Trichlorofluoromethane	76		78		70-139	3		30
1,2-Dichloroethane	75		82		70-130	9		30
1,1,1-Trichloroethane	72		75		70-130	4		30
Bromodichloromethane	77		83		70-130	8		30
trans-1,3-Dichloropropene	79		86		70-130	8		30
cis-1,3-Dichloropropene	77		84		70-130	9		30
1,1-Dichloropropene	72		76		70-130	5		30
Bromoform	78		86		70-130	10		30
1,1,2,2-Tetrachloroethane	75		81		70-130	8		30
Benzene	77		82		70-130	6		30
Toluene	76		81		70-130	6		30
Ethylbenzene	78		83		70-130	6		30
Chloromethane	72		76		52-130	5		30
Bromomethane	86		90		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1790715-3 WG1790715-4								
Vinyl chloride	64	Q	66	Q	67-130	3		30
Chloroethane	75		78		50-151	4		30
1,1-Dichloroethene	69		72		65-135	4		30
trans-1,2-Dichloroethene	77		82		70-130	6		30
Trichloroethene	74		79		70-130	7		30
1,2-Dichlorobenzene	77		86		70-130	11		30
1,3-Dichlorobenzene	78		85		70-130	9		30
1,4-Dichlorobenzene	78		86		70-130	10		30
Methyl tert butyl ether	75		83		66-130	10		30
p/m-Xylene	80		86		70-130	7		30
o-Xylene	80		86		70-130	7		30
cis-1,2-Dichloroethene	76		82		70-130	8		30
Dibromomethane	75		83		70-130	10		30
Styrene	79		85		70-130	7		30
Dichlorodifluoromethane	63		65		30-146	3		30
Acetone	68		74		54-140	8		30
Carbon disulfide	66		69		59-130	4		30
2-Butanone	73		78		70-130	7		30
Vinyl acetate	76		79		70-130	4		30
4-Methyl-2-pentanone	73		80		70-130	9		30
1,2,3-Trichloropropane	74		81		68-130	9		30
2-Hexanone	71		78		70-130	9		30
Bromochloromethane	81		88		70-130	8		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1790715-3 WG1790715-4								
2,2-Dichloropropane	76		79		70-130	4		30
1,2-Dibromoethane	72		79		70-130	9		30
1,3-Dichloropropane	78		85		69-130	9		30
1,1,1,2-Tetrachloroethane	80		87		70-130	8		30
Bromobenzene	76		84		70-130	10		30
n-Butylbenzene	80		85		70-130	6		30
sec-Butylbenzene	80		84		70-130	5		30
tert-Butylbenzene	78		83		70-130	6		30
o-Chlorotoluene	86		93		70-130	8		30
p-Chlorotoluene	76		82		70-130	8		30
1,2-Dibromo-3-chloropropane	72		81		68-130	12		30
Hexachlorobutadiene	81		86		67-130	6		30
Isopropylbenzene	77		82		70-130	6		30
p-Isopropyltoluene	79		84		70-130	6		30
Naphthalene	72		79		70-130	9		30
Acrylonitrile	77		82		70-130	6		30
n-Propylbenzene	79		84		70-130	6		30
1,2,3-Trichlorobenzene	77		85		70-130	10		30
1,2,4-Trichlorobenzene	80		88		70-130	10		30
1,3,5-Trimethylbenzene	76		82		70-130	8		30
1,2,4-Trimethylbenzene	76		82		70-130	8		30
1,4-Dioxane	78		89		65-136	13		30
p-Diethylbenzene	78		84		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1790715-3 WG1790715-4								
p-Ethyltoluene	78		83		70-130	6		30
1,2,4,5-Tetramethylbenzene	76		82		70-130	8		30
Ethyl ether	76		82		67-130	8		30
trans-1,4-Dichloro-2-butene	76		83		70-130	9		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	97		97		70-130

SEMIVOLATILES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/13/23 17:08
Analyst: IM
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	7500		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	31.	1
2-Chloronaphthalene	ND		ug/kg	230	22.	1
1,2-Dichlorobenzene	ND		ug/kg	230	41.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	40.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	60.	1
2,4-Dinitrotoluene	ND		ug/kg	230	45.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	1200		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	23.	1
Hexachlorobutadiene	ND		ug/kg	230	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	200	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	1300		ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	200	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	78.	1
Butyl benzyl phthalate	ND		ug/kg	230	57.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	77.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	360		ug/kg	140	26.	1
Benzo(a)pyrene	180		ug/kg	180	55.	1
Benzo(b)fluoranthene	120	J	ug/kg	140	38.	1
Benzo(k)fluoranthene	50	J	ug/kg	140	36.	1
Chrysene	500		ug/kg	140	24.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	2700		ug/kg	140	44.	1
Benzo(ghi)perylene	54	J	ug/kg	180	27.	1
Fluorene	3600		ug/kg	230	22.	1
Dibenzo(a,h)anthracene	28	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	55	J	ug/kg	180	32.	1
Pyrene	2000		ug/kg	140	22.	1
Biphenyl	180	J	ug/kg	520	29.	1
4-Chloroaniline	ND		ug/kg	230	41.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	94.	1
Dibenzofuran	ND		ug/kg	230	21.	1
2-Methylnaphthalene	5500		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	230	75.	1
2-Nitrophenol	ND		ug/kg	490	85.	1
4-Nitrophenol	ND		ug/kg	320	92.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	590	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	34.	1
2-Methylphenol	ND		ug/kg	230	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	330	35.	1
2,4,5-Trichlorophenol	ND		ug/kg	230	43.	1

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzoic Acid	ND		ug/kg	730	230	1
Benzyl Alcohol	ND		ug/kg	230	69.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ug/kg	34	10.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	43		30-120
2,4,6-Tribromophenol	49		10-136
4-Terphenyl-d14	40		18-120

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01 D
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 06/14/23 15:23
Analyst: IM
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Phenanthrene	23000		ug/kg	680	140	5

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1790226-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1790226-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	22.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/13/23 11:34
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 06/12/23 13:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1790226-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	71		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1790226-2 WG1790226-3								
Acenaphthene	76		72		31-137	5		50
1,2,4-Trichlorobenzene	74		64		38-107	14		50
Hexachlorobenzene	82		75		40-140	9		50
Bis(2-chloroethyl)ether	70		66		40-140	6		50
2-Chloronaphthalene	77		68		40-140	12		50
1,2-Dichlorobenzene	71		64		40-140	10		50
1,3-Dichlorobenzene	70		65		40-140	7		50
1,4-Dichlorobenzene	73		66		28-104	10		50
3,3'-Dichlorobenzidine	66		60		40-140	10		50
2,4-Dinitrotoluene	74		68		40-132	8		50
2,6-Dinitrotoluene	71		61		40-140	15		50
Fluoranthene	79		69		40-140	14		50
4-Chlorophenyl phenyl ether	75		69		40-140	8		50
4-Bromophenyl phenyl ether	76		69		40-140	10		50
Bis(2-chloroisopropyl)ether	67		61		40-140	9		50
Bis(2-chloroethoxy)methane	72		64		40-117	12		50
Hexachlorobutadiene	70		63		40-140	11		50
Hexachlorocyclopentadiene	50		45		40-140	11		50
Hexachloroethane	65		60		40-140	8		50
Isophorone	65		58		40-140	11		50
Naphthalene	79		71		40-140	11		50
Nitrobenzene	68		58		40-140	16		50
NDPA/DPA	77		72		36-157	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1790226-2 WG1790226-3								
n-Nitrosodi-n-propylamine	69		61		32-121	12		50
Bis(2-ethylhexyl)phthalate	78		70		40-140	11		50
Butyl benzyl phthalate	85		73		40-140	15		50
Di-n-butylphthalate	82		71		40-140	14		50
Di-n-octylphthalate	84		72		40-140	15		50
Diethyl phthalate	77		69		40-140	11		50
Dimethyl phthalate	75		65		40-140	14		50
Benzo(a)anthracene	75		66		40-140	13		50
Benzo(a)pyrene	96		86		40-140	11		50
Benzo(b)fluoranthene	79		74		40-140	7		50
Benzo(k)fluoranthene	92		80		40-140	14		50
Chrysene	77		69		40-140	11		50
Acenaphthylene	83		73		40-140	13		50
Anthracene	79		70		40-140	12		50
Benzo(ghi)perylene	83		76		40-140	9		50
Fluorene	77		71		40-140	8		50
Phenanthrene	77		67		40-140	14		50
Dibenzo(a,h)anthracene	84		77		40-140	9		50
Indeno(1,2,3-cd)pyrene	82		78		40-140	5		50
Pyrene	80		68		35-142	16		50
Biphenyl	76		68		37-127	11		50
4-Chloroaniline	71		61		40-140	15		50
2-Nitroaniline	80		65		47-134	21		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1790226-2 WG1790226-3								
3-Nitroaniline	76		68		26-129	11		50
4-Nitroaniline	78		70		41-125	11		50
Dibenzofuran	79		74		40-140	7		50
2-Methylnaphthalene	78		69		40-140	12		50
1,2,4,5-Tetrachlorobenzene	72		65		40-117	10		50
Acetophenone	75		66		14-144	13		50
2,4,6-Trichlorophenol	71		62		30-130	14		50
p-Chloro-m-cresol	75		66		26-103	13		50
2-Chlorophenol	77		71		25-102	8		50
2,4-Dichlorophenol	78		67		30-130	15		50
2,4-Dimethylphenol	72		62		30-130	15		50
2-Nitrophenol	77		69		30-130	11		50
4-Nitrophenol	61		55		11-114	10		50
2,4-Dinitrophenol	58		37		4-130	44		50
4,6-Dinitro-o-cresol	76		68		10-130	11		50
Pentachlorophenol	61		51		17-109	18		50
Phenol	74		65		26-90	13		50
2-Methylphenol	76		66		30-130.	14		50
3-Methylphenol/4-Methylphenol	82		70		30-130	16		50
2,4,5-Trichlorophenol	75		63		30-130	17		50
Benzoic Acid	3	Q	9	Q	10-110	102	Q	50
Benzyl Alcohol	71		65		40-140	9		50
Carbazole	81		70		54-128	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1790226-2 WG1790226-3								
1,4-Dioxane	51		47		40-140	8		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		65		25-120
Phenol-d6	72		60		10-120
Nitrobenzene-d5	64		56		23-120
2-Fluorobiphenyl	74		65		30-120
2,4,6-Tribromophenol	83		73		10-136
4-Terphenyl-d14	79		65		18-120

PCBS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/10/23 10:40
Analyst: MEO
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/09/23 08:48
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	63.5	5.64	1	A
Aroclor 1221	ND		ug/kg	63.5	6.37	1	A
Aroclor 1232	ND		ug/kg	63.5	13.5	1	A
Aroclor 1242	ND		ug/kg	63.5	8.56	1	A
Aroclor 1248	ND		ug/kg	63.5	9.53	1	A
Aroclor 1254	ND		ug/kg	63.5	6.95	1	A
Aroclor 1260	ND		ug/kg	63.5	11.7	1	A
Aroclor 1262	ND		ug/kg	63.5	8.07	1	A
Aroclor 1268	ND		ug/kg	63.5	6.58	1	A
PCBs, Total	ND		ug/kg	63.5	5.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-02
Client ID: FB_060723
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 14:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8082A
Analytical Date: 06/13/23 09:34
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/12/23 03:10
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/13/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/10/23 09:52
Analyst: ER

Extraction Method: EPA 3546
Extraction Date: 06/09/23 08:48
Cleanup Method: EPA 3665A
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1789211-1						
Aroclor 1016	ND		ug/kg	47.6	4.22	A
Aroclor 1221	ND		ug/kg	47.6	4.77	A
Aroclor 1232	ND		ug/kg	47.6	10.1	A
Aroclor 1242	ND		ug/kg	47.6	6.41	A
Aroclor 1248	ND		ug/kg	47.6	7.14	A
Aroclor 1254	ND		ug/kg	47.6	5.20	A
Aroclor 1260	ND		ug/kg	47.6	8.79	A
Aroclor 1262	ND		ug/kg	47.6	6.04	A
Aroclor 1268	ND		ug/kg	47.6	4.93	A
PCBs, Total	ND		ug/kg	47.6	4.22	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/13/23 08:37
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/12/23 03:06
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/13/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1789936-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1789211-2 WG1789211-3									
Aroclor 1016	83		73		40-140	13		50	A
Aroclor 1260	76		68		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		78		30-150	A
Decachlorobiphenyl	81		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		76		30-150	B
Decachlorobiphenyl	82		72		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1789936-2 WG1789936-3									
Aroclor 1016	60		63		40-140	5		50	A
Aroclor 1260	59		62		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		57		30-150	A
Decachlorobiphenyl	67		70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		59		30-150	B
Decachlorobiphenyl	70		72		30-150	B

PESTICIDES

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/10/23 21:12
Analyst: MMG
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 06/09/23 10:37
Cleanup Method: EPA 3620B
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.16	0.423	1	A
Lindane	ND		ug/kg	0.899	0.402	1	A
Alpha-BHC	ND		ug/kg	0.899	0.255	1	A
Beta-BHC	ND		ug/kg	2.16	0.818	1	A
Heptachlor	ND		ug/kg	1.08	0.484	1	A
Aldrin	ND		ug/kg	2.16	0.760	1	A
Heptachlor epoxide	ND		ug/kg	4.05	1.21	1	A
Endrin	ND		ug/kg	0.899	0.369	1	A
Endrin aldehyde	ND		ug/kg	2.70	0.944	1	A
Endrin ketone	ND		ug/kg	2.16	0.556	1	A
Dieldrin	ND		ug/kg	1.35	0.674	1	A
4,4'-DDE	ND		ug/kg	2.16	0.499	1	A
4,4'-DDD	ND		ug/kg	2.16	0.770	1	A
4,4'-DDT	ND		ug/kg	2.16	1.74	1	A
Endosulfan I	ND		ug/kg	2.16	0.510	1	A
Endosulfan II	ND		ug/kg	2.16	0.721	1	A
Endosulfan sulfate	ND		ug/kg	0.899	0.428	1	A
Methoxychlor	ND		ug/kg	4.05	1.26	1	A
Toxaphene	ND		ug/kg	40.5	11.3	1	A
cis-Chlordane	ND		ug/kg	2.70	0.752	1	A
trans-Chlordane	ND		ug/kg	2.70	0.712	1	A
Chlordane	ND		ug/kg	18.0	7.15	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/14/23 11:55
Analyst: RMP
Percent Solids: 73%
Methylation Date: 06/13/23 08:04

Extraction Method: EPA 8151A
Extraction Date: 06/12/23 09:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	225	14.2	1	A
2,4,5-T	ND		ug/kg	225	6.99	1	A
2,4,5-TP (Silvex)	ND		ug/kg	225	6.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	87		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-02
Client ID: FB_060723
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 14:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8081B
Analytical Date: 06/13/23 15:29
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/12/23 09:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	B
Alpha-BHC	0.027		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-02
Client ID: FB_060723
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 14:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-02
Client ID: FB_060723
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 14:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8151A
Analytical Date: 06/13/23 13:27
Analyst: RMP

Extraction Method: EPA 8151A
Extraction Date: 06/12/23 10:11

Methylation Date: 06/12/23 22:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	112		30-150	A
DCAA	96		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/10/23 18:45
Analyst: AKM

Extraction Method: EPA 3546
Extraction Date: 06/09/23 01:24
Cleanup Method: EPA 3620B
Cleanup Date: 06/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1789050-1						
Delta-BHC	ND		ug/kg	1.51	0.296	A
Lindane	ND		ug/kg	0.630	0.282	A
Alpha-BHC	ND		ug/kg	0.630	0.179	A
Beta-BHC	ND		ug/kg	1.51	0.573	A
Heptachlor	ND		ug/kg	0.756	0.339	A
Aldrin	ND		ug/kg	1.51	0.532	A
Heptachlor epoxide	ND		ug/kg	2.84	0.851	A
Endrin	ND		ug/kg	0.630	0.258	A
Endrin aldehyde	ND		ug/kg	1.89	0.662	A
Endrin ketone	ND		ug/kg	1.51	0.389	A
Dieldrin	ND		ug/kg	0.945	0.472	A
4,4'-DDE	ND		ug/kg	1.51	0.350	A
4,4'-DDD	ND		ug/kg	1.51	0.539	A
4,4'-DDT	ND		ug/kg	1.51	1.22	A
Endosulfan I	ND		ug/kg	1.51	0.357	A
Endosulfan II	ND		ug/kg	1.51	0.505	A
Endosulfan sulfate	ND		ug/kg	0.630	0.300	A
Methoxychlor	ND		ug/kg	2.84	0.882	A
Toxaphene	ND		ug/kg	28.4	7.94	A
cis-Chlordane	ND		ug/kg	1.89	0.527	A
trans-Chlordane	ND		ug/kg	1.89	0.499	A
Chlordane	ND		ug/kg	12.6	5.01	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/10/23 18:45
 Analyst: AKM

Extraction Method: EPA 3546
 Extraction Date: 06/09/23 01:24
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/10/23
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1789050-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	97		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/13/23 11:50
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/12/23 09:06

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1790042-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/13/23 11:50
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/12/23 09:06

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1790042-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/14/23 08:50
Analyst: RMP

Extraction Method: EPA 8151A
Extraction Date: 06/12/23 08:00

Methylation Date: 06/13/23 08:04

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01 Batch: WG1790059-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.08	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.36	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	87		30-150	B

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/13/23 10:13
Analyst: RMP

Extraction Method: EPA 8151A
Extraction Date: 06/12/23 10:11

Methylation Date: 06/12/23 22:41

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 02 Batch: WG1790097-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	122		30-150	A
DCAA	101		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1789050-2 WG1789050-3									
Delta-BHC	85		91		30-150	7		30	A
Lindane	79		83		30-150	5		30	A
Alpha-BHC	78		83		30-150	6		30	A
Beta-BHC	103		90		30-150	13		30	A
Heptachlor	76		80		30-150	5		30	A
Aldrin	76		81		30-150	6		30	A
Heptachlor epoxide	77		82		30-150	6		30	A
Endrin	79		84		30-150	6		30	A
Endrin aldehyde	74		78		30-150	5		30	A
Endrin ketone	84		87		30-150	4		30	A
Dieldrin	82		88		30-150	7		30	A
4,4'-DDE	80		86		30-150	7		30	A
4,4'-DDD	86		92		30-150	7		30	A
4,4'-DDT	82		86		30-150	5		30	A
Endosulfan I	75		79		30-150	5		30	A
Endosulfan II	77		82		30-150	6		30	A
Endosulfan sulfate	80		85		30-150	6		30	A
Methoxychlor	81		85		30-150	5		30	A
cis-Chlordane	72		76		30-150	5		30	A
trans-Chlordane	88		94		30-150	7		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1789050-2 WG1789050-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		77		30-150	A
Decachlorobiphenyl	89		94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		76		30-150	B
Decachlorobiphenyl	97		96		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1790042-2 WG1790042-3									
Delta-BHC	56		66		30-150	16		20	A
Lindane	54		65		30-150	19		20	A
Alpha-BHC	54		65		30-150	18		20	A
Beta-BHC	58		70		30-150	18		20	A
Heptachlor	54		65		30-150	18		20	A
Aldrin	52		62		30-150	18		20	A
Heptachlor epoxide	52		63		30-150	20		20	A
Endrin	52		63		30-150	19		20	A
Endrin aldehyde	48		56		30-150	15		20	A
Endrin ketone	56		66		30-150	18		20	A
Dieldrin	55		67		30-150	19		20	A
4,4'-DDE	51		61		30-150	18		20	A
4,4'-DDD	56		68		30-150	20		20	A
4,4'-DDT	60		72		30-150	19		20	A
Endosulfan I	52		62		30-150	18		20	A
Endosulfan II	55		65		30-150	17		20	A
Endosulfan sulfate	52		61		30-150	16		20	A
Methoxychlor	65		76		30-150	16		20	A
cis-Chlordane	55		66		30-150	19		20	A
trans-Chlordane	65		79		30-150	19		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1790042-2 WG1790042-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		58		30-150	A
Decachlorobiphenyl	56		73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		57		30-150	B
Decachlorobiphenyl	53		68		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1790059-2 WG1790059-3									
2,4-D	92		100		30-150	8		30	A
2,4,5-T	88		92		30-150	4		30	A
2,4,5-TP (Silvex)	101		108		30-150	7		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	107		113		30-150	A
DCAA	103		113		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1790097-2 WG1790097-3									
2,4-D	101		101		30-150	0		25	A
2,4,5-T	94		95		30-150	1		25	A
2,4,5-TP (Silvex)	102		108		30-150	6		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	108		118		30-150	A
DCAA	102		106		30-150	B

METALS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
 Client ID: R-6_(9-11)
 Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
 Date Received: 06/07/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	17700		mg/kg	10.6	2.86	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Antimony, Total	0.892	J	mg/kg	5.30	0.403	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Arsenic, Total	1.29		mg/kg	1.06	0.220	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Barium, Total	427		mg/kg	1.06	0.184	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Beryllium, Total	0.664		mg/kg	0.530	0.035	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Cadmium, Total	0.164	J	mg/kg	1.06	0.104	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Calcium, Total	5860		mg/kg	10.6	3.71	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Chromium, Total	205		mg/kg	1.06	0.102	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Cobalt, Total	32.2		mg/kg	2.12	0.176	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Copper, Total	103		mg/kg	1.06	0.273	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Iron, Total	29400		mg/kg	5.30	0.957	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Lead, Total	2.78	J	mg/kg	5.30	0.284	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Magnesium, Total	15800		mg/kg	10.6	1.63	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Manganese, Total	212		mg/kg	1.06	0.168	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Mercury, Total	ND		mg/kg	0.086	0.056	1	06/12/23 07:30	06/14/23 11:28	EPA 7471B	1,7471B	DMB
Nickel, Total	125		mg/kg	2.65	0.256	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Potassium, Total	5720		mg/kg	265	15.3	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Selenium, Total	ND		mg/kg	2.12	0.273	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Silver, Total	ND		mg/kg	0.530	0.300	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Sodium, Total	654		mg/kg	212	3.34	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Thallium, Total	1.04	J	mg/kg	2.12	0.334	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Vanadium, Total	61.0		mg/kg	1.06	0.215	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA
Zinc, Total	50.4		mg/kg	5.30	0.310	2	06/12/23 06:55	06/13/23 21:50	EPA 3050B	1,6010D	TAA



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-02
 Client ID: FB_060723
 Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 14:00
 Date Received: 06/07/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Field Blank

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Barium, Total	0.00050		mg/l	0.00050	0.00017	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/12/23 13:09	06/14/23 13:31	EPA 7470A	1,7470A	DMB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Sodium, Total	0.194		mg/l	0.100	0.0293	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/12/23 10:43	06/14/23 12:49	EPA 3005A	1,6020B	SMV



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1789335-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Nickel, Total	0.00061	J	mg/l	0.00200	0.00055	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/12/23 10:43	06/14/23 10:21	1,6020B	SMV
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/12/23 10:43	06/14/23 10:21	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/12/23 10:43	06/14/23 08:34	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1789345-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/12/23 13:09	06/14/23 12:55	1,7470A	DMB



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1789391-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Barium, Total	ND		mg/kg	0.400	0.070	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Copper, Total	ND		mg/kg	0.400	0.103	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Iron, Total	0.827	J	mg/kg	2.00	0.361	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Lead, Total	ND		mg/kg	2.00	0.107	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Potassium, Total	20.5	J	mg/kg	100	5.76	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Silver, Total	ND		mg/kg	0.200	0.113	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Sodium, Total	28.0	J	mg/kg	80.0	1.26	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/12/23 06:55	06/13/23 20:59	1,6010D	TAA

Prep Information

Digestion Method: EPA 3050B



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1789392-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	06/12/23 07:30	06/14/23 10:45	1,7471B	DMB

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1789335-2								
Aluminum, Total	102		-		80-120	-		
Antimony, Total	85		-		80-120	-		
Arsenic, Total	98		-		80-120	-		
Barium, Total	98		-		80-120	-		
Beryllium, Total	104		-		80-120	-		
Cadmium, Total	98		-		80-120	-		
Calcium, Total	80		-		80-120	-		
Chromium, Total	96		-		80-120	-		
Cobalt, Total	120		-		80-120	-		
Copper, Total	99		-		80-120	-		
Iron, Total	98		-		80-120	-		
Lead, Total	103		-		80-120	-		
Magnesium, Total	86		-		80-120	-		
Manganese, Total	98		-		80-120	-		
Nickel, Total	96		-		80-120	-		
Potassium, Total	83		-		80-120	-		
Selenium, Total	92		-		80-120	-		
Silver, Total	102		-		80-120	-		
Sodium, Total	94		-		80-120	-		
Thallium, Total	91		-		80-120	-		
Vanadium, Total	96		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1789335-2					
Zinc, Total	101	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1789345-2					
Mercury, Total	88	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1789391-2 SRM Lot Number: D119-540					
Aluminum, Total	74	-	48-152	-	
Antimony, Total	132	-	10-190	-	
Arsenic, Total	91	-	83-117	-	
Barium, Total	90	-	82-118	-	
Beryllium, Total	94	-	83-117	-	
Cadmium, Total	91	-	82-117	-	
Calcium, Total	91	-	81-118	-	
Chromium, Total	94	-	82-119	-	
Cobalt, Total	93	-	83-117	-	
Copper, Total	95	-	84-116	-	
Iron, Total	91	-	60-140	-	
Lead, Total	95	-	82-118	-	
Magnesium, Total	88	-	76-124	-	
Manganese, Total	92	-	82-118	-	
Nickel, Total	93	-	82-117	-	
Potassium, Total	88	-	70-130	-	
Selenium, Total	94	-	79-121	-	
Silver, Total	93	-	80-120	-	
Sodium, Total	103	-	74-126	-	
Thallium, Total	93	-	81-119	-	
Vanadium, Total	92	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1789391-2 SRM Lot Number: D119-540					
Zinc, Total	92	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1789392-2 SRM Lot Number: D119-540					
Mercury, Total	98	-	73-127	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789335-3 QC Sample: L2329270-01 Client ID: MS Sample												
Aluminum, Total	0.107	2	2.15	102		-	-		75-125	-		20
Antimony, Total	0.0018J	0.5	0.4888	98		-	-		75-125	-		20
Arsenic, Total	0.00292	0.12	0.1178	96		-	-		75-125	-		20
Barium, Total	0.0069	2	2.035	101		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05376	108		-	-		75-125	-		20
Cadmium, Total	0.0001J	0.053	0.05433	102		-	-		75-125	-		20
Calcium, Total	11.5	10	19.1	76		-	-		75-125	-		20
Chromium, Total	0.0021	0.2	0.1980	98		-	-		75-125	-		20
Cobalt, Total	0.0004J	0.5	0.4974	99		-	-		75-125	-		20
Copper, Total	0.0060	0.25	0.2613	102		-	-		75-125	-		20
Iron, Total	0.596	1	1.59	99		-	-		75-125	-		20
Lead, Total	0.0015	0.53	0.4743	89		-	-		75-125	-		20
Magnesium, Total	0.951	10	9.22	83		-	-		75-125	-		20
Manganese, Total	0.0625	0.5	0.5532	98		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.4998	100		-	-		75-125	-		20
Potassium, Total	2.78	10	10.8	80		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.113	94		-	-		75-125	-		20
Silver, Total	ND	0.05	0.03609	72	Q	-	-		75-125	-		20
Sodium, Total	10.1	10	18.8	87		-	-		75-125	-		20
Thallium, Total	0.0002J	0.12	0.07830	65	Q	-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.4839	97		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02		QC Batch ID: WG1789335-3			QC Sample: L2329270-01		Client ID: MS Sample		
Zinc, Total	0.05278	0.5	0.5747	104	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 02		QC Batch ID: WG1789345-3			QC Sample: L2329934-04		Client ID: MS Sample		
Mercury, Total	ND	0.005	0.00496	99	-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1789391-3 WG1789391-4 QC Sample: L2331291-01 Client ID: MS Sample											
Aluminum, Total	7870	177	8000	74	Q	8320	249	Q	75-125	4	20
Antimony, Total	0.683J	44.2	37.9	86		39.5	87		75-125	4	20
Arsenic, Total	4.65	10.6	14.7	95		15.6	101		75-125	6	20
Barium, Total	46.6	177	210	92		226	99		75-125	7	20
Beryllium, Total	0.379J	4.42	4.58	104		4.88	108		75-125	6	20
Cadmium, Total	0.258J	4.68	4.48	96		4.84	101		75-125	8	20
Calcium, Total	3030	884	5270	254	Q	4160	125		75-125	24	Q 20
Chromium, Total	9.91	17.7	26.0	91		27.9	99		75-125	7	20
Cobalt, Total	4.63	44.2	44.7	91		48.2	96		75-125	8	20
Copper, Total	9.90	22.1	30.6	94		32.5	100		75-125	6	20
Iron, Total	13200	88.4	12100	0	Q	13200	0	Q	75-125	9	20
Lead, Total	21.8	46.8	65.0	92		70.1	101		75-125	8	20
Magnesium, Total	2240	884	2920	77		3130	98		75-125	7	20
Manganese, Total	512	44.2	498	0	Q	608	212	Q	75-125	20	20
Nickel, Total	8.76	44.2	47.9	88		51.6	95		75-125	7	20
Potassium, Total	527	884	1380	96		1420	99		75-125	3	20
Selenium, Total	0.262J	10.6	9.90	93		10.5	97		75-125	6	20
Silver, Total	ND	4.42	4.28	97		4.60	102		75-125	7	20
Sodium, Total	64.3J	884	960	109		1020	113		75-125	6	20
Thallium, Total	0.602J	10.6	10.1	95		10.9	100		75-125	8	20
Vanadium, Total	15.9	44.2	57.3	94		61.3	100		75-125	7	20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1789391-3 WG1789391-4 QC Sample: L2331291-01 Client ID: MS Sample									
Zinc, Total	46.8	44.2	86.3	89	96.4	110	75-125	11	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1789392-3 WG1789392-4 QC Sample: L2331291-01 Client ID: MS Sample									
Mercury, Total	0.058J	1.46	1.56	107	1.54	105	80-120	1	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789335-4 QC Sample: L2329270-01 Client ID: DUP Sample						
Arsenic, Total	0.00292	0.00288	mg/l	1		20
Zinc, Total	0.05278	0.05150	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789345-4 QC Sample: L2329934-04 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: HLP 40/50
Project Number: 1338.0013Y000

**Lab Serial Dilution
 Analysis
 Batch Quality Control**

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1789391-6 QC Sample: L2331291-01 Client ID: DUP Sample						
Aluminum, Total	7870	8130	mg/kg	3		20
Barium, Total	46.6	47.4	mg/kg	2		20
Calcium, Total	3030	3100	mg/kg	2		20
Iron, Total	13200	13800	mg/kg	5		20
Magnesium, Total	2240	2330	mg/kg	4		20
Manganese, Total	512	531	mg/kg	4		20

INORGANICS & MISCELLANEOUS

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

SAMPLE RESULTS

Lab ID: L2331849-01
Client ID: R-6_(9-11)
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/07/23 13:00
Date Received: 06/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.2		%	0.100	NA	1	-	06/08/23 13:42	121,2540G	ROI



Lab Duplicate Analysis
Batch Quality Control

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1788890-1 QC Sample: L2331934-03 Client ID: DUP Sample						
Solids, Total	86.6	87.5	%	1		20

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849**Report Date:** 06/15/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331849-01A	5 gram Encore Sampler	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2331849-01B	5 gram Encore Sampler	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2331849-01C	5 gram Encore Sampler	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2331849-01D	Plastic 2oz unpreserved for TS	A	NA		5.1	Y	Absent		TS(7)
L2331849-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.1	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),TL-Ti(180),CR-Ti(180),NI-Ti(180),AL-Ti(180),SB-Ti(180),PB-Ti(180),SE-Ti(180),CU-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),MN-Ti(180),HG-T(28),MG-Ti(180),FE-Ti(180),CA-Ti(180),K-Ti(180),CD-Ti(180),NA-Ti(180)
L2331849-01F	Glass 120ml/4oz unpreserved	A	NA		5.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331849-01G	Glass 500ml/16oz unpreserved	A	NA		5.1	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365)
L2331849-01X	Vial MeOH preserved split	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2331849-01Y	Vial Water preserved split	A	NA		5.1	Y	Absent	09-JUN-23 07:49	NYTCL-8260HLW(14)
L2331849-01Z	Vial Water preserved split	A	NA		5.1	Y	Absent	09-JUN-23 07:49	NYTCL-8260HLW(14)
L2331849-02A	Amber 120ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8082-LVI(365)
L2331849-02B	Amber 120ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8082-LVI(365)
L2331849-02C	Amber 120ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8081(7)
L2331849-02D	Amber 120ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8081(7)
L2331849-02E	Plastic 250ml HNO3 preserved	A	<2	<2	5.1	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),AG-6020T(180),HG-T(28),CO-6020T(180)
L2331849-02F	Amber 1000ml unpreserved	A	7	7	5.1	Y	Absent		HERB-APA(7)

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Serial_No:06152309:47
Lab Number: L2331849
Report Date: 06/15/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2331849-02G	Amber 1000ml unpreserved	A	7	7	5.1	Y	Absent		HERB-APA(7)
L2331849-02H	Amber 500ml unpreserved	A	7	7	5.1	Y	Absent		ARCHIVE()

Container Comments

L2331849-02H Extra volume

Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 40/50
Project Number: 1338.0013Y000

Lab Number: L2331849
Report Date: 06/15/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

6/8/23

62331849

6/7	2100
6/7/23	2340

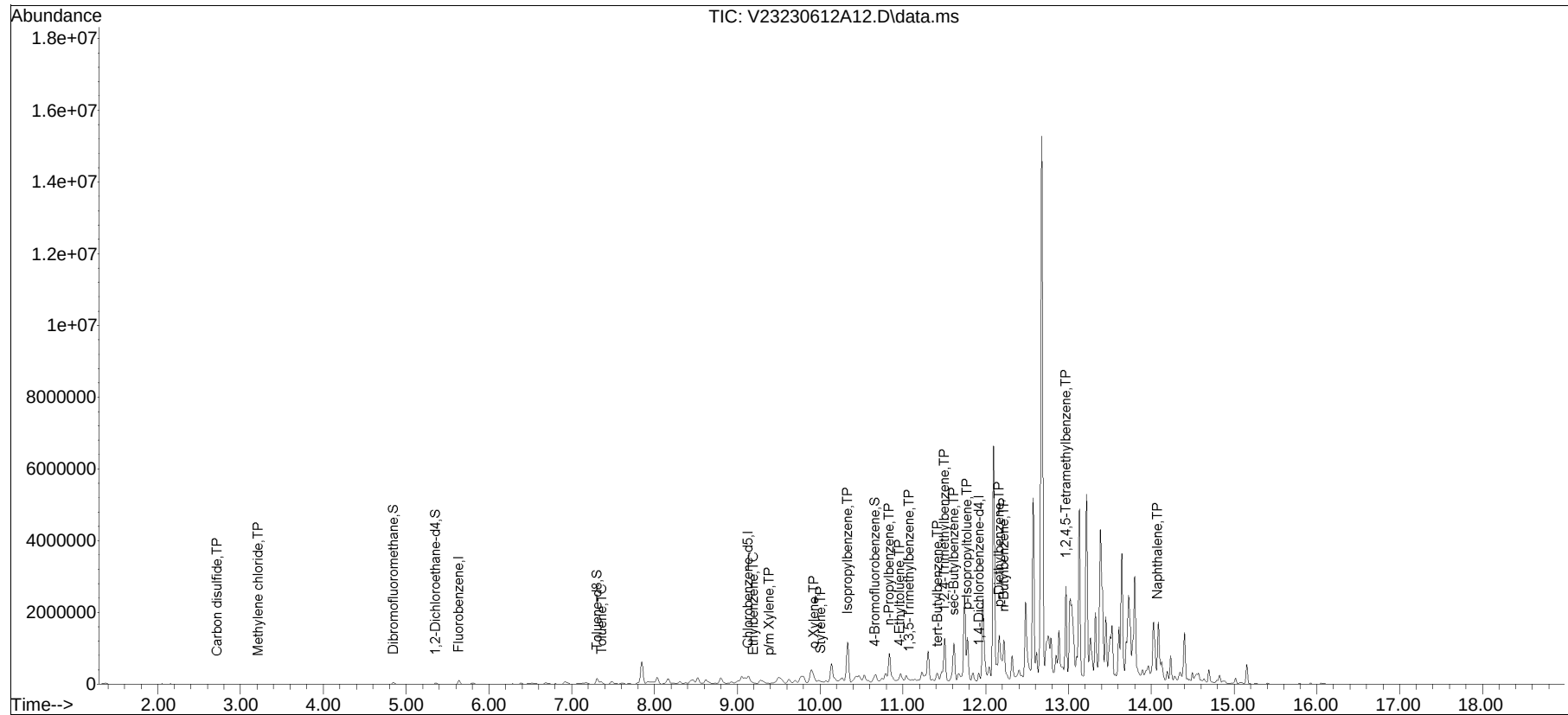
Page 82 of 83

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\V0A123\2023\230612A\
Data File : V23230612A12.D
Acq On : 12 Jun 2023 12:05 pm
Operator : VOA123:JIC
Sample : L2331849-01,31H,4.22,5,0.100,,X
Misc : WG1790715,ICAL20024
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 13 07:54:20 2023
Quant Method : I:\VOLATILES\V0A123\2023\230612A\V123_230518A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue May 23 09:22:30 2023
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox30612A\V23230612A01.D•





ANALYTICAL REPORT

Lab Number:	L2334307
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 4/5
Project Number:	1338.0013Y000
Report Date:	06/23/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2334307-01	RMW-3	WATER	27-02 1ST STREET, ASTORIA, NY	06/15/23 10:40	06/15/23
L2334307-02	RMW-6	WATER	27-02 1ST STREET, ASTORIA, NY	06/15/23 12:50	06/15/23
L2334307-03	DUP_061523	WATER	27-02 1ST STREET, ASTORIA, NY	06/15/23 12:00	06/15/23
L2334307-04	RMW-2	WATER	27-02 1ST STREET, ASTORIA, NY	06/15/23 12:55	06/15/23
L2334307-05	FB_061523	FIELD BLANK	27-02 1ST STREET, ASTORIA, NY	06/15/23 14:30	06/15/23
L2334307-06	TRIP BLANK	TRIP BLANK (AQUEOUS)	27-02 1ST STREET, ASTORIA, NY	06/15/23 00:00	06/15/23

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2334307-02D and -03D: The sample has elevated detection limits due to the dilution required by the sample matrix (foam).

Semivolatile Organics by SIM

The WG1793608-1 Method Blank, associated with L2334307-04 and -05, has concentrations above the reporting limit for Naphthalene and 2-Methylnaphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

Total Metals

L2334307-01 and -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

L2334307-05: The Field Blank has a result for barium present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1794593-3/-4 MS/MSD recoveries for calcium (0%), magnesium (0%), potassium (0%/40%), and sodium (0%), performed on L2334307-04, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1794593-3/-4 MS/MSD recoveries, performed on L2334307-04, are outside the acceptance criteria for chromium (58%), manganese (72%) and vanadium (53%/54%). A post digestion spike was performed and yielded unacceptable recoveries for chromium (52%), manganese (66%) and vanadium (50%). The serial dilution recovery was not applicable; therefore, these elements fail the matrix test and the results reported in

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Case Narrative (continued)

the native sample should be considered estimated.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  **Kelly O'Neill**

Title: Technical Director/Representative

Date: 06/23/23

ORGANICS

VOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/20/23 13:26
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.46	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	106		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02 **D**
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/21/23 04:01
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	58		ug/l	1.0	0.32	2
Toluene	7.6		ug/l	5.0	1.4	2
Ethylbenzene	22		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02 **D**
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	19		ug/l	5.0	1.4	2
o-Xylene	23		ug/l	5.0	1.4	2
Xylenes, Total	42		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	2.9	J	ug/l	5.0	1.4	2
sec-Butylbenzene	5.8		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	52		ug/l	5.0	1.4	2
p-Isopropyltoluene	2.9	J	ug/l	5.0	1.4	2
Naphthalene	42		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02 **D**
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	11		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	1.5	J	ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	20		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	4.6		ug/l	4.0	1.4	2
p-Ethyltoluene	16		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	8.7		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03 **D**
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/21/23 03:40
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	62		ug/l	1.0	0.32	2
Toluene	7.9		ug/l	5.0	1.4	2
Ethylbenzene	22		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03 **D**
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	19		ug/l	5.0	1.4	2
o-Xylene	24		ug/l	5.0	1.4	2
Xylenes, Total	43		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	2.9	J	ug/l	5.0	1.4	2
sec-Butylbenzene	6.1		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	54		ug/l	5.0	1.4	2
p-Isopropyltoluene	3.0	J	ug/l	5.0	1.4	2
Naphthalene	43		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03 **D**
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	12		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	1.6	J	ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	20		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	4.8		ug/l	4.0	1.4	2
p-Ethyltoluene	16		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	9.0		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	97		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/20/23 13:47
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8260D
Analytical Date: 06/20/23 12:44
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	110		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-06
Client ID: TRIP BLANK
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 00:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Trip Blank (Aqueous)
Analytical Method: 1,8260D
Analytical Date: 06/20/23 13:05
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-06
Client ID: TRIP BLANK
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 00:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-06
Client ID: TRIP BLANK
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 00:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	107		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/20/23 10:56
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1793749-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/20/23 10:56
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1793749-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/20/23 10:56
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1793749-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	109		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/20/23 21:33
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1794279-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/20/23 21:33
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1794279-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/20/23 21:33
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1794279-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1793749-3 WG1793749-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		120		70-130	9		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	95		98		63-132	3		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	87		87		63-130	0		20
1,1,2-Trichloroethane	90		90		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	94		97		62-150	3		20
1,2-Dichloroethane	89		95		70-130	7		20
1,1,1-Trichloroethane	99		100		67-130	1		20
Bromodichloromethane	93		97		67-130	4		20
trans-1,3-Dichloropropene	84		85		70-130	1		20
cis-1,3-Dichloropropene	87		93		70-130	7		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	82		82		54-136	0		20
1,1,2,2-Tetrachloroethane	87		88		67-130	1		20
Benzene	100		110		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	86		88		64-130	2		20
Bromomethane	58		57		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1793749-3 WG1793749-4								
Vinyl chloride	100		110		55-140	10		20
Chloroethane	93		95		55-138	2		20
1,1-Dichloroethene	95		85		61-145	11		20
trans-1,2-Dichloroethene	100		120		70-130	18		20
Trichloroethene	99		100		70-130	1		20
1,2-Dichlorobenzene	97		99		70-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	98		100		70-130	2		20
Methyl tert butyl ether	82		89		63-130	8		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	120		120		70-130	0		20
Dibromomethane	95		97		70-130	2		20
1,2,3-Trichloropropane	84		85		64-130	1		20
Acrylonitrile	95		100		70-130	5		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	80		83		36-147	4		20
Acetone	81		81		58-148	0		20
Carbon disulfide	96		97		51-130	1		20
2-Butanone	60	Q	73		63-138	20		20
Vinyl acetate	84		85		70-130	1		20
4-Methyl-2-pentanone	75		75		59-130	0		20
2-Hexanone	70		72		57-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1793749-3 WG1793749-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	98		100		63-133	2		20
1,2-Dibromoethane	84		88		70-130	5		20
1,3-Dichloropropane	88		91		70-130	3		20
1,1,1,2-Tetrachloroethane	92		94		64-130	2		20
Bromobenzene	96		99		70-130	3		20
n-Butylbenzene	99		100		53-136	1		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	98		99		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	98		99		70-130	1		20
1,2-Dibromo-3-chloropropane	77		77		41-144	0		20
Hexachlorobutadiene	99		98		63-130	1		20
Isopropylbenzene	97		100		70-130	3		20
p-Isopropyltoluene	99		100		70-130	1		20
Naphthalene	84		86		70-130	2		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	90		92		70-130	2		20
1,2,4-Trichlorobenzene	94		96		70-130	2		20
1,3,5-Trimethylbenzene	99		100		64-130	1		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
1,4-Dioxane	86		92		56-162	7		20
p-Diethylbenzene	96		100		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1793749-3 WG1793749-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	94		95		70-130	1		20
Ethyl ether	82		80		59-134	2		20
trans-1,4-Dichloro-2-butene	75		74		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		90		70-130
Toluene-d8	100		97		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	96		102		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1794279-3 WG1794279-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	90		92		63-132	2		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	84		87		63-130	4		20
1,1,2-Trichloroethane	91		91		70-130	0		20
Tetrachloroethene	96		96		70-130	0		20
Chlorobenzene	96		98		75-130	2		20
Trichlorofluoromethane	89		90		62-150	1		20
1,2-Dichloroethane	93		94		70-130	1		20
1,1,1-Trichloroethane	94		99		67-130	5		20
Bromodichloromethane	93		95		67-130	2		20
trans-1,3-Dichloropropene	84		83		70-130	1		20
cis-1,3-Dichloropropene	89		90		70-130	1		20
1,1-Dichloropropene	98		100		70-130	2		20
Bromoform	79		81		54-136	3		20
1,1,2,2-Tetrachloroethane	86		90		67-130	5		20
Benzene	100		110		70-130	10		20
Toluene	100		98		70-130	2		20
Ethylbenzene	98		99		70-130	1		20
Chloromethane	84		84		64-130	0		20
Bromomethane	57		60		39-139	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1794279-3 WG1794279-4								
Vinyl chloride	100		98		55-140	2		20
Chloroethane	90		91		55-138	1		20
1,1-Dichloroethene	94		93		61-145	1		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	98		100		70-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	98		100		70-130	2		20
Methyl tert butyl ether	88		92		63-130	4		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	96		100		70-130	4		20
1,2,3-Trichloropropane	87		89		64-130	2		20
Acrylonitrile	99		100		70-130	1		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	76		76		36-147	0		20
Acetone	85		89		58-148	5		20
Carbon disulfide	88		92		51-130	4		20
2-Butanone	68		79		63-138	15		20
Vinyl acetate	75		85		70-130	13		20
4-Methyl-2-pentanone	80		82		59-130	2		20
2-Hexanone	72		76		57-130	5		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1794279-3 WG1794279-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	94		97		63-133	3		20
1,2-Dibromoethane	88		90		70-130	2		20
1,3-Dichloropropane	91		92		70-130	1		20
1,1,1,2-Tetrachloroethane	91		93		64-130	2		20
Bromobenzene	98		98		70-130	0		20
n-Butylbenzene	96		96		53-136	0		20
sec-Butylbenzene	96		98		70-130	2		20
tert-Butylbenzene	95		97		70-130	2		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	98		97		70-130	1		20
1,2-Dibromo-3-chloropropane	73		80		41-144	9		20
Hexachlorobutadiene	90		93		63-130	3		20
Isopropylbenzene	96		98		70-130	2		20
p-Isopropyltoluene	97		98		70-130	1		20
Naphthalene	88		92		70-130	4		20
n-Propylbenzene	99		100		69-130	1		20
1,2,3-Trichlorobenzene	91		94		70-130	3		20
1,2,4-Trichlorobenzene	96		96		70-130	0		20
1,3,5-Trimethylbenzene	98		98		64-130	0		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
1,4-Dioxane	92		98		56-162	6		20
p-Diethylbenzene	93		94		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1794279-3 WG1794279-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	92		93		70-130	1		20
Ethyl ether	81		87		59-134	7		20
trans-1,4-Dichloro-2-butene	62	Q	69	Q	70-130	11		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		92		70-130
Toluene-d8	99		98		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	101		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 QC Batch ID: WG1793749-6 WG1793749-7 QC Sample: L2334307-04 Client ID: RMW-2												
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
1,1-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
Chloroform	ND	10	9.9	99		10	100		70-130	1		20
Carbon tetrachloride	ND	10	9.0	90		9.5	95		63-132	5		20
1,2-Dichloropropane	ND	10	9.6	96		10	100		70-130	4		20
Dibromochloromethane	ND	10	8.1	81		8.9	89		63-130	9		20
1,1,2-Trichloroethane	ND	10	8.8	88		9.3	93		70-130	6		20
Tetrachloroethene	ND	10	9.6	96		9.9	99		70-130	3		20
Chlorobenzene	ND	10	9.5	95		9.9	99		75-130	4		20
Trichlorofluoromethane	ND	10	9.6	96		8.6	86		62-150	11		20
1,2-Dichloroethane	ND	10	9.1	91		8.7	87		70-130	4		20
1,1,1-Trichloroethane	ND	10	9.7	97		9.9	99		67-130	2		20
Bromodichloromethane	ND	10	9.0	90		9.2	92		67-130	2		20
trans-1,3-Dichloropropene	ND	10	7.8	78		8.3	83		70-130	6		20
cis-1,3-Dichloropropene	ND	10	8.0	80		8.7	87		70-130	8		20
1,1-Dichloropropene	ND	10	9.8	98		10	100		70-130	2		20
Bromoform	ND	10	7.7	77		7.8	78		54-136	1		20
1,1,2,2-Tetrachloroethane	ND	10	9.1	91		9.4	94		67-130	3		20
Benzene	ND	10	10	100		10	100		70-130	0		20
Toluene	ND	10	9.7	97		10	100		70-130	3		20
Ethylbenzene	ND	10	9.8	98		10	100		70-130	2		20
Chloromethane	ND	10	8.6	86		9.0	90		64-130	5		20
Bromomethane	ND	10	4.2	42		5.2	52		39-139	21	Q	20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 QC Batch ID: WG1793749-6 WG1793749-7 QC Sample: L2334307-04 Client ID: RMW-2												
Vinyl chloride	ND	10	10	100		11	110		55-140	10		20
Chloroethane	ND	10	10	100		9.9	99		55-138	1		20
1,1-Dichloroethene	ND	10	9.4	94		10	100		61-145	6		20
trans-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Trichloroethene	ND	10	8.9	89		9.0	90		70-130	1		20
1,2-Dichlorobenzene	ND	10	9.5	95		9.6	96		70-130	1		20
1,3-Dichlorobenzene	ND	10	9.5	95		9.7	97		70-130	2		20
1,4-Dichlorobenzene	ND	10	9.3	93		9.4	94		70-130	1		20
Methyl tert butyl ether	ND	10	8.7	87		8.8	88		63-130	1		20
p/m-Xylene	ND	20	20	100		21	105		70-130	5		20
o-Xylene	ND	20	20	100		20	100		70-130	0		20
cis-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Dibromomethane	ND	10	9.0	90		9.8	98		70-130	9		20
1,2,3-Trichloropropane	ND	10	8.8	88		9.0	90		64-130	2		20
Acrylonitrile	ND	10	9.2	92		9.4	94		70-130	2		20
Styrene	ND	20	20	100		21	105		70-130	5		20
Dichlorodifluoromethane	ND	10	7.6	76		7.7	77		36-147	1		20
Acetone	ND	10	9.7	97		8.9	89		58-148	9		20
Carbon disulfide	ND	10	9.1	91		9.3	93		51-130	2		20
2-Butanone	ND	10	7.5	75		7.8	78		63-138	4		20
Vinyl acetate	ND	10	8.5	85		8.6	86		70-130	1		20
4-Methyl-2-pentanone	ND	10	9.9	99		10	100		59-130	1		20
2-Hexanone	ND	10	9.6	96		9.9	99		57-130	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 QC Batch ID: WG1793749-6 WG1793749-7 QC Sample: L2334307-04 Client ID: RMW-2												
Bromochloromethane	ND	10	9.7	97		9.2	92		70-130	5		20
2,2-Dichloropropane	ND	10	7.4	74		7.0	70		63-133	6		20
1,2-Dibromoethane	ND	10	8.5	85		8.8	88		70-130	3		20
1,3-Dichloropropane	ND	10	8.8	88		9.3	93		70-130	6		20
1,1,1,2-Tetrachloroethane	ND	10	8.6	86		9.4	94		64-130	9		20
Bromobenzene	ND	10	9.2	92		9.6	96		70-130	4		20
n-Butylbenzene	ND	10	8.7	87		9.0	90		53-136	3		20
sec-Butylbenzene	ND	10	9.2	92		9.5	95		70-130	3		20
tert-Butylbenzene	ND	10	9.4	94		9.6	96		70-130	2		20
o-Chlorotoluene	ND	10	9.7	97		9.8	98		70-130	1		20
p-Chlorotoluene	ND	10	9.4	94		9.5	95		70-130	1		20
1,2-Dibromo-3-chloropropane	ND	10	7.9	79		8.5	85		41-144	7		20
Hexachlorobutadiene	ND	10	7.5	75		7.9	79		63-130	5		20
Isopropylbenzene	ND	10	9.6	96		9.8	98		70-130	2		20
p-Isopropyltoluene	ND	10	9.1	91		9.3	93		70-130	2		20
Naphthalene	ND	10	9.5	95		9.8	98		70-130	3		20
n-Propylbenzene	ND	10	9.7	97		10	100		69-130	3		20
1,2,3-Trichlorobenzene	ND	10	8.5	85		8.8	88		70-130	3		20
1,2,4-Trichlorobenzene	ND	10	8.5	85		9.0	90		70-130	6		20
1,3,5-Trimethylbenzene	ND	10	9.4	94		9.6	96		64-130	2		20
1,2,4-Trimethylbenzene	ND	10	9.5	95		9.8	98		70-130	3		20
1,4-Dioxane	ND	500	470	94		490	98		56-162	4		20
p-Diethylbenzene	ND	10	8.8	88		8.8	88		70-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 QC Batch ID: WG1793749-6 WG1793749-7 QC Sample: L2334307-04 Client ID: RMW-2												
p-Ethyltoluene	ND	10	9.8	98		10	100		70-130	2		20
1,2,4,5-Tetramethylbenzene	ND	10	8.3	83		8.5	85		70-130	2		20
Ethyl ether	ND	10	8.4	84		8.3	83		59-134	1		20
trans-1,4-Dichloro-2-butene	ND	10	6.5	65	Q	6.6	66	Q	70-130	2		20

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		92		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	103		101		70-130
Toluene-d8	99		98		70-130

SEMIVOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/20/23 22:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	60		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/23/23 10:27
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 12:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.10	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	52		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/20/23 22:33
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	0.89	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	1.6	J	ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	59		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/23/23 10:44
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 12:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	28		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.46		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	8.2		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.11		ug/l	0.10	0.01	1
Acenaphthylene	1.8		ug/l	0.10	0.01	1
Anthracene	2.2		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.01	J	ug/l	0.10	0.01	1
Fluorene	4.0		ug/l	0.10	0.01	1
Phenanthrene	1.3		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.01	J	ug/l	0.10	0.01	1
Pyrene	0.85		ug/l	0.10	0.02	1
2-Methylnaphthalene	1.6		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	59		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/20/23 22:56
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	1.1	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	1.7	J	ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	0.82	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	66		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/23/23 11:00
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 12:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	33		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.54		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	18		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.12		ug/l	0.10	0.01	1
Acenaphthylene	2.2		ug/l	0.10	0.01	1
Anthracene	2.8		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	5.2		ug/l	0.10	0.01	1
Phenanthrene	6.9		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.01	J	ug/l	0.10	0.01	1
Pyrene	1.0		ug/l	0.10	0.02	1
2-Methylnaphthalene	2.9		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	65		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/20/23 23:20
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	58		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/22/23 13:06
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.33		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	JB	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.18		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.27		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.32		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.09	J	ug/l	0.10	0.01	1
Chrysene	0.18		ug/l	0.10	0.01	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Anthracene	0.06	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.16		ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.24		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.05	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.16		ug/l	0.10	0.01	1
Pyrene	0.41		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.07	JB	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	108		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	66		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8270E
Analytical Date: 06/21/23 00:30
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	54		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8270E-SIM
Analytical Date: 06/22/23 11:54
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	JB	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	66		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1793607-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1793607-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	0.73	J	ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1793607-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	57		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/21/23 14:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-05 Batch: WG1793608-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.40		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.81		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/21/23 14:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 04-05 Batch: WG1793608-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	73		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/22/23 16:58
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 07:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1794667-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.05	J	ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	0.06	J	ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/22/23 16:58
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 07:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1794667-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	59		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1793607-2 WG1793607-3								
Acenaphthene	64		78		37-111	20		30
1,2,4-Trichlorobenzene	60		73		39-98	20		30
Hexachlorobenzene	55		67		40-140	20		30
Bis(2-chloroethyl)ether	60		73		40-140	20		30
2-Chloronaphthalene	58		71		40-140	20		30
1,2-Dichlorobenzene	63		78		40-140	21		30
1,3-Dichlorobenzene	62		76		40-140	20		30
1,4-Dichlorobenzene	63		76		36-97	19		30
3,3'-Dichlorobenzidine	56		63		40-140	12		30
2,4-Dinitrotoluene	73		90		48-143	21		30
2,6-Dinitrotoluene	63		79		40-140	23		30
Fluoranthene	62		79		40-140	24		30
4-Chlorophenyl phenyl ether	59		71		40-140	18		30
4-Bromophenyl phenyl ether	54		64		40-140	17		30
Bis(2-chloroisopropyl)ether	83		101		40-140	20		30
Bis(2-chloroethoxy)methane	64		75		40-140	16		30
Hexachlorobutadiene	44		53		40-140	19		30
Hexachlorocyclopentadiene	44		58		40-140	27		30
Hexachloroethane	67		78		40-140	15		30
Isophorone	54		64		40-140	17		30
Naphthalene	59		73		40-140	21		30
Nitrobenzene	63		73		40-140	15		30
NDPA/DPA	62		75		40-140	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1793607-2 WG1793607-3								
n-Nitrosodi-n-propylamine	55		66		29-132	18		30
Bis(2-ethylhexyl)phthalate	90		100		40-140	11		30
Butyl benzyl phthalate	79		99		40-140	22		30
Di-n-butylphthalate	77		92		40-140	18		30
Di-n-octylphthalate	86		99		40-140	14		30
Diethyl phthalate	72		88		40-140	20		30
Dimethyl phthalate	63		75		40-140	17		30
Benzo(a)anthracene	67		80		40-140	18		30
Benzo(a)pyrene	75		90		40-140	18		30
Benzo(b)fluoranthene	66		81		40-140	20		30
Benzo(k)fluoranthene	77		90		40-140	16		30
Chrysene	68		81		40-140	17		30
Acenaphthylene	61		74		45-123	19		30
Anthracene	67		82		40-140	20		30
Benzo(ghi)perylene	82		100		40-140	20		30
Fluorene	64		79		40-140	21		30
Phenanthrene	68		84		40-140	21		30
Dibenzo(a,h)anthracene	79		98		40-140	21		30
Indeno(1,2,3-cd)pyrene	76		96		40-140	23		30
Pyrene	64		78		26-127	20		30
Biphenyl	55		67		40-140	20		30
4-Chloroaniline	52		58		40-140	11		30
2-Nitroaniline	64		80		52-143	22		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1793607-2 WG1793607-3								
3-Nitroaniline	68		85		25-145	22		30
4-Nitroaniline	73		92		51-143	23		30
Dibenzofuran	65		81		40-140	22		30
2-Methylnaphthalene	64		76		40-140	17		30
1,2,4,5-Tetrachlorobenzene	44		52		2-134	17		30
Acetophenone	55		65		39-129	17		30
2,4,6-Trichlorophenol	54		67		30-130	21		30
p-Chloro-m-cresol	59		72		23-97	20		30
2-Chlorophenol	67		84		27-123	23		30
2,4-Dichlorophenol	64		79		30-130	21		30
2,4-Dimethylphenol	61		72		30-130	17		30
2-Nitrophenol	74		92		30-130	22		30
4-Nitrophenol	72		89	Q	10-80	21		30
2,4-Dinitrophenol	62		68		20-130	9		30
4,6-Dinitro-o-cresol	68		89		20-164	27		30
Pentachlorophenol	53		70		9-103	28		30
Phenol	46		55		12-110	18		30
2-Methylphenol	58		72		30-130	22		30
3-Methylphenol/4-Methylphenol	66		76		30-130	14		30
2,4,5-Trichlorophenol	55		69		30-130	23		30
Benzoic Acid	63		78		10-164	21		30
Benzyl Alcohol	52		60		26-116	14		30
Carbazole	73		88		55-144	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1793607-2 WG1793607-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		68		21-120
Phenol-d6	46		53		10-120
Nitrobenzene-d5	63		79		23-120
2-Fluorobiphenyl	55		64		15-120
2,4,6-Tribromophenol	65		78		10-120
4-Terphenyl-d14	58		72		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG1793608-2 WG1793608-3								
Acenaphthene	66		78		40-140	17		40
2-Chloronaphthalene	76		92		40-140	19		40
Fluoranthene	71		87		40-140	20		40
Hexachlorobutadiene	81		96		40-140	17		40
Naphthalene	64		78		40-140	20		40
Benzo(a)anthracene	75		90		40-140	18		40
Benzo(a)pyrene	79		94		40-140	17		40
Benzo(b)fluoranthene	72		89		40-140	21		40
Benzo(k)fluoranthene	84		96		40-140	13		40
Chrysene	68		82		40-140	19		40
Acenaphthylene	79		94		40-140	17		40
Anthracene	68		82		40-140	19		40
Benzo(ghi)perylene	73		84		40-140	14		40
Fluorene	71		85		40-140	18		40
Phenanthrene	63		78		40-140	21		40
Dibenzo(a,h)anthracene	74		86		40-140	15		40
Indeno(1,2,3-cd)pyrene	72		84		40-140	15		40
Pyrene	71		86		40-140	19		40
2-Methylnaphthalene	72		86		40-140	18		40
Pentachlorophenol	80		100		40-140	22		40
Hexachlorobenzene	70		104		40-140	39		40
Hexachloroethane	63		77		40-140	20		40

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 Batch: WG1793608-2 WG1793608-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		72		21-120
Phenol-d6	56		66		10-120
Nitrobenzene-d5	85		102		23-120
2-Fluorobiphenyl	77		94		15-120
2,4,6-Tribromophenol	96		110		10-120
4-Terphenyl-d14	72		86		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1794667-2 WG1794667-3								
Acenaphthene	84		95		40-140	12		40
2-Chloronaphthalene	79		90		40-140	13		40
Fluoranthene	90		100		40-140	11		40
Hexachlorobutadiene	74		87		40-140	16		40
Naphthalene	75		85		40-140	13		40
Benzo(a)anthracene	98		110		40-140	12		40
Benzo(a)pyrene	107		118		40-140	10		40
Benzo(b)fluoranthene	95		106		40-140	11		40
Benzo(k)fluoranthene	98		110		40-140	12		40
Chrysene	90		101		40-140	12		40
Acenaphthylene	89		100		40-140	12		40
Anthracene	94		105		40-140	11		40
Benzo(ghi)perylene	98		109		40-140	11		40
Fluorene	86		98		40-140	13		40
Phenanthrene	83		94		40-140	12		40
Dibenzo(a,h)anthracene	98		107		40-140	9		40
Indeno(1,2,3-cd)pyrene	99		112		40-140	12		40
Pyrene	88		98		40-140	11		40
2-Methylnaphthalene	79		90		40-140	13		40
Pentachlorophenol	139		147	Q	40-140	6		40
Hexachlorobenzene	87		98		40-140	12		40
Hexachloroethane	78		92		40-140	16		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1794667-2 WG1794667-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		85		21-120
Phenol-d6	69		79		10-120
Nitrobenzene-d5	107		121	Q	23-120
2-Fluorobiphenyl	74		83		15-120
2,4,6-Tribromophenol	122	Q	136	Q	10-120
4-Terphenyl-d14	64		70		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793607-4 WG1793607-5 QC Sample: L2334307-04 Client ID: RMW-2												
1,2,4-Trichlorobenzene	ND	18.2	12	66		10	55		39-98	18		30
Bis(2-chloroethyl)ether	ND	18.2	13	72		10	55		40-140	26		30
1,2-Dichlorobenzene	ND	18.2	14	77		10	55		40-140	33	Q	30
1,3-Dichlorobenzene	ND	18.2	13	72		10	55		40-140	26		30
1,4-Dichlorobenzene	ND	18.2	14	77		10	55		36-97	33	Q	30
3,3'-Dichlorobenzidine	ND	18.2	7.0	39	Q	7.4	41		40-140	6		30
2,4-Dinitrotoluene	ND	18.2	16	88		12	66		48-143	29		30
2,6-Dinitrotoluene	ND	18.2	13	72		11	61		40-140	17		30
4-Chlorophenyl phenyl ether	ND	18.2	12	66		9.9	54		40-140	19		30
4-Bromophenyl phenyl ether	ND	18.2	10	55		8.7	48		40-140	14		30
Bis(2-chloroisopropyl)ether	ND	18.2	18	99		14	77		40-140	25		30
Bis(2-chloroethoxy)methane	ND	18.2	13	72		11	61		40-140	17		30
Hexachlorocyclopentadiene	ND	18.2	10.J	55		8.0J	44		40-140	22		30
Isophorone	ND	18.2	11	61		9.5	52		40-140	15		30
Nitrobenzene	ND	18.2	14	77		11	61		40-140	24		30
NDPA/DPA	ND	18.2	13	72		11	61		40-140	17		30
n-Nitrosodi-n-propylamine	ND	18.2	12	66		9.1	50		29-132	27		30
Bis(2-ethylhexyl)phthalate	ND	18.2	18	99		16	88		40-140	12		30
Butyl benzyl phthalate	ND	18.2	18	99		13	72		40-140	32	Q	30
Di-n-butylphthalate	ND	18.2	17	94		14	77		40-140	19		30
Di-n-octylphthalate	ND	18.2	18	99		15	83		40-140	18		30
Diethyl phthalate	ND	18.2	15	83		13	72		40-140	14		30
Dimethyl phthalate	ND	18.2	13	72		11	61		40-140	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793607-4 WG1793607-5 QC Sample: L2334307-04 Client ID: RMW-2												
Biphenyl	ND	18.2	12	66		9.4	52		40-140	24		30
4-Chloroaniline	ND	18.2	9.0	50		7.3	40		40-140	21		30
2-Nitroaniline	ND	18.2	14	77		11	61		52-143	24		30
3-Nitroaniline	ND	18.2	12	66		10	55		25-145	18		30
4-Nitroaniline	ND	18.2	13	72		10	55		51-143	26		30
Dibenzofuran	ND	18.2	13	72		11	61		40-140	17		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	9.1J	50		7.5J	41		2-134	19		30
Acetophenone	ND	18.2	12	66		9.0	50		39-129	29		30
2,4,6-Trichlorophenol	ND	18.2	12	66		9.9	54		30-130	19		30
p-Chloro-m-cresol	ND	18.2	12	66		11	61		23-97	9		30
2-Chlorophenol	ND	18.2	14	77		11	61		27-123	24		30
2,4-Dichlorophenol	ND	18.2	14	77		11	61		30-130	24		30
2,4-Dimethylphenol	ND	18.2	12	66		10	55		30-130	18		30
2-Nitrophenol	ND	18.2	17	94		13	72		30-130	27		30
4-Nitrophenol	ND	18.2	15	83	Q	11	61		10-80	31	Q	30
2,4-Dinitrophenol	ND	18.2	14.J	77		11.J	61		20-130	24		30
4,6-Dinitro-o-cresol	ND	18.2	16	88		12	66		20-164	29		30
Phenol	ND	18.2	10	55		8.1	45		12-110	21		30
2-Methylphenol	ND	18.2	13	72		10	55		30-130	26		30
3-Methylphenol/4-Methylphenol	ND	18.2	13	72		10	55		30-130	26		30
2,4,5-Trichlorophenol	ND	18.2	12	66		9.7	53		30-130	21		30
Benzoic Acid	ND	18.2	19.J	100		16.J	88		10-164	17		30
Benzyl Alcohol	ND	18.2	11	61		8.9	49		26-116	21		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793607-4 WG1793607-5 QC Sample: L2334307-04 Client ID: RMW-2												
Carbazole	ND	18.2	16	88		12	66		55-144	29		30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	69		59		10-120
2-Fluorobiphenyl	64		52		15-120
2-Fluorophenol	68		52		21-120
4-Terphenyl-d14	67		49		41-149
Nitrobenzene-d5	76		60		23-120
Phenol-d6	57		44		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 QC Batch ID: WG1793608-4 WG1793608-5 QC Sample: L2334307-04 Client ID: RMW-2												
Acenaphthene	0.04J	18.2	16	88		13	72		40-140	21		40
2-Chloronaphthalene	ND	18.2	15	83		12	66		40-140	22		40
Fluoranthene	0.33	18.2	16	86		14	75		40-140	13		40
Hexachlorobutadiene	ND	18.2	16	88		12	66		40-140	29		40
Naphthalene	0.06JB	18.2	15	83		12	66		40-140	22		40
Benzo(a)anthracene	0.18	18.2	19	100		16	87		40-140	17		40
Benzo(a)pyrene	0.27	18.2	20	110		17	92		40-140	16		40
Benzo(b)fluoranthene	0.32	18.2	18	97		16	86		40-140	12		40
Benzo(k)fluoranthene	0.09J	18.2	18	99		15	83		40-140	18		40
Chrysene	0.18	18.2	17	93		14	76		40-140	19		40
Acenaphthylene	0.05J	18.2	16	88		14	77		40-140	13		40
Anthracene	0.06J	18.2	17	94		14	77		40-140	19		40
Benzo(ghi)perylene	0.16	18.2	18	98		15	82		40-140	18		40
Fluorene	0.03J	18.2	16	88		14	77		40-140	13		40
Phenanthrene	0.24	18.2	16	87		13	70		40-140	21		40
Dibenzo(a,h)anthracene	0.05J	18.2	17	94		14	77		40-140	19		40
Indeno(1,2,3-cd)pyrene	0.16	18.2	18	98		15	82		40-140	18		40
Pyrene	0.41	18.2	16	86		14	75		40-140	13		40
2-Methylnaphthalene	0.07JB	18.2	15	83		12	66		40-140	22		40
Pentachlorophenol	ND	18.2	22	120		19	100		40-140	15		40
Hexachlorobenzene	ND	18.2	16	88		14	77		40-140	13		40
Hexachloroethane	ND	18.2	16	88		13	72		40-140	21		40

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04-05 QC Batch ID: WG1793608-4 WG1793608-5 QC Sample: L2334307-04
 Client ID: RMW-2

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	123	Q	108		10-120
2-Fluorobiphenyl	82		68		15-120
2-Fluorophenol	82		68		21-120
4-Terphenyl-d14	67		59		41-149
Nitrobenzene-d5	116		94		23-120
Phenol-d6	80		66		10-120

PCBS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/20/23 18:29
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/20/23 18:38
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/20/23 21:43
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/20/23 17:42
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8082A
Analytical Date: 06/20/23 21:52
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/20/23 17:14
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/19/23 15:41
Cleanup Method: EPA 3665A
Cleanup Date: 06/20/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/20/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1793309-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	98		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1793309-2 WG1793309-3									
Aroclor 1016	68		64		40-140	6		50	A
Aroclor 1260	71		68		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		61		30-150	A
Decachlorobiphenyl	89		81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		61		30-150	B
Decachlorobiphenyl	83		87		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793309-4 WG1793309-5 QC Sample: L2334307-04 Client ID: RMW-2													
Aroclor 1016	ND	1.78	1.15	64		1.18	66		40-140	3		50	A
Aroclor 1260	ND	1.78	1.16	65		1.18	66		40-140	2		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	57		61		30-150	A
Decachlorobiphenyl	72		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		56		30-150	B
Decachlorobiphenyl	75		72		30-150	B

PESTICIDES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 13:00
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 15:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 10:38
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	63		30-150	A
DCAA	63		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 13:12
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 15:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 10:56
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	30		30-150	A
DCAA	28	Q	30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 13:23
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 15:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
Client ID: DUP_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 11:14
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	74		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 13:35
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 15:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 11:33
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	58		30-150	A
DCAA	60		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8081B
Analytical Date: 06/22/23 14:09
Analyst: MMG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 15:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Field Blank
Analytical Method: 1,8151A
Analytical Date: 06/21/23 12:28
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	87		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/21/23 08:10
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1793400-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	51		30-150	A
DCAA	50		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/20/23 18:33
Analyst: AR

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 01:47

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1793447-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/20/23 18:33
Analyst: AR

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 01:47

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1793447-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	43		30-150	B
Decachlorobiphenyl	70		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1793400-2 WG1793400-3									
2,4-D	118		116		30-150	2		25	A
2,4,5-T	99		107		30-150	8		25	A
2,4,5-TP (Silvex)	122		126		30-150	3		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	90		93		30-150	A
DCAA	97		101		30-150	B

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1793447-2 WG1793447-3									
Delta-BHC	69		71		30-150	2		20	A
Lindane	64		66		30-150	3		20	A
Alpha-BHC	73		72		30-150	1		20	A
Beta-BHC	84		74		30-150	13		20	A
Heptachlor	67		70		30-150	5		20	A
Aldrin	60		65		30-150	8		20	A
Heptachlor epoxide	62		66		30-150	7		20	A
Endrin	62		68		30-150	10		20	A
Endrin aldehyde	54		56		30-150	4		20	A
Endrin ketone	66		73		30-150	10		20	A
Dieldrin	66		72		30-150	9		20	A
4,4'-DDE	62		68		30-150	9		20	A
4,4'-DDD	66		74		30-150	11		20	A
4,4'-DDT	64		71		30-150	11		20	A
Endosulfan I	62		68		30-150	9		20	A
Endosulfan II	64		69		30-150	8		20	A
Endosulfan sulfate	61		66		30-150	8		20	A
Methoxychlor	75		84		30-150	11		20	A
cis-Chlordane	63		68		30-150	8		20	A
trans-Chlordane	69		74		30-150	8		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1793447-2 WG1793447-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		61		30-150	A
Decachlorobiphenyl	62		69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		62		30-150	B
Decachlorobiphenyl	68		73		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793400-4 WG1793400-5 QC Sample: L2334307-04 Client ID: RMW-2													
2,4-D	ND	5	4.55J	91		5.13J	103		30-150	12		25	A
2,4,5-T	ND	5	4.19	84		3.71	74		30-150	12		25	A
2,4,5-TP (Silvex)	ND	5	5.92	118		5.25	105		30-150	12		25	A

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		68		30-150	A
DCAA	83		75		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab ID: RMW-2 Associated sample(s): 01-05 QC Batch ID: WG1793447-4 WG1793447-5 QC Sample: L2334307-04 Client													
Delta-BHC	ND	0.357	0.292	82		0.326	91		30-150	11		30	A
Lindane	ND	0.357	0.273	76		0.303	85		30-150	10		30	A
Alpha-BHC	ND	0.357	0.296	83		0.327	92		30-150	10		30	A
Beta-BHC	ND	0.357	0.306	86		0.336	94		30-150	9		30	A
Heptachlor	ND	0.357	0.259	72		0.290	81		30-150	11		30	A
Aldrin	ND	0.357	0.254	71		0.285	80		30-150	12		30	A
Heptachlor epoxide	ND	0.357	0.260	73		0.290	81		30-150	11		30	A
Endrin	ND	0.357	0.268	75		0.301	84		30-150	12		30	A
Endrin aldehyde	ND	0.357	0.176	49		0.187	52		30-150	6		30	A
Endrin ketone	ND	0.357	0.269	75		0.307	86		30-150	13		30	A
Dieldrin	ND	0.357	0.284	80		0.317	89		30-150	11		30	A
4,4'-DDE	ND	0.357	0.239	67		0.273	76		30-150	13		30	A
4,4'-DDD	ND	0.357	0.280	78		0.314	88		30-150	11		30	A
4,4'-DDT	ND	0.357	0.281	79		0.321	90		30-150	13		30	A
Endosulfan I	ND	0.357	0.267	75		0.297	83		30-150	11		30	A
Endosulfan II	ND	0.357	0.274	77		0.306	86		30-150	11		30	A
Endosulfan sulfate	ND	0.357	0.259	72		0.288	81		30-150	11		30	A
Methoxychlor	ND	0.357	0.265	74		0.307	86		30-150	15		30	A
cis-Chlordane	ND	0.357	0.267	75		0.300	84		30-150	12		30	A
trans-Chlordane	ND	0.357	0.286	80		0.316	88		30-150	10		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1793447-4 WG1793447-5 QC Sample: L2334307-04 Client ID: RMW-2												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		76		30-150	A
Decachlorobiphenyl	63		70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		74		30-150	B
Decachlorobiphenyl	61		67		30-150	B

METALS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-01
Client ID: RMW-3
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 10:40
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.597		mg/l	0.100	0.0327	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.04000	0.00429	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00238	J	mg/l	0.00500	0.00165	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Barium, Total	0.09114		mg/l	0.00500	0.00173	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Calcium, Total	197.		mg/l	1.00	0.394	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.01000	0.00178	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Copper, Total	ND		mg/l	0.01000	0.00384	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Iron, Total	0.615		mg/l	0.500	0.191	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Lead, Total	0.01434		mg/l	0.01000	0.00343	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Magnesium, Total	722.		mg/l	0.700	0.242	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Manganese, Total	0.1065		mg/l	0.01000	0.00440	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Mercury, Total	0.00018	J	mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:31	EPA 7470A	1,7470A	GMG
Nickel, Total	ND		mg/l	0.02000	0.00556	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Potassium, Total	187.		mg/l	1.00	0.309	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.0500	0.0173	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00400	0.00163	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Sodium, Total	5940		mg/l	10.0	2.93	100	06/22/23 08:35	06/22/23 18:58	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.01000	0.00143	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.1000	0.03410	10	06/22/23 08:35	06/22/23 18:53	EPA 3005A	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-02
Client ID: RMW-6
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:50
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0188		mg/l	0.0100	0.00327	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00080		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Barium, Total	0.3166		mg/l	0.00050	0.00017	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Calcium, Total	286.		mg/l	0.100	0.0394	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Chromium, Total	0.00099	J	mg/l	0.00100	0.00017	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00038	J	mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Copper, Total	0.00113		mg/l	0.00100	0.00038	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Iron, Total	5.68		mg/l	0.0500	0.0191	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Lead, Total	0.00082	J	mg/l	0.00100	0.00034	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Magnesium, Total	89.2		mg/l	0.0700	0.0242	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Manganese, Total	2.284		mg/l	0.00100	0.00044	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Mercury, Total	0.00014	J	mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:34	EPA 7470A	1,7470A	GMG
Nickel, Total	0.00250		mg/l	0.00200	0.00055	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Potassium, Total	28.9		mg/l	0.100	0.0309	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Sodium, Total	323.		mg/l	0.100	0.0293	1	06/22/23 08:35	06/23/23 09:20	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Vanadium, Total	0.00451	J	mg/l	0.00500	0.00157	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/22/23 08:35	06/22/23 19:30	EPA 3005A	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-03
 Client ID: DUP_061523
 Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:00
 Date Received: 06/15/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0178		mg/l	0.0100	0.00327	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00077		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Barium, Total	0.3297		mg/l	0.00050	0.00017	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Calcium, Total	293.		mg/l	0.100	0.0394	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Chromium, Total	0.00088	J	mg/l	0.00100	0.00017	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Cobalt, Total	0.00037	J	mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Copper, Total	0.00097	J	mg/l	0.00100	0.00038	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Iron, Total	5.37		mg/l	0.0500	0.0191	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Lead, Total	0.00064	J	mg/l	0.00100	0.00034	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Magnesium, Total	91.1		mg/l	0.0700	0.0242	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Manganese, Total	2.291		mg/l	0.00100	0.00044	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Mercury, Total	0.00015	J	mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:38	EPA 7470A	1,7470A	GMG
Nickel, Total	0.00214		mg/l	0.00200	0.00055	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Potassium, Total	30.1		mg/l	0.100	0.0309	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Sodium, Total	327.		mg/l	0.100	0.0293	1	06/22/23 08:35	06/23/23 09:25	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Vanadium, Total	0.00452	J	mg/l	0.00500	0.00157	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/22/23 08:35	06/22/23 19:34	EPA 3005A	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-04
Client ID: RMW-2
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 12:55
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.765		mg/l	0.100	0.0327	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.04000	0.00429	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Arsenic, Total	0.00256	J	mg/l	0.00500	0.00165	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Barium, Total	0.06580		mg/l	0.00500	0.00173	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Calcium, Total	143.		mg/l	1.00	0.394	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Chromium, Total	0.00217	J	mg/l	0.01000	0.00178	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Copper, Total	0.03175		mg/l	0.01000	0.00384	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Iron, Total	0.901		mg/l	0.500	0.191	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Lead, Total	0.04226		mg/l	0.01000	0.00343	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Magnesium, Total	844.		mg/l	0.700	0.242	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Manganese, Total	0.02874		mg/l	0.01000	0.00440	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Mercury, Total	0.00012	J	mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:10	EPA 7470A	1,7470A	GMG
Nickel, Total	0.01306	J	mg/l	0.02000	0.00556	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Potassium, Total	207.		mg/l	1.00	0.309	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.0500	0.0173	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00400	0.00163	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Sodium, Total	6910		mg/l	10.0	2.93	100	06/22/23 08:35	06/22/23 18:49	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.01000	0.00143	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.1000	0.03410	10	06/22/23 08:35	06/22/23 18:44	EPA 3005A	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

SAMPLE RESULTS

Lab ID: L2334307-05
Client ID: FB_061523
Sample Location: 27-02 1ST STREET, ASTORIA, NY

Date Collected: 06/15/23 14:30
Date Received: 06/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Field Blank

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00332	J	mg/l	0.0100	0.00327	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Barium, Total	0.00084		mg/l	0.00050	0.00017	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Mercury, Total	0.00013	J	mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:41	EPA 7470A	1,7470A	GMG
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/22/23 08:35	06/22/23 18:30	EPA 3005A	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1793188-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/19/23 23:15	06/22/23 11:03	1,7470A	GMG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1794593-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/22/23 08:35	06/22/23 17:23	1,6020B	WKP



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1793188-2								
Mercury, Total	99		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1794593-2					
Aluminum, Total	108	-	80-120	-	
Antimony, Total	91	-	80-120	-	
Arsenic, Total	105	-	80-120	-	
Barium, Total	102	-	80-120	-	
Beryllium, Total	111	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	86	-	80-120	-	
Chromium, Total	101	-	80-120	-	
Cobalt, Total	102	-	80-120	-	
Copper, Total	104	-	80-120	-	
Iron, Total	106	-	80-120	-	
Lead, Total	108	-	80-120	-	
Magnesium, Total	105	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	102	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	101	-	80-120	-	
Silver, Total	102	-	80-120	-	
Sodium, Total	106	-	80-120	-	
Thallium, Total	109	-	80-120	-	
Vanadium, Total	100	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1794593-2					
Zinc, Total	104	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1793188-3 WG1793188-4 QC Sample: L2334307-04 Client ID: RMW-2												
Mercury, Total	0.000123	0.005	0.00480	96		0.00495	99		75-125	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1794593-3 WG1794593-4 QC Sample: L2334307-04 Client ID: RMW-2									
Aluminum, Total	0.765	2	2.95	109	2.92	108	75-125	1	20
Antimony, Total	ND	0.5	0.4836	97	0.4588	92	75-125	5	20
Arsenic, Total	0.00256J	0.12	0.1200	100	0.1197	100	75-125	0	20
Barium, Total	0.06580	2	2.103	102	2.069	100	75-125	2	20
Beryllium, Total	ND	0.05	0.04334	87	0.04356	87	75-125	1	20
Cadmium, Total	ND	0.053	0.04624	87	0.04534	86	75-125	2	20
Calcium, Total	143.	10	133	0	Q 143	0	Q 75-125	7	20
Chromium, Total	0.00217J	0.2	0.1151	58	Q 0.1159	58	Q 75-125	1	20
Cobalt, Total	ND	0.5	0.4792	96	0.4878	98	75-125	2	20
Copper, Total	0.03175	0.25	0.2588	91	0.2620	92	75-125	1	20
Iron, Total	0.901	1	1.71	81	1.69	79	75-125	1	20
Lead, Total	0.04226	0.53	0.6016	106	0.5932	104	75-125	1	20
Magnesium, Total	844.	10	790	0	Q 804	0	Q 75-125	2	20
Manganese, Total	0.02874	0.5	0.3877	72	Q 0.3884	72	Q 75-125	0	20
Nickel, Total	0.01306J	0.5	0.4693	94	0.4791	96	75-125	2	20
Potassium, Total	207.	10	204	0	Q 211	40	Q 75-125	3	20
Selenium, Total	ND	0.12	0.0968	81	0.0950	79	75-125	2	20
Silver, Total	ND	0.05	0.04366	87	0.04304	86	75-125	1	20
Sodium, Total	6910	10	6590	0	Q 6520	0	Q 75-125	1	20
Thallium, Total	ND	0.12	0.1214	101	0.1207	100	75-125	1	20
Vanadium, Total	ND	0.5	0.2639	53	Q 0.2685	54	Q 75-125	2	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1794593-3 WG1794593-4 QC Sample: L2334307-04 Client ID: RMW-2									
Zinc, Total	ND	0.5	0.4188	84	0.4235	85	75-125	1	20

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307**Report Date:** 06/23/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334307-01A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-01B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-01C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.0	Y	Absent		TL-6020T(180),SE-6020T(180),BA-6020T(180),FE-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L2334307-01E	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-01F	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-01G	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-01H	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-01I	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-01J	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-01K	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)
L2334307-01L	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)
L2334307-02A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-02B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-02C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Serial_No: 06232316:46
Lab Number: L2334307
Report Date: 06/23/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334307-02D	Plastic 250ml HNO3 preserved	A	<2	<2	3.0	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),NI-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),MG-6020T(180),HG-T(28),CO-6020T(180)
L2334307-02E	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-02F	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-02G	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-02H	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-02I	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-02J	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-02K	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)
L2334307-02L	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)
L2334307-03A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-03B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-03C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-03D	Plastic 250ml HNO3 preserved	A	<2	<2	3.0	Y	Absent		SE-6020T(180),FE-6020T(180),TL-6020T(180),BA-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),CO-6020T(180)
L2334307-03E	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-03F	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8082-LVI(365)
L2334307-03G	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-03H	Amber 120ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8081(7)
L2334307-03I	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-03J	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-03K	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)

*Values in parentheses indicate holding time in days

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Serial_No: 06232316:46
Lab Number: L2334307
Report Date: 06/23/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334307-03L	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		HERB-APA(7)
L2334307-04A	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04A1	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04A2	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04B	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04B1	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04B2	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04C	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04C1	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04C2	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2334307-04D	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L2334307-04D1	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L2334307-04D2	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L2334307-04E	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2334307-04E1	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2334307-04E2	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)

*Values in parentheses indicate holding time in days

Project Name: HLP 4/5**Lab Number:** L2334307**Project Number:** 1338.0013Y000**Report Date:** 06/23/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334307-04F	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2334307-04F1	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2334307-04F2	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2334307-04G	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04G1	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04G2	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04H	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04H1	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04H2	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2334307-04I	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04I1	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04I2	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04J	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04J1	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04J2	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-04K	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-04K1	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-04K2	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-04L	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-04L1	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-04L2	Amber 1000ml unpreserved	B	7	7	2.8	Y	Absent		HERB-APA(7)
L2334307-05A	Vial HCl preserved	C	NA		3.3	Y	Absent		NYTCL-8260(14)
L2334307-05B	Vial HCl preserved	C	NA		3.3	Y	Absent		NYTCL-8260(14)
L2334307-05C	Vial HCl preserved	C	NA		3.3	Y	Absent		NYTCL-8260(14)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Serial_No: 06232316:46
Lab Number: L2334307
Report Date: 06/23/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334307-05D	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),MG-6020T(180),CO-6020T(180)
L2334307-05E	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(365)
L2334307-05F	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(365)
L2334307-05G	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L2334307-05H	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L2334307-05I	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-05J	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334307-05K	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L2334307-05L	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L2334307-06A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L2334307-06B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334307
Report Date: 06/23/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 20

Department: **Quality Assurance**

Published Date: 6/16/2023 4:52:28 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 6/15/23		ALPHA Job # 18334307					
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: HLP 4/5 Project Location: 27-50 1st St Astoria, NY Project # 1838.0013Y000 (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☐ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☐ Same as Client Info PO #					
Client Information Client: Roux Env. Eng. & Geology Inc. Address: 209 Shafter St Islandia, NY 11749 Phone: 631 232 2600 Fax: Email: rmiller@rouxinc.com		Project Manager: Rachel Miller ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:							
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments:				ANALYSIS NY TCL Semivolatiles TCL PCBs Total Target Analyte List Metals TCL Pesticides Herbicides TCL Volatiles		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)		Total Bottles					
Please specify Metals or TAL.				Sample Specific Comments									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NY TCL Semivolatiles	TCL PCBs	Total Target Analyte List Metals	TCL Pesticides	Herbicides	TCL Volatiles	Sample Specific Comments	
34307-01	RMW-3	6/15/23	1040	W	AD	X	X	X	X	X	X		12
-02	RMW-6		1250	W	AD	X	X	X	X	X	X		12
-03	DUP-061523		1200	W	AD	X	X	X	X	X	X		12
-04	RMW-2		1255	W	DB	X	X	X	X	X	X		36
-05	FB-061523		1430	W	AD	X	X	X	X	X	X	MS/MSD	12
-06	Trip Blank			W							X	Field Blank	12
												Trip Blank	12
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		A A P A A V A A C A A B		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)			
Relinquished By: D. P. [Signature]		Date/Time: 6/15/23 15:45		Received By: [Signature]		Date/Time: 6/15/23 15:45		6/15/23 18:50		6/15/23 22:00		6/15/23 23:00	



ANALYTICAL REPORT

Lab Number:	L2334618
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 4/5
Project Number:	1338.0013Y000
Report Date:	06/26/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2334618-01	RMW-5	WATER	27-50 1ST STREET, ASTORIA, NY	06/16/23 08:45	06/16/23
L2334618-02	RMW-1	WATER	27-50 1ST STREET, ASTORIA, NY	06/16/23 10:40	06/16/23
L2334618-03	RMW-4	WATER	27-50 1ST STREET, ASTORIA, NY	06/16/23 12:20	06/16/23

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics by SIM

The WG1793608-1 Method Blank, associated with L2334618-03, has concentrations above the reporting limit for Naphthalene and 2-Methylnaphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 06/26/23

ORGANICS

VOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01 D2
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/23/23 09:58
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	410		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	114		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01 **D**
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/21/23 20:20
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	54		ug/l	1.0	0.32	2
Toluene	5.5		ug/l	5.0	1.4	2
Ethylbenzene	160		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01 **D**
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	68		ug/l	5.0	1.4	2
o-Xylene	50		ug/l	5.0	1.4	2
Xylenes, Total	120		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	74		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	17		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	ND		ug/l	5.0	1.4	2
sec-Butylbenzene	1.8	J	ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	48		ug/l	5.0	1.4	2
p-Isopropyltoluene	13		ug/l	5.0	1.4	2
n-Propylbenzene	7.1		ug/l	5.0	1.4	2

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01 **D**
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	8.6		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	74		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	8.9		ug/l	4.0	1.4	2
p-Ethyltoluene	38		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	9.0		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/23/23 09:11
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.8	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	115		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/21/23 21:08
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	0.94	J	ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.4	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	1.6	J	ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/21/23 19:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1795200-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/21/23 19:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1795200-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/21/23 19:08
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1795200-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/23/23 08:48
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795400-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/23/23 08:48
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795400-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/23/23 08:48
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795400-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	115		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1795200-3 WG1795200-4								
Methylene chloride	92		96		70-130	4		20
1,1-Dichloroethane	92		96		70-130	4		20
Chloroform	95		96		70-130	1		20
Carbon tetrachloride	93		97		63-132	4		20
1,2-Dichloropropane	93		98		70-130	5		20
Dibromochloromethane	89		93		63-130	4		20
1,1,2-Trichloroethane	87		94		70-130	8		20
Tetrachloroethene	92		93		70-130	1		20
Chlorobenzene	92		91		75-130	1		20
Trichlorofluoromethane	93		98		62-150	5		20
1,2-Dichloroethane	92		99		70-130	7		20
1,1,1-Trichloroethane	94		97		67-130	3		20
Bromodichloromethane	92		96		67-130	4		20
trans-1,3-Dichloropropene	90		94		70-130	4		20
cis-1,3-Dichloropropene	93		96		70-130	3		20
1,1-Dichloropropene	94		96		70-130	2		20
Bromoform	84		92		54-136	9		20
1,1,2,2-Tetrachloroethane	84		98		67-130	15		20
Benzene	92		95		70-130	3		20
Toluene	89		91		70-130	2		20
Ethylbenzene	90		92		70-130	2		20
Chloromethane	88		93		64-130	6		20
Bromomethane	72		82		39-139	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1795200-3 WG1795200-4								
Vinyl chloride	88		92		55-140	4		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	87		94		61-145	8		20
trans-1,2-Dichloroethene	91		94		70-130	3		20
Trichloroethene	85		86		70-130	1		20
1,2-Dichlorobenzene	88		91		70-130	3		20
1,3-Dichlorobenzene	90		90		70-130	0		20
1,4-Dichlorobenzene	90		90		70-130	0		20
Methyl tert butyl ether	88		97		63-130	10		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	93		94		70-130	1		20
Dibromomethane	92		97		70-130	5		20
1,2,3-Trichloropropane	79		90		64-130	13		20
Acrylonitrile	88		100		70-130	13		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	74		77		36-147	4		20
Acetone	84		100		58-148	17		20
Carbon disulfide	89		93		51-130	4		20
2-Butanone	81		100		63-138	21	Q	20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	81		99		59-130	20		20
2-Hexanone	78		98		57-130	23	Q	20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1795200-3 WG1795200-4								
Bromochloromethane	95		100		70-130	5		20
2,2-Dichloropropane	95		100		63-133	5		20
1,2-Dibromoethane	87		94		70-130	8		20
1,3-Dichloropropane	88		94		70-130	7		20
1,1,1,2-Tetrachloroethane	90		91		64-130	1		20
Bromobenzene	89		91		70-130	2		20
n-Butylbenzene	90		91		53-136	1		20
sec-Butylbenzene	90		90		70-130	0		20
tert-Butylbenzene	87		89		70-130	2		20
o-Chlorotoluene	89		90		70-130	1		20
p-Chlorotoluene	88		89		70-130	1		20
1,2-Dibromo-3-chloropropane	80		96		41-144	18		20
Hexachlorobutadiene	90		90		63-130	0		20
Isopropylbenzene	89		90		70-130	1		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	73		91		70-130	22	Q	20
n-Propylbenzene	89		90		69-130	1		20
1,2,3-Trichlorobenzene	81		93		70-130	14		20
1,2,4-Trichlorobenzene	83		89		70-130	7		20
1,3,5-Trimethylbenzene	89		90		64-130	1		20
1,2,4-Trimethylbenzene	90		89		70-130	1		20
1,4-Dioxane	82		102		56-162	22	Q	20
p-Diethylbenzene	90		90		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1795200-3 WG1795200-4								
p-Ethyltoluene	90		90		70-130	0		20
1,2,4,5-Tetramethylbenzene	85		87		70-130	2		20
Ethyl ether	87		90		59-134	3		20
trans-1,4-Dichloro-2-butene	80		88		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		106		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	98		100		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795400-3 WG1795400-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	95		93		70-130	2		20
Dibromochloromethane	100		97		63-130	3		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Tetrachloroethene	120		120		70-130	0		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	120		120		62-150	0		20
1,2-Dichloroethane	98		96		70-130	2		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	97		93		67-130	4		20
trans-1,3-Dichloropropene	90		86		70-130	5		20
cis-1,3-Dichloropropene	94		92		70-130	2		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	90		85		54-136	6		20
1,1,2,2-Tetrachloroethane	85		82		67-130	4		20
Benzene	100		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	95		92		64-130	3		20
Bromomethane	98		98		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795400-3 WG1795400-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	120		120		61-145	0		20
trans-1,2-Dichloroethene	120		110		70-130	9		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	94		92		63-130	2		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		110		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	100		98		70-130	2		20
1,2,3-Trichloropropane	83		80		64-130	4		20
Acrylonitrile	80		79		70-130	1		20
Styrene	110		105		70-130	5		20
Dichlorodifluoromethane	140		140		36-147	0		20
Acetone	62		62		58-148	0		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	68		67		63-138	1		20
Vinyl acetate	97		93		70-130	4		20
4-Methyl-2-pentanone	72		68		59-130	6		20
2-Hexanone	66		66		57-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795400-3 WG1795400-4								
Bromochloromethane	120		110		70-130	9		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	100		98		70-130	2		20
1,3-Dichloropropane	93		90		70-130	3		20
1,1,1,2-Tetrachloroethane	110		100		64-130	10		20
Bromobenzene	110		100		70-130	10		20
n-Butylbenzene	98		94		53-136	4		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	97		94		70-130	3		20
p-Chlorotoluene	96		94		70-130	2		20
1,2-Dibromo-3-chloropropane	82		78		41-144	5		20
Hexachlorobutadiene	120		110		63-130	9		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	86		85		70-130	1		20
n-Propylbenzene	100		97		69-130	3		20
1,2,3-Trichlorobenzene	97		96		70-130	1		20
1,2,4-Trichlorobenzene	100		98		70-130	2		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	99		96		70-130	3		20
1,4-Dioxane	98		88		56-162	11		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795400-3 WG1795400-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	99		97		70-130	2		20
Ethyl ether	94		93		59-134	1		20
trans-1,4-Dichloro-2-butene	70		69	Q	70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		102		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	113		113		70-130

SEMIVOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/21/23 23:37
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/21/23 08:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.8	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	38		15-120
2,4,6-Tribromophenol	48		10-120
4-Terphenyl-d14	39	Q	41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/24/23 15:06
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/23/23 12:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	72		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	6.4		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	26		ug/l	0.10	0.05	1
Benzo(a)anthracene	5.5		ug/l	0.10	0.02	1
Benzo(a)pyrene	3.1		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	2.2		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.56		ug/l	0.10	0.01	1
Chrysene	6.6		ug/l	0.10	0.01	1
Acenaphthylene	5.5		ug/l	0.10	0.01	1
Anthracene	20		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.79		ug/l	0.10	0.01	1
Fluorene	23		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	0.57		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.83		ug/l	0.10	0.01	1
Pyrene	16		ug/l	0.10	0.02	1
Pentachlorophenol	0.39	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	132	Q	10-120
4-Terphenyl-d14	80		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01 **D**
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/26/23 14:36
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/23/23 12:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Phenanthrene	140		ug/l	0.50	0.12	5
2-Methylnaphthalene	160		ug/l	0.50	0.11	5

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/22/23 00:01
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/21/23 08:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.8		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	8.5	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	46		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/24/23 15:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/23/23 12:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	1.9		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	1.1		ug/l	0.10	0.02	1
Benzo(a)pyrene	1.6		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	1.9		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.57		ug/l	0.10	0.01	1
Chrysene	1.1		ug/l	0.10	0.01	1
Acenaphthylene	0.35		ug/l	0.10	0.01	1
Anthracene	0.24		ug/l	0.10	0.01	1
Benzo(ghi)perylene	1.2		ug/l	0.10	0.01	1
Fluorene	0.06	J	ug/l	0.10	0.01	1
Phenanthrene	0.74		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.30		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	1.2		ug/l	0.10	0.01	1
Pyrene	1.9		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	107		10-120
4-Terphenyl-d14	60		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/22/23 00:25
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 06/21/23 08:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	57		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/22/23 18:37
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/21/23 08:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.13		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Anthracene	0.38		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	JB	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	57		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1793607-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1793607-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	0.73	J	ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/20/23 20:58
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1793607-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	57		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/21/23 14:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1793608-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.40		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.81		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/21/23 14:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/20/23 08:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1793608-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	73		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/24/23 13:42
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/23/23 12:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1795397-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	0.05	J	ug/l	0.80	0.01
Hexachlorobenzene	0.01	J	ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/24/23 13:42
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/23/23 12:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1795397-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	120		10-120
4-Terphenyl-d14	73		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1793607-2 WG1793607-3								
Acenaphthene	64		78		37-111	20		30
1,2,4-Trichlorobenzene	60		73		39-98	20		30
Hexachlorobenzene	55		67		40-140	20		30
Bis(2-chloroethyl)ether	60		73		40-140	20		30
2-Chloronaphthalene	58		71		40-140	20		30
1,2-Dichlorobenzene	63		78		40-140	21		30
1,3-Dichlorobenzene	62		76		40-140	20		30
1,4-Dichlorobenzene	63		76		36-97	19		30
3,3'-Dichlorobenzidine	56		63		40-140	12		30
2,4-Dinitrotoluene	73		90		48-143	21		30
2,6-Dinitrotoluene	63		79		40-140	23		30
Fluoranthene	62		79		40-140	24		30
4-Chlorophenyl phenyl ether	59		71		40-140	18		30
4-Bromophenyl phenyl ether	54		64		40-140	17		30
Bis(2-chloroisopropyl)ether	83		101		40-140	20		30
Bis(2-chloroethoxy)methane	64		75		40-140	16		30
Hexachlorobutadiene	44		53		40-140	19		30
Hexachlorocyclopentadiene	44		58		40-140	27		30
Hexachloroethane	67		78		40-140	15		30
Isophorone	54		64		40-140	17		30
Naphthalene	59		73		40-140	21		30
Nitrobenzene	63		73		40-140	15		30
NDPA/DPA	62		75		40-140	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1793607-2 WG1793607-3								
n-Nitrosodi-n-propylamine	55		66		29-132	18		30
Bis(2-ethylhexyl)phthalate	90		100		40-140	11		30
Butyl benzyl phthalate	79		99		40-140	22		30
Di-n-butylphthalate	77		92		40-140	18		30
Di-n-octylphthalate	86		99		40-140	14		30
Diethyl phthalate	72		88		40-140	20		30
Dimethyl phthalate	63		75		40-140	17		30
Benzo(a)anthracene	67		80		40-140	18		30
Benzo(a)pyrene	75		90		40-140	18		30
Benzo(b)fluoranthene	66		81		40-140	20		30
Benzo(k)fluoranthene	77		90		40-140	16		30
Chrysene	68		81		40-140	17		30
Acenaphthylene	61		74		45-123	19		30
Anthracene	67		82		40-140	20		30
Benzo(ghi)perylene	82		100		40-140	20		30
Fluorene	64		79		40-140	21		30
Phenanthrene	68		84		40-140	21		30
Dibenzo(a,h)anthracene	79		98		40-140	21		30
Indeno(1,2,3-cd)pyrene	76		96		40-140	23		30
Pyrene	64		78		26-127	20		30
Biphenyl	55		67		40-140	20		30
4-Chloroaniline	52		58		40-140	11		30
2-Nitroaniline	64		80		52-143	22		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1793607-2 WG1793607-3								
3-Nitroaniline	68		85		25-145	22		30
4-Nitroaniline	73		92		51-143	23		30
Dibenzofuran	65		81		40-140	22		30
2-Methylnaphthalene	64		76		40-140	17		30
1,2,4,5-Tetrachlorobenzene	44		52		2-134	17		30
Acetophenone	55		65		39-129	17		30
2,4,6-Trichlorophenol	54		67		30-130	21		30
p-Chloro-m-cresol	59		72		23-97	20		30
2-Chlorophenol	67		84		27-123	23		30
2,4-Dichlorophenol	64		79		30-130	21		30
2,4-Dimethylphenol	61		72		30-130	17		30
2-Nitrophenol	74		92		30-130	22		30
4-Nitrophenol	72		89	Q	10-80	21		30
2,4-Dinitrophenol	62		68		20-130	9		30
4,6-Dinitro-o-cresol	68		89		20-164	27		30
Pentachlorophenol	53		70		9-103	28		30
Phenol	46		55		12-110	18		30
2-Methylphenol	58		72		30-130	22		30
3-Methylphenol/4-Methylphenol	66		76		30-130	14		30
2,4,5-Trichlorophenol	55		69		30-130	23		30
Benzoic Acid	63		78		10-164	21		30
Benzyl Alcohol	52		60		26-116	14		30
Carbazole	73		88		55-144	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1793607-2 WG1793607-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		68		21-120
Phenol-d6	46		53		10-120
Nitrobenzene-d5	63		79		23-120
2-Fluorobiphenyl	55		64		15-120
2,4,6-Tribromophenol	65		78		10-120
4-Terphenyl-d14	58		72		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1793608-2 WG1793608-3								
Acenaphthene	66		78		40-140	17		40
2-Chloronaphthalene	76		92		40-140	19		40
Fluoranthene	71		87		40-140	20		40
Hexachlorobutadiene	81		96		40-140	17		40
Naphthalene	64		78		40-140	20		40
Benzo(a)anthracene	75		90		40-140	18		40
Benzo(a)pyrene	79		94		40-140	17		40
Benzo(b)fluoranthene	72		89		40-140	21		40
Benzo(k)fluoranthene	84		96		40-140	13		40
Chrysene	68		82		40-140	19		40
Acenaphthylene	79		94		40-140	17		40
Anthracene	68		82		40-140	19		40
Benzo(ghi)perylene	73		84		40-140	14		40
Fluorene	71		85		40-140	18		40
Phenanthrene	63		78		40-140	21		40
Dibenzo(a,h)anthracene	74		86		40-140	15		40
Indeno(1,2,3-cd)pyrene	72		84		40-140	15		40
Pyrene	71		86		40-140	19		40
2-Methylnaphthalene	72		86		40-140	18		40
Pentachlorophenol	80		100		40-140	22		40
Hexachlorobenzene	70		104		40-140	39		40
Hexachloroethane	63		77		40-140	20		40

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1793608-2 WG1793608-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		72		21-120
Phenol-d6	56		66		10-120
Nitrobenzene-d5	85		102		23-120
2-Fluorobiphenyl	77		94		15-120
2,4,6-Tribromophenol	96		110		10-120
4-Terphenyl-d14	72		86		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1795397-2 WG1795397-3								
Acenaphthene	77		77		40-140	0		40
2-Chloronaphthalene	74		71		40-140	4		40
Fluoranthene	79		79		40-140	0		40
Hexachlorobutadiene	78		74		40-140	5		40
Naphthalene	71		69		40-140	3		40
Benzo(a)anthracene	89		90		40-140	1		40
Benzo(a)pyrene	92		92		40-140	0		40
Benzo(b)fluoranthene	87		84		40-140	4		40
Benzo(k)fluoranthene	86		87		40-140	1		40
Chrysene	82		84		40-140	2		40
Acenaphthylene	81		78		40-140	4		40
Anthracene	84		84		40-140	0		40
Benzo(ghi)perylene	84		88		40-140	5		40
Fluorene	80		78		40-140	3		40
Phenanthrene	76		77		40-140	1		40
Dibenzo(a,h)anthracene	81		86		40-140	6		40
Indeno(1,2,3-cd)pyrene	85		88		40-140	3		40
Pyrene	77		77		40-140	0		40
2-Methylnaphthalene	74		71		40-140	4		40
Pentachlorophenol	97		94		40-140	3		40
Hexachlorobenzene	83		82		40-140	1		40
Hexachloroethane	76		72		40-140	5		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1795397-2 WG1795397-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		64		21-120
Phenol-d6	58		59		10-120
Nitrobenzene-d5	91		89		23-120
2-Fluorobiphenyl	70		67		15-120
2,4,6-Tribromophenol	113		108		10-120
4-Terphenyl-d14	60		59		41-149

PCBS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/22/23 13:25
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 00:28
Cleanup Method: EPA 3665A
Cleanup Date: 06/22/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/22/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/22/23 13:32
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 00:28
Cleanup Method: EPA 3665A
Cleanup Date: 06/22/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/22/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	0.178		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	0.178		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/22/23 13:40
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 00:28
Cleanup Method: EPA 3665A
Cleanup Date: 06/22/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/22/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	112		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/22/23 11:34
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 00:26
Cleanup Method: EPA 3665A
Cleanup Date: 06/22/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/22/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1794552-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	109		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	97		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1794552-2 WG1794552-3									
Aroclor 1016	83		76		40-140	8		50	A
Aroclor 1260	91		81		40-140	12		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		75		30-150	A
Decachlorobiphenyl	106		93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		72		30-150	B
Decachlorobiphenyl	99		90		30-150	B

PESTICIDES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 18:36
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 05:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
Client ID: RMW-5
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 14:37
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/20/23 04:25

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	130		30-150	A
DCAA	101		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/23/23 11:22
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 05:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	0.013	JIP	ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.039		ug/l	0.029	0.003	1	B
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	0.007	J	ug/l	0.014	0.005	1	A
trans-Chlordane	0.014	J	ug/l	0.014	0.004	1	B
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 14:55
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/20/23 04:25

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	80		30-150	A
DCAA	79		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/22/23 18:59
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 05:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/21/23 15:14
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/20/23 04:25

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	64		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/21/23 08:10
Analyst: MMG

Extraction Method: EPA 8151A
Extraction Date: 06/19/23 21:47

Methylation Date: 06/20/23 22:50

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1793400-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	51		30-150	A
DCAA	50		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/22/23 18:02
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 05:14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1794591-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/22/23 18:02
Analyst: AKM

Extraction Method: EPA 3510C
Extraction Date: 06/22/23 05:14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1794591-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	69		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1793400-2 WG1793400-3									
2,4-D	118		116		30-150	2		25	A
2,4,5-T	99		107		30-150	8		25	A
2,4,5-TP (Silvex)	122		126		30-150	3		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	90		93		30-150	A
DCAA	97		101		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1794591-2 WG1794591-3									
Delta-BHC	79		69		30-150	13		20	A
Lindane	78		66		30-150	17		20	A
Alpha-BHC	82		71		30-150	14		20	A
Beta-BHC	86		72		30-150	18		20	A
Heptachlor	82		71		30-150	14		20	A
Aldrin	77		67		30-150	15		20	A
Heptachlor epoxide	75		65		30-150	13		20	A
Endrin	76		65		30-150	16		20	A
Endrin aldehyde	70		59		30-150	16		20	A
Endrin ketone	84		73		30-150	14		20	A
Dieldrin	80		69		30-150	15		20	A
4,4'-DDE	73		63		30-150	15		20	A
4,4'-DDD	84		73		30-150	15		20	A
4,4'-DDT	90		79		30-150	13		20	A
Endosulfan I	75		64		30-150	16		20	A
Endosulfan II	80		69		30-150	15		20	A
Endosulfan sulfate	75		64		30-150	15		20	A
Methoxychlor	103		89		30-150	15		20	A
cis-Chlordane	78		67		30-150	15		20	A
trans-Chlordane	93		82		30-150	13		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1794591-2 WG1794591-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		62		30-150	A
Decachlorobiphenyl	84		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		60		30-150	B
Decachlorobiphenyl	73		62		30-150	B

METALS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-01
 Client ID: RMW-5
 Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 08:45
 Date Received: 06/16/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.227		mg/l	0.0100	0.00327	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00106	J	mg/l	0.00400	0.00042	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00267		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Barium, Total	0.1111		mg/l	0.00050	0.00017	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Calcium, Total	83.0		mg/l	0.100	0.0394	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00157		mg/l	0.00100	0.00017	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00074		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Copper, Total	0.00291		mg/l	0.00100	0.00038	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Iron, Total	0.272		mg/l	0.0500	0.0191	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Lead, Total	0.00124		mg/l	0.00100	0.00034	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Magnesium, Total	27.5		mg/l	0.0700	0.0242	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Manganese, Total	0.1860		mg/l	0.00100	0.00044	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/21/23 16:50	06/23/23 11:48	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00714		mg/l	0.00200	0.00055	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Potassium, Total	42.8		mg/l	0.100	0.0309	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Sodium, Total	282.		mg/l	0.100	0.0293	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.01109		mg/l	0.00500	0.00157	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/21/23 15:21	06/23/23 10:14	EPA 3005A	1,6020B	SMV



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-02
Client ID: RMW-1
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 10:40
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	46.2		mg/l	0.0100	0.00327	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00182	J	mg/l	0.00400	0.00042	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.01816		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Barium, Total	0.9293		mg/l	0.00050	0.00017	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00228		mg/l	0.00050	0.00010	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00196		mg/l	0.00020	0.00005	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Calcium, Total	508.		mg/l	0.500	0.197	5	06/21/23 15:21	06/23/23 10:50	EPA 3005A	1,6020B	SMV
Chromium, Total	0.09557		mg/l	0.00100	0.00017	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.05100		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Copper, Total	0.3162		mg/l	0.00100	0.00038	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Iron, Total	62.5		mg/l	0.0500	0.0191	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Lead, Total	2.735		mg/l	0.00100	0.00034	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Magnesium, Total	92.0		mg/l	0.0700	0.0242	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Manganese, Total	3.480		mg/l	0.00100	0.00044	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Mercury, Total	0.00644		mg/l	0.00020	0.00009	1	06/21/23 16:50	06/23/23 11:52	EPA 7470A	1,7470A	DMB
Nickel, Total	0.07388		mg/l	0.00200	0.00055	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Potassium, Total	53.7		mg/l	0.100	0.0309	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Selenium, Total	0.0318		mg/l	0.00500	0.00173	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Silver, Total	0.00071		mg/l	0.00040	0.00016	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Sodium, Total	455.		mg/l	0.500	0.146	5	06/21/23 15:21	06/23/23 10:50	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00061	J	mg/l	0.00100	0.00014	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.1585		mg/l	0.00500	0.00157	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV
Zinc, Total	0.7480		mg/l	0.01000	0.00341	1	06/21/23 15:21	06/23/23 10:18	EPA 3005A	1,6020B	SMV



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

SAMPLE RESULTS

Lab ID: L2334618-03
Client ID: RMW-4
Sample Location: 27-50 1ST STREET, ASTORIA, NY

Date Collected: 06/16/23 12:20
Date Received: 06/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.130		mg/l	0.0100	0.00327	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00114	J	mg/l	0.00400	0.00042	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00111		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Barium, Total	0.09686		mg/l	0.00050	0.00017	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Calcium, Total	319.		mg/l	0.100	0.0394	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00088	J	mg/l	0.00100	0.00017	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00103		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Copper, Total	0.00334		mg/l	0.00100	0.00038	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Iron, Total	0.233		mg/l	0.0500	0.0191	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Lead, Total	0.00108		mg/l	0.00100	0.00034	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Magnesium, Total	194.		mg/l	0.0700	0.0242	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Manganese, Total	0.1608		mg/l	0.00100	0.00044	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/21/23 16:50	06/23/23 11:55	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00335		mg/l	0.00200	0.00055	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Potassium, Total	67.8		mg/l	0.100	0.0309	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Selenium, Total	0.0246		mg/l	0.00500	0.00173	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Sodium, Total	812.		mg/l	1.00	0.293	10	06/21/23 15:21	06/23/23 10:54	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.00171	J	mg/l	0.00500	0.00157	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/21/23 15:21	06/23/23 10:23	EPA 3005A	1,6020B	SMV



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1793754-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/21/23 15:21	06/23/23 09:47	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1793755-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/21/23 16:50	06/23/23 11:23	1,7470A	DMB



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1793754-2								
Aluminum, Total	102		-		80-120	-		
Antimony, Total	87		-		80-120	-		
Arsenic, Total	100		-		80-120	-		
Barium, Total	100		-		80-120	-		
Beryllium, Total	107		-		80-120	-		
Cadmium, Total	101		-		80-120	-		
Calcium, Total	83		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Cobalt, Total	100		-		80-120	-		
Copper, Total	103		-		80-120	-		
Iron, Total	106		-		80-120	-		
Lead, Total	102		-		80-120	-		
Magnesium, Total	95		-		80-120	-		
Manganese, Total	99		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Potassium, Total	96		-		80-120	-		
Selenium, Total	95		-		80-120	-		
Silver, Total	96		-		80-120	-		
Sodium, Total	96		-		80-120	-		
Thallium, Total	104		-		80-120	-		
Vanadium, Total	97		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1793754-2					
Zinc, Total	100	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1793755-2					
Mercury, Total	113	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03			QC Batch ID: WG1793754-3		WG1793754-4		QC Sample: L2332397-01		Client ID: MS Sample			
Aluminum, Total	0.167	2	2.32	108		2.27	105		75-125	2		20
Antimony, Total	ND	0.5	0.5043	101		0.4834	97		75-125	4		20
Arsenic, Total	0.03852	0.12	0.1658	106		0.1590	100		75-125	4		20
Barium, Total	0.7292	2	2.765	102		2.689	98		75-125	3		20
Beryllium, Total	ND	0.05	0.05468	109		0.05267	105		75-125	4		20
Cadmium, Total	ND	0.053	0.05408	102		0.05354	101		75-125	1		20
Calcium, Total	131	10	132	10	Q	130	0	Q	75-125	2		20
Chromium, Total	0.0005J	0.2	0.2052	103		0.1995	100		75-125	3		20
Cobalt, Total	0.0005J	0.5	0.5094	102		0.4967	99		75-125	3		20
Copper, Total	0.0010J	0.25	0.2606	104		0.2530	101		75-125	3		20
Iron, Total	54.9	1	52.4	0	Q	51.3	0	Q	75-125	2		20
Lead, Total	0.0006J	0.53	0.5253	99		0.5145	97		75-125	2		20
Magnesium, Total	23.7	10	33.5	98		33.0	93		75-125	2		20
Manganese, Total	5.718	0.5	5.742	5	Q	5.578	0	Q	75-125	3		20
Nickel, Total	0.0007J	0.5	0.5048	101		0.4924	98		75-125	2		20
Potassium, Total	5.56	10	15.5	99		15.0	94		75-125	3		20
Selenium, Total	ND	0.12	0.119	99		0.117	98		75-125	2		20
Silver, Total	ND	0.05	0.04831	97		0.04757	95		75-125	2		20
Sodium, Total	23.0	10	32.3	93		32.0	90		75-125	1		20
Thallium, Total	0.0002J	0.12	0.1129	94		0.1108	92		75-125	2		20
Vanadium, Total	ND	0.5	0.5102	102		0.4932	99		75-125	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03			QC Batch ID: WG1793754-3		WG1793754-4	QC Sample: L2332397-01		Client ID: MS Sample	
Zinc, Total	0.0034J	0.5	0.5116	102	0.4993	100	75-125	2	20
Total Metals - Mansfield Lab Associated sample(s): 01-03			QC Batch ID: WG1793755-3		QC Sample: L2331318-26		Client ID: MS Sample		
Mercury, Total	0.00419	0.005	0.00937	104	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1793755-4 QC Sample: L2331318-26 Client ID: DUP Sample						
Mercury, Total	0.00419	0.00413	mg/l	1		20

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Serial Dilution
Analysis
Batch Quality Control

Lab Number: L2334618
Report Date: 06/26/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1793754-6 QC Sample: L2332397-01 Client ID: DUP Sample						
Arsenic, Total	0.03852	0.04004	mg/l	4		20



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618**Report Date:** 06/26/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334618-01A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-01B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-01C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),MG-6020T(180),HG-T(28),AG-6020T(180),CD-6020T(180),CO-6020T(180)
L2334618-01E	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-01F	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-01G	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-01H	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-01I	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-01J	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-01K	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)
L2334618-01L	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)
L2334618-02A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-02B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-02C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-02D	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),CA-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)

Project Name: HLP 4/5**Lab Number:** L2334618**Project Number:** 1338.0013Y000**Report Date:** 06/26/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2334618-02E	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-02F	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-02G	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-02H	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-02I	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-02J	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-02K	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)
L2334618-02L	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)
L2334618-03A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-03B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-03C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260(14)
L2334618-03D	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),AG-6020T(180),MG-6020T(180),HG-T(28),CD-6020T(180),AL-6020T(180),CO-6020T(180)
L2334618-03E	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-03F	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8082-LVI(365)
L2334618-03G	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-03H	Amber 120ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8081(7)
L2334618-03I	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-03J	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2334618-03K	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)
L2334618-03L	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		HERB-APA(7)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2334618
Report Date: 06/26/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 20

Published Date: 6/16/2023 4:52:28 PM

Page 1 of 1

Certification Information**The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B**The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

[illegible]



ANALYTICAL REPORT

Lab Number:	L2335648
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Rachel Miller
Phone:	(631) 630-2436
Project Name:	HLP 4/5
Project Number:	1338.0013Y000
Report Date:	07/06/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2335648-01	LB-1A	WATER	ASTORIA, NY	06/21/23 13:35	06/21/23
L2335648-02	LB-12B	WATER	ASTORIA, NY	06/21/23 15:50	06/21/23

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Case Narrative (continued)

Report Submission

July 06, 2023: This final report includes the results of all requested analyses.

June 28, 2023: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Metals

L2335648-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 07/06/23

ORGANICS

VOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/23/23 20:27
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	1.0	J	ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	109		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/23/23 20:51
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	2.4		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.57		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.2	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	1.2	J	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/23/23 20:04
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1796738-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/23/23 20:04
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1796738-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/23/23 20:04
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1796738-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1796738-3 WG1796738-4								
Methylene chloride	90		92		70-130	2		20
1,1-Dichloroethane	92		92		70-130	0		20
Chloroform	95		96		70-130	1		20
Carbon tetrachloride	96		97		63-132	1		20
1,2-Dichloropropane	84		85		70-130	1		20
Dibromochloromethane	92		94		63-130	2		20
1,1,2-Trichloroethane	90		92		70-130	2		20
Tetrachloroethene	120		110		70-130	9		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	87		88		70-130	1		20
1,1,1-Trichloroethane	100		99		67-130	1		20
Bromodichloromethane	84		86		67-130	2		20
trans-1,3-Dichloropropene	83		84		70-130	1		20
cis-1,3-Dichloropropene	82		82		70-130	0		20
1,1-Dichloropropene	95		95		70-130	0		20
Bromoform	85		86		54-136	1		20
1,1,2,2-Tetrachloroethane	81		83		67-130	2		20
Benzene	89		88		70-130	1		20
Toluene	98		99		70-130	1		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	82		79		64-130	4		20
Bromomethane	70		73		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1796738-3 WG1796738-4								
Vinyl chloride	98		94		55-140	4		20
Chloroethane	96		90		55-138	6		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	97		96		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	82		84		63-130	2		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	98		98		70-130	0		20
Dibromomethane	90		91		70-130	1		20
1,2,3-Trichloropropane	78		80		64-130	3		20
Acrylonitrile	72		73		70-130	1		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	63		59		58-148	7		20
Carbon disulfide	96		95		51-130	1		20
2-Butanone	65		65		63-138	0		20
Vinyl acetate	84		81		70-130	4		20
4-Methyl-2-pentanone	65		69		59-130	6		20
2-Hexanone	66		65		57-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1796738-3 WG1796738-4								
Bromochloromethane	100		110		70-130	10		20
2,2-Dichloropropane	97		96		63-133	1		20
1,2-Dibromoethane	95		95		70-130	0		20
1,3-Dichloropropane	88		88		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	93		94		53-136	1		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	93		93		70-130	0		20
p-Chlorotoluene	93		94		70-130	1		20
1,2-Dibromo-3-chloropropane	74		80		41-144	8		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	98		98		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	97		88		70-130	10		20
n-Propylbenzene	96		97		69-130	1		20
1,2,3-Trichlorobenzene	94		96		70-130	2		20
1,2,4-Trichlorobenzene	96		99		70-130	3		20
1,3,5-Trimethylbenzene	99		99		64-130	0		20
1,2,4-Trimethylbenzene	96		96		70-130	0		20
1,4-Dioxane	86		80		56-162	7		20
p-Diethylbenzene	98		98		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1796738-3 WG1796738-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	96		96		70-130	0		20
Ethyl ether	83		80		59-134	4		20
trans-1,4-Dichloro-2-butene	63	Q	64	Q	70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	108		108		70-130

SEMIVOLATILES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/26/23 01:13
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	9.6	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	68		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/26/23 16:32
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.21		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.68		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.14		ug/l	0.10	0.01	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.08	J	ug/l	0.10	0.01	1
Phenanthrene	0.35		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.15		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.18		ug/l	0.10	0.02	1
Pentachlorophenol	0.06	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	69		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/26/23 01:35
Analyst: LJG

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	53		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/26/23 16:49
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	0.12		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.07	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	58		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/25/23 21:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795790-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/25/23 21:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795790-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/25/23 21:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1795790-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	49		41-149

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/26/23 14:20
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1795792-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	0.06	J	ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/26/23 14:20
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 19:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1795792-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	54		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795790-2 WG1795790-3								
Acenaphthene	64		51		37-111	23		30
1,2,4-Trichlorobenzene	76		57		39-98	29		30
Hexachlorobenzene	74		60		40-140	21		30
Bis(2-chloroethyl)ether	63		52		40-140	19		30
2-Chloronaphthalene	71		56		40-140	24		30
1,2-Dichlorobenzene	69		58		40-140	17		30
1,3-Dichlorobenzene	66		53		40-140	22		30
1,4-Dichlorobenzene	67		55		36-97	20		30
3,3'-Dichlorobenzidine	48		52		40-140	8		30
2,4-Dinitrotoluene	72		57		48-143	23		30
2,6-Dinitrotoluene	74		63		40-140	16		30
Fluoranthene	66		57		40-140	15		30
4-Chlorophenyl phenyl ether	71		57		40-140	22		30
4-Bromophenyl phenyl ether	73		60		40-140	20		30
Bis(2-chloroisopropyl)ether	50		41		40-140	20		30
Bis(2-chloroethoxy)methane	64		49		40-140	27		30
Hexachlorobutadiene	70		63		40-140	11		30
Hexachlorocyclopentadiene	72		58		40-140	22		30
Hexachloroethane	68		57		40-140	18		30
Isophorone	67		54		40-140	21		30
Naphthalene	65		53		40-140	20		30
Nitrobenzene	69		59		40-140	16		30
NDPA/DPA	61		56		40-140	9		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795790-2 WG1795790-3								
n-Nitrosodi-n-propylamine	71		55		29-132	25		30
Bis(2-ethylhexyl)phthalate	80		67		40-140	18		30
Butyl benzyl phthalate	70		62		40-140	12		30
Di-n-butylphthalate	68		61		40-140	11		30
Di-n-octylphthalate	72		63		40-140	13		30
Diethyl phthalate	71		58		40-140	20		30
Dimethyl phthalate	75		62		40-140	19		30
Benzo(a)anthracene	68		57		40-140	18		30
Benzo(a)pyrene	71		62		40-140	14		30
Benzo(b)fluoranthene	70		56		40-140	22		30
Benzo(k)fluoranthene	65		57		40-140	13		30
Chrysene	67		57		40-140	16		30
Acenaphthylene	78		62		45-123	23		30
Anthracene	63		56		40-140	12		30
Benzo(ghi)perylene	68		55		40-140	21		30
Fluorene	66		56		40-140	16		30
Phenanthrene	62		53		40-140	16		30
Dibenzo(a,h)anthracene	69		54		40-140	24		30
Indeno(1,2,3-cd)pyrene	64		52		40-140	21		30
Pyrene	64		57		26-127	12		30
Biphenyl	67		54		40-140	21		30
4-Chloroaniline	34	Q	47		40-140	32	Q	30
2-Nitroaniline	75		60		52-143	22		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795790-2 WG1795790-3								
3-Nitroaniline	60		51		25-145	16		30
4-Nitroaniline	65		58		51-143	11		30
Dibenzofuran	70		57		40-140	20		30
2-Methylnaphthalene	73		58		40-140	23		30
1,2,4,5-Tetrachlorobenzene	68		56		2-134	19		30
Acetophenone	65		50		39-129	26		30
2,4,6-Trichlorophenol	79		68		30-130	15		30
p-Chloro-m-cresol	76		63		23-97	19		30
2-Chlorophenol	70		54		27-123	26		30
2,4-Dichlorophenol	84		66		30-130	24		30
2,4-Dimethylphenol	71		57		30-130	22		30
2-Nitrophenol	76		64		30-130	17		30
4-Nitrophenol	69		61		10-80	12		30
2,4-Dinitrophenol	83		70		20-130	17		30
4,6-Dinitro-o-cresol	85		73		20-164	15		30
Pentachlorophenol	89		75		9-103	17		30
Phenol	46		40		12-110	14		30
2-Methylphenol	69		58		30-130	17		30
3-Methylphenol/4-Methylphenol	71		59		30-130	18		30
2,4,5-Trichlorophenol	90		71		30-130	24		30
Benzoic Acid	70		63		10-164	11		30
Benzyl Alcohol	69		57		26-116	19		30
Carbazole	65		56		55-144	15		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1795790-2 WG1795790-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	66		55		21-120
Phenol-d6	52		43		10-120
Nitrobenzene-d5	72		60		23-120
2-Fluorobiphenyl	73		61		15-120
2,4,6-Tribromophenol	88		74		10-120
4-Terphenyl-d14	61		55		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1795792-2 WG1795792-3								
Acenaphthene	73		60		40-140	20		40
2-Chloronaphthalene	72		60		40-140	18		40
Fluoranthene	78		66		40-140	17		40
Hexachlorobutadiene	75		63		40-140	17		40
Naphthalene	68		57		40-140	18		40
Benzo(a)anthracene	83		68		40-140	20		40
Benzo(a)pyrene	87		74		40-140	16		40
Benzo(b)fluoranthene	80		67		40-140	18		40
Benzo(k)fluoranthene	80		69		40-140	15		40
Chrysene	76		64		40-140	17		40
Acenaphthylene	78		66		40-140	17		40
Anthracene	77		65		40-140	17		40
Benzo(ghi)perylene	85		72		40-140	17		40
Fluorene	76		64		40-140	17		40
Phenanthrene	70		59		40-140	17		40
Dibenzo(a,h)anthracene	82		70		40-140	16		40
Indeno(1,2,3-cd)pyrene	84		72		40-140	15		40
Pyrene	76		65		40-140	16		40
2-Methylnaphthalene	70		59		40-140	17		40
Pentachlorophenol	85		70		40-140	19		40
Hexachlorobenzene	74		63		40-140	16		40
Hexachloroethane	74		62		40-140	18		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1795792-2 WG1795792-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	70		60		21-120
Phenol-d6	64		55		10-120
Nitrobenzene-d5	95		79		23-120
2-Fluorobiphenyl	70		61		15-120
2,4,6-Tribromophenol	116		101		10-120
4-Terphenyl-d14	65		57		41-149

PCBS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/26/23 09:50
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/25/23 08:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/25/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/25/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/26/23 10:00
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/25/23 08:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/25/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/25/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/26/23 08:54
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/25/23 08:58
Cleanup Method: EPA 3665A
Cleanup Date: 06/25/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/25/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1795846-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	70		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1795846-2 WG1795846-3									
Aroclor 1016	76		70		40-140	8		50	A
Aroclor 1260	74		69		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		66		30-150	A
Decachlorobiphenyl	86		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		59		30-150	B
Decachlorobiphenyl	81		76		30-150	B

PESTICIDES

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/26/23 13:13
Analyst: EJJ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 13:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
Client ID: LB-1A
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/23/23 18:55
Analyst: ER

Extraction Method: EPA 8151A
Extraction Date: 06/23/23 03:41

Methylation Date: 06/23/23 14:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	158	Q	30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/26/23 13:24
Analyst: EJJ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 13:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
Client ID: LB-12B
Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
Date Received: 06/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
 Client ID: LB-12B
 Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
 Date Received: 06/21/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 06/23/23 19:14
 Analyst: ER

Extraction Method: EPA 8151A
 Extraction Date: 06/23/23 03:41

Methylation Date: 06/23/23 14:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	159	Q	30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/25/23 20:14
Analyst: EJL

Extraction Method: EPA 8151A
Extraction Date: 06/23/23 03:41

Methylation Date: 06/23/23 14:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1795128-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A
2,4,5-T	ND		ug/l	2.00	0.531	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	35		30-150	A
DCAA	46		30-150	B

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/26/23 11:43
Analyst: EJJ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 13:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1795747-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/26/23 11:43
Analyst: EJJ

Extraction Method: EPA 3510C
Extraction Date: 06/24/23 13:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1795747-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	73		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1795128-2 WG1795128-3									
2,4-D	70		40		30-150	55	Q	25	A
2,4,5-TP (Silvex)	87		52		30-150	50	Q	25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	49		21	Q	30-150	A
DCAA	65		25	Q	30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1795128-2 WG1795128-3									
2,4,5-T	73		43		30-150	52	Q	25	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	49		21	Q	30-150	A
DCAA	65		25	Q	30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1795747-2 WG1795747-3									
Delta-BHC	71		76		30-150	6		20	A
Lindane	67		70		30-150	5		20	A
Alpha-BHC	69		77		30-150	11		20	A
Beta-BHC	73		78		30-150	7		20	A
Heptachlor	73		76		30-150	5		20	A
Aldrin	67		71		30-150	7		20	A
Heptachlor epoxide	66		71		30-150	7		20	A
Endrin	68		73		30-150	7		20	A
Endrin aldehyde	69		74		30-150	7		20	A
Endrin ketone	80		83		30-150	5		20	A
Dieldrin	72		77		30-150	7		20	A
4,4'-DDE	66		71		30-150	7		20	A
4,4'-DDD	75		80		30-150	6		20	A
4,4'-DDT	81		88		30-150	8		20	A
Endosulfan I	66		71		30-150	7		20	A
Endosulfan II	72		77		30-150	7		20	A
Endosulfan sulfate	70		74		30-150	5		20	A
Methoxychlor	94		101		30-150	7		20	A
cis-Chlordane	68		68		30-150	1		20	A
trans-Chlordane	84		90		30-150	7		20	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1795747-2 WG1795747-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		67		30-150	A
Decachlorobiphenyl	104		97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		65		30-150	B
Decachlorobiphenyl	79		75		30-150	B

METALS

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-01
 Client ID: LB-1A
 Sample Location: ASTORIA, NY

Date Collected: 06/21/23 13:35
 Date Received: 06/21/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0597	J	mg/l	0.100	0.0327	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Antimony, Total	ND		mg/l	0.04000	0.00429	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Arsenic, Total	0.00218	J	mg/l	0.00500	0.00165	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Barium, Total	0.1324		mg/l	0.00500	0.00173	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Calcium, Total	193.		mg/l	1.00	0.394	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Chromium, Total	ND		mg/l	0.01000	0.00178	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Cobalt, Total	0.00295	J	mg/l	0.00500	0.00163	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Copper, Total	0.00737	J	mg/l	0.01000	0.00384	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Iron, Total	4.65		mg/l	0.500	0.191	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Lead, Total	0.01099		mg/l	0.01000	0.00343	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Magnesium, Total	1310		mg/l	0.700	0.242	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Manganese, Total	0.2166		mg/l	0.01000	0.00440	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/27/23 00:15	06/30/23 21:30	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00851	J	mg/l	0.02000	0.00556	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Potassium, Total	208.		mg/l	1.00	0.309	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Selenium, Total	ND		mg/l	0.0500	0.0173	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Silver, Total	ND		mg/l	0.00400	0.00163	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Sodium, Total	12100		mg/l	10.0	2.93	100	06/26/23 22:00	07/06/23 11:51	EPA 3005A	1,6020B	EJF
Thallium, Total	0.00159	J	mg/l	0.01000	0.00143	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF
Zinc, Total	ND		mg/l	0.1000	0.03410	10	06/26/23 22:00	06/29/23 20:27	EPA 3005A	1,6020B	EJF



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

SAMPLE RESULTS

Lab ID: L2335648-02
 Client ID: LB-12B
 Sample Location: ASTORIA, NY

Date Collected: 06/21/23 15:50
 Date Received: 06/21/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0815		mg/l	0.0100	0.00327	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Antimony, Total	0.00281	J	mg/l	0.00400	0.00042	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Arsenic, Total	0.00039	J	mg/l	0.00050	0.00016	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Barium, Total	0.1225		mg/l	0.00050	0.00017	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Calcium, Total	175.		mg/l	0.100	0.0394	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Chromium, Total	0.00117		mg/l	0.00100	0.00017	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Cobalt, Total	0.00073		mg/l	0.00050	0.00016	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Copper, Total	0.00846		mg/l	0.00100	0.00038	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Iron, Total	0.148		mg/l	0.0500	0.0191	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Lead, Total	0.00080	J	mg/l	0.00100	0.00034	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Magnesium, Total	46.8		mg/l	0.0700	0.0242	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Manganese, Total	0.1919		mg/l	0.00100	0.00044	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/27/23 00:15	06/30/23 21:33	EPA 7470A	1,7470A	DMB
Nickel, Total	0.01049		mg/l	0.00200	0.00055	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Potassium, Total	29.5		mg/l	0.100	0.0309	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Selenium, Total	0.00830		mg/l	0.00500	0.00173	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Sodium, Total	181.		mg/l	1.00	0.293	10	06/26/23 22:00	06/30/23 07:53	EPA 3005A	1,6020B	EJF
Thallium, Total	0.00023	J	mg/l	0.00100	0.00014	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Vanadium, Total	0.00391	J	mg/l	0.00500	0.00157	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF
Zinc, Total	0.00532	J	mg/l	0.01000	0.00341	1	06/26/23 22:00	06/29/23 17:26	EPA 3005A	1,6020B	EJF



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1796303-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/26/23 22:00	06/27/23 16:22	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1796309-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/27/23 00:15	06/27/23 14:58	1,7470A	GMG



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1796303-2								
Aluminum, Total	103		-		80-120	-		
Antimony, Total	90		-		80-120	-		
Arsenic, Total	107		-		80-120	-		
Barium, Total	105		-		80-120	-		
Beryllium, Total	105		-		80-120	-		
Cadmium, Total	101		-		80-120	-		
Calcium, Total	88		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Cobalt, Total	99		-		80-120	-		
Copper, Total	100		-		80-120	-		
Iron, Total	106		-		80-120	-		
Lead, Total	101		-		80-120	-		
Magnesium, Total	101		-		80-120	-		
Manganese, Total	100		-		80-120	-		
Nickel, Total	99		-		80-120	-		
Potassium, Total	108		-		80-120	-		
Selenium, Total	103		-		80-120	-		
Silver, Total	101		-		80-120	-		
Sodium, Total	102		-		80-120	-		
Thallium, Total	101		-		80-120	-		
Vanadium, Total	97		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1796303-2					
Zinc, Total	100	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1796309-2					
Mercury, Total	93	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1796303-3			QC Sample: L2333903-05			Client ID: MS Sample			
Aluminum, Total	0.096	2	2.07	99		-	-		75-125	-		20
Antimony, Total	ND	0.5	0.4316	86		-	-		75-125	-		20
Arsenic, Total	0.0003J	0.12	0.1203	100		-	-		75-125	-		20
Barium, Total	0.0020	2	1.980	99		-	-		75-125	-		20
Beryllium, Total	0.0001J	0.05	0.05132	103		-	-		75-125	-		20
Cadmium, Total	ND	0.053	0.05263	99		-	-		75-125	-		20
Calcium, Total	1.06	10	13.2	121		-	-		75-125	-		20
Chromium, Total	0.0002J	0.2	0.1870	94		-	-		75-125	-		20
Cobalt, Total	ND	0.5	0.4927	98		-	-		75-125	-		20
Copper, Total	ND	0.25	0.2480	99		-	-		75-125	-		20
Iron, Total	0.043J	1	1.14	114		-	-		75-125	-		20
Lead, Total	ND	0.53	0.5086	96		-	-		75-125	-		20
Magnesium, Total	0.158	10	9.62	95		-	-		75-125	-		20
Manganese, Total	0.0079	0.5	0.5066	100		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.5004	100		-	-		75-125	-		20
Potassium, Total	0.301	10	10.5	102		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.126	105		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04814	96		-	-		75-125	-		20
Sodium, Total	1.32	10	10.9	96		-	-		75-125	-		20
Thallium, Total	0.0002J	0.12	0.1179	98		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.4773	95		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1796303-3		QC Sample: L2333903-05		Client ID: MS Sample		
Zinc, Total	0.0041J	0.5	0.5075	102	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1796309-3		QC Sample: L2336316-01		Client ID: MS Sample		
Mercury, Total	ND	0.005	0.00453	91	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1796303-4 QC Sample: L2333903-05 Client ID: DUP Sample						
Cadmium, Total	ND	0.00007J	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1796309-4 QC Sample: L2336316-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648**Report Date:** 07/06/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
 A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335648-01A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)
L2335648-01B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)
L2335648-01C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)
L2335648-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		FE-6020T(180),BA-6020T(180),TL-6020T(180),SE-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AG-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2335648-01E	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8082-LVI(365)
L2335648-01F	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8082-LVI(365)
L2335648-01G	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8081(7)
L2335648-01H	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8081(7)
L2335648-01I	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2335648-01J	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2335648-01K	Amber 1000ml unpreserved	A	7	7	4.5	Y	Absent		HERB-APA(7)
L2335648-01L	Amber 1000ml unpreserved	A	7	7	4.5	Y	Absent		HERB-APA(7)
L2335648-02A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)
L2335648-02B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)
L2335648-02C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260(14)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Serial_No: 07062320:08
Lab Number: L2335648
Report Date: 07/06/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2335648-02D	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		SE-6020T(180),BA-6020T(180),TL-6020T(180),FE-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),MG-6020T(180),HG-T(28),AL-6020T(180),CO-6020T(180)
L2335648-02E	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8082-LVI(365)
L2335648-02F	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8082-LVI(365)
L2335648-02G	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8081(7)
L2335648-02H	Amber 120ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8081(7)
L2335648-02I	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2335648-02J	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2335648-02K	Amber 1000ml unpreserved	A	7	7	4.5	Y	Absent		HERB-APA(7)
L2335648-02L	Amber 1000ml unpreserved	A	7	7	4.5	Y	Absent		HERB-APA(7)

Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: HLP 4/5
Project Number: 1338.0013Y000

Lab Number: L2335648
Report Date: 07/06/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 20

Department: **Quality Assurance**

Published Date: 6/16/2023 4:52:28 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Page 76 of 76 Form No. 01-25 HC (rev. 30-Sept-2013)