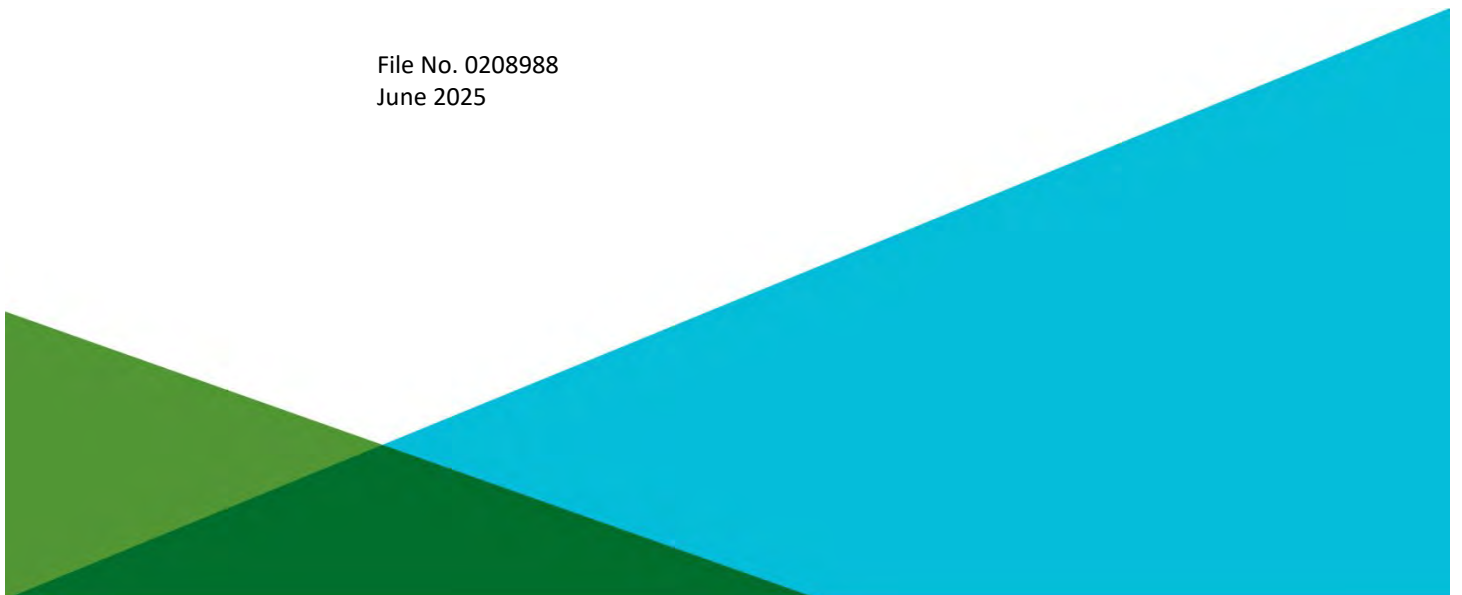


IN-SITU SOLIDIFICATION PILOT STUDY WORK PLAN
FORMER PORT MOBIL – STATEN ISLAND
4101 ARTHUR KILL ROAD
STATEN ISLAND, NEW YORK
SITE NO. 243016
USEPA ID NO. NYD000824516

by
H & A of New York Engineering and Geology, LLP
New York, New York

for
NP Staten Island Industrial, LLC
Kansas City, Missouri

File No. 0208988
June 2025





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**SIGNATURE PAGE FOR
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FORMER PORT MOBIL – STATEN ISLAND
4101 ARTHUR KILL ROAD
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**PREPARED FOR
NP STATEN ISLAND INDUSTRIAL, LLC
KANSAS CITY, MISSOURI**

PREPARED BY:

A handwritten signature in black ink, appearing to read "S Bell", written over a horizontal line.

Suzanne M. Bell, P.E.
Senior Associate
H & A of New York Engineering and Geology, LLP

REVIEWED AND APPROVED BY:

A handwritten signature in black ink, appearing to read "Scott A. Underhill", written over a horizontal line.

Scott A. Underhill, P.E.
Principal
H & A of New York Engineering and Geology, LLP

A handwritten signature in blue ink, appearing to read "James M. Bellew", written over a horizontal line.

James M. Bellew
Principal
H & A of New York Engineering and Geology, LLP

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1. Introduction

H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) has prepared this In-Situ Solidification (ISS) Pilot Study Work Plan on behalf of NP Staten Island Industrial, LLC for the Former Port Mobil Terminal (also known as Kinder Morgan Staten Island [KM]) located at 4101 Arthur Kill Road in Staten Island, New York (the “Site”). A Project Locus and Site Plan are shown on Figures 1 and 2, respectively. ISS is a means of soil remediation through which contaminants are bound to the soil matrix through the addition of cement or a similar binding product. ISS is included as a viable remediation technology in the alternative analysis for the Site; however, prior to full-scale implementation, a pilot study is being proposed to evaluate various soil-mix quantity ratios and mixing methods to establish which of those ratios and methods satisfies the performance objectives. Information describing the details of conducting the ISS Pilot Study is provided in this work plan.

1.1 SITE LOCATION AND DESCRIPTION

The Site consists of an approximately 240-acre waterfront facility located at 4101 Arthur Kill Road in Staten Island, New York (Block 7427, Lot 1 and Block 7207, Lot 60) and is depicted on Figure 2. The Site is currently owned by NP Staten Island Industrial, LLC, and was formerly a petroleum bulk storage terminal. The facility operated as a major oil storage facility (MOSF) from 1934 to November 2019, at which time the existing aboveground storage tanks (ASTs) and pipe systems were closed in accordance with the MOSF permit and Fire Department of the City of New York (FDNY) requirements. During the years of operation, the storage capacity at the facility was 125 million gallons, with an annual throughput of approximately 1.4 billion gallons. The facility previously stored and transferred gasoline, No. 6 fuel oil, and distillate fuels, such as No. 4 fuel oil, No. 2 fuel oil, marine lubricating oils, and kerosene. In addition, there was an aboveground piping network to transfer petroleum products throughout the operational areas, and there was piping throughout the Site for the distribution of firefighting foam. The ASTs and piping have been drained, cleaned, and removed. All buildings have been demolished, except for three building structures, which remain, including the marine warehouse, an office/garage, and the Dravo building (Figure 2).

2. In-Situ Solidification Pilot Study Scope

The following scope of work has been prepared to conduct a pilot study of ISS efficacy in an area where the grossly contaminated material (GCM) has been encountered. Soil containing GCM was identified in the seven delineated light non-aqueous phase liquid (LNAPL) areas outside of the Interim Removal Measure (IRM) 1 area. The depth of GCM impacts varied by area and were delineated based on the presence of visual observations, photoionization detector (PID) readings, and shaker tests as documented on the soil boring logs. The locations of LNAPL areas are included in Figure 2.

2.1 ISS PILOT STUDY OBJECTIVES

The primary objective of the ISS Pilot Study is to demonstrate the efficacy of ISS for remediating soil impacted with GCM. The pilot study will be used to evaluate several reagent mixes and the means and methods used to implement ISS. Once the ISS Pilot Study has been completed, a Pilot Study Summary Report will be provided discussing the results and, if found to be successful, providing the design for full-scale implementation of ISS.

2.2 BENCH SCALE TREATABILITY STUDY RESULTS

An ISS Bench Scale Treatability Study was conducted using soil from three locations: two from areas of historical LNAPL contamination (U.S. Environmental Protection Agency [USEPA] Area 5 and AST-12 area) identified as COMP-2 and COMP-3, and one location from an area suspected to have per- and polyfluoroalkyl substances (PFAS) contamination identified as COMP-4.

Soils from COMP-2 and COMP-3 (LNAPL) were mixed with the following reagent mixtures:

- 7.5 percent total reagent dosage (7.5 percent Portland cement)
- 7.5 percent total reagent dosage (5 percent Portland cement and 2.5 percent slag)
- 10 percent total reagent dosage (7.5 percent Portland cement and 2.5 percent slag)
- 10 percent total reagent dosage (5 percent Portland cement and 5 percent slag)

Soils from COMP-4 (PFAS) were mixed with the following reagent mixtures:

- 7.5 percent total reagent dosage (7.5 percent Portland cement)
- 7.5 percent total reagent dosage (7.5 percent Portland cement) + 0.5 percent GAC
- 7.5 percent total reagent dosage (7.5 percent Portland cement) + 1 percent GAC
- 7.5 percent total reagent dosage (7.5 percent Portland cement) + 1.5 percent GAC

The results of the ISS bench scale study showed that all mix designs met the minimum unconfined compressive strength (UCS) standard of 50 pounds per square inch (psi) and maximum hydraulic conductivity of 1×10^{-6} centimeters per second (cm/s) at 28 days, except for the mix of 7.5 percent Portland cement and 1.5 percent GAC, which had a hydraulic conductivity of 1.1×10^{-6} cm/s. In addition, Synthetic Precipitation Leaching Procedure (SPLP) was performed on the three mix designs. The four mix designs trended with a decrease in concentration of detected compounds from the composited soils with some detections of additional compounds.

The Bench Scale Treatability Study Report is provided as Appendix A.

2.3 ISS PILOT STUDY

The ISS Pilot Study is being proposed for one location with LNAPL, Tank Area 12, as shown in Figure 2. Tank Area 12 is shown with relevant borings from the 2021-2022 Remedial Investigation (Weston Solutions of New York, Inc. [Weston], 2024) in Figure 3. Cross-sections are shown in Figures 4A, 4B, 4C, and 4D. The boring logs from the 2021-2022 Remedial Investigation used to prepare the cross-sections are provided in Appendix B.

The following tasks summarize how the ISS Pilot Study will be conducted:

- Locate public and private utilities within the proposed pilot study project limits;
- Install erosion and sediment control measures around the proposed treatment area (e.g., sandbag barriers and straw wattles);
- Demolish tank bottom in accordance with the Demolition Work Plan, dated May 4, 2021 (Industrial Development Advantage Port Mobil, LLC and Weston, 2021);
- Excavate soil from the area to an approximate depth of 4 feet below ground surface (bgs) and stockpile on the Site for reuse as backfill over the test area once the test has been completed (final restoration of the test area will be performed after the full-scale remedy has been completed);
- Administer the various reagent dosages of Portland cement and/or slag via the different equipment options (i.e., excavator bucket mixing by both wet and dry reagent additions, polishing step with additional mixing tool) to an approximate maximum treatment depth of 20 feet bgs. The excavator bucket will continuously mix the soil within the cell for one to two hours until the reagent has been fully mixed with all soil down to the treatment depth. For cells utilizing a mixing tool, once the excavator bucket has fully mixed the treatment cell, the mixing tool will mix the contents of the cell for an additional 0.5 to 1 hour;
- Collect test cylinders from each mixed test cell and test at a third-party certified laboratory for UCS and hydraulic conductivity at seven days, 14 days, and 28 days after the date of collection;
- Mitigate odors using a Rusmar PFU 400/25 self-contained, portable, foam-generating unit and Atmos Shield 645 foam;
- Perform coring and/or trenching within solidified soil cells to document the effectiveness of specific ISS reagent mixes and mixing equipment, and backfill the core/trench with grout;
- After completion of the coring and/or trenching, grade the ISS swell generated during the field pilot study to a depth of 4 feet bgs, and install a temporary cover including a demarcation barrier and backfill with excavated on-Site soil (final restoration of the test area will be performed after the full-scale remedy has been completed);
- Restore the Site and any disturbed erosion control measures;
- Remove and dispose of construction infrastructure encountered during the ISS Pilot Test work;
- Manage any excess material (i.e. excavated soils, ISS spoils) generated during the ISS, where it will be later evaluated during full-scale ISS and Site-wide work for on-Site reuse or disposal

(material intended or eligible for on-Site reuse will be sampled and the analyses provided to the NYSDEC and USEPA for approval prior to on-Site reuse);

- Clean up the Site and demobilize labor, equipment, and surplus materials;
- Submit an ISS Pilot Test summary report to the New York State Department of Environmental Conservation (NYSDEC) and the USEPA; and
- Provide a source area design package based on the results of the ISS Pilot Study.

2.4 CELL CONFIGURATION AND SEQUENCING

The proposed ISS treatment area is located adjacent to a previously existing AST where LNAPL has been encountered in monitoring wells. The ISS treatment area will be located in Tank Area 12 as shown in Figure 5. Tank Area 12 is divided into 12 distinct ISS mixing test cells corresponding to the four different mix designs to be tested and three different means of implementing the mix designs, as further discussed in Section 2.6. The proposed ISS treatment depths will begin at a depth of 4 feet bgs. However, if groundwater is encountered shallower than the depth where impacted soils begin, the top of the mix mass will be adjusted to a minimum of 2 feet above the groundwater table to allow for the use of a solid working platform. The terminal mixing depth for each test cell will encapsulate the LNAPL smear zone and be approximately 20 feet bgs. The length and width of each test cell will be approximately 15 feet and 15 feet, respectively, or approximately 135 cubic yards per test cell (1,620 cubic yards total). The size of the grid may be altered slightly to account for the reagent addition delivered per truck load.

2.5 ISS REAGENT MIXES

The four proposed mix designs consist of different soil weight percentages of Type L Portland cement and blast furnace slag to be mixed with the soil and groundwater in each ISS cell. The current mix designs are based on both wet and dry mixing, assuming there will be sufficient groundwater to adequately homogenize the mixed soil and reagents for the dry mixing application. Each mix will be monitored during implementation, and water addition can be adjusted as needed using a water truck (dry mixing) or adjusting the water-to-cement ratio (wet mixing). Any supplemental water that is added to the mix designs listed below will be quantified and documented.

Area	Reagent	Test Cell 1	Test Cell 2	Test Cell 3	Test Cell 4
Tank Area 12	Portland Cement	5%	5%	7.5%	7.5%
	Blast Furnace Slag	2.5%	5%	0%	2.5%

2.6 PILOT TEST IMPLEMENTATION

Each of the four test cells within the tank area will be divided into three mixing cells to evaluate different mixing methods for a total of 12 mixing cells (e.g., Test Cell 1 will have three individual mixing cells: Cell 1A, Cell 1B, and Cell 1C). The three proposed mixing methods are listed below and discussed in the following sections:

- A. Bucket mixing with dry reagent addition
- B. Bucket mixing with wet reagent addition
- C. Bucket mixing with wet reagent addition and final mixing with a mechanical mixer

The initial implementation for mixing of the ISS area will be based on bucket mixing utilizing a hydraulic excavator, such as a CAT® 336. The CAT® 336 excavator has a maximum digging depth of approximately 22 feet and a maximum reach of approximately 34 feet. Excavators may be supported by timber mats to allow the machine to work from a stable platform when removal of overburden soils is performed. The ISS test area will be divided into 12 mixing cells, and each cell will be sized and field-surveyed using pre-determined coordinates. The volume and weight of the soil will then be calculated based on the required treatment depth so that pre-determined quantities of reagent can be incorporated into the required mix mass.

In cells with a “C” designation, a mechanical mixing tool (e.g., Allu Processor Power Mixer or equivalent) will be utilized as a polishing step to further homogenize the material that has already been bucket mixed. The Allu Processor Power Mixer will also include an extension to enable the complete mix mass to be further homogenized from top to bottom. The Allu Processor Power Mixer will be mounted as an attachment on a standard 82,000-pound hydraulic excavator. The attachment contains two heads, each capable of tilling the reagent into the soil.

Once the grid has been thoroughly mixed, wet samples will be collected with the bucket of the hydraulic excavator for evaluation, as further described in the ISS Quality Control section.

2.6.1 Bucket Mixing – Dry Reagent Addition

Dry mixing will begin by placing a custom-built reagent storage box within the limits of the grid to be mixed. The reagent box is fabricated out of steel with an open bottom and is equipped with a bag filter over a pressure relief port to prevent fugitive dust emissions. Reagents will be delivered pneumatically into these boxes at the prescribed dosage weight. Once the pre-determined amount of reagent has been off-loaded into the mixing grid, the hydraulic excavator will relocate the reagent box out of the work area and begin the mixing process.

The hydraulic excavator will begin thoroughly blending the soils and reagents within the grid. Generally, wet soils beneath the groundwater table will be incorporated into the reagent piles first to mitigate dust emissions. The hydraulic excavator will continue blending the reagent into the mix mass until a homogeneous mixture with no visible reagent powder is observed. Any large debris that is encountered and not able to be incorporated into the mix mass will be removed from the ISS cell and disposed of as construction and demolition debris at an off-Site disposal facility. The hydraulic excavator will be equipped with a Trimble Grade Control System that the operator views in real-time to ensure that the horizontal and vertical limits are being met so that all required soils are being incorporated into the solidified grid.

2.6.2 Bucket Mixing – Wet Reagent Addition

Wet mixing will begin by introducing a cementitious grout into the mixing cell at the prescribed dosage rate and water-to-cement ratio; an assumed water-to-cement ratio of 0.8 to 1 will be used. Mixing of the cementitious grout will be performed utilizing the same excavator that will be used during the dry mixing application.

Once the top and bottom of the mix mass have been identified and the proper volume of grout calculated, a small excavation will be performed into the mix mass to create a “bathtub” for the grout to be introduced into. Grout will be delivered from a batch plant (as described further below) into the

“bathtub.” Homogenization of the grout and soil will then occur with the hydraulic excavators in a similar manner to how the dry reagent is blended. Once the soils have been thoroughly homogenized with the grout and the vertical and horizontal limits have been met as verified with the Trimble Grade Control System, wet samples will be collected with the bucket of the hydraulic excavator for evaluation, as further described in the ISS Quality Control section.

A custom-built grout batch plant will be used for the delivery of the cementitious grout. The batch plant will consist of two grout mixing tanks, each fed by up to two reagent silos, allowing for a constant availability of grout for the ISS treatment. Reagent addition control from each dry bulk silo to the mixing tank will be accomplished using each respective silo’s weight scale and screw conveyor system. A self-calibration check will be conducted prior to ISS implementation to verify the accuracy of the equipment. Water for cement grout preparation will be supplied from a nearby 21,000-gallon frac tank or directly from a permitted hydrant. The proportions of the water and reagents utilized for the grout will be a 0.8 to 1 addition of water to reagent by weight. Water will be introduced to the batch plant mixing tank until the pre-determined volume is achieved. Reagents will then be metered into the mixing tank and blended with the water to form a homogenous grout mixture. Grout will be continually agitated/mixed to maintain homogeneity while it awaits transfer to the mixing area. Periodically, grout will be checked for density using a Mud-Balance. Additionally, viscosity will be checked using a Marsh Funnel on each batch. Typically, these parameters are randomly checked on at least one grout batch per cell mixed.

2.7 ISS QUALITY CONTROL

Documentation of the ISS installation will be accomplished through test cylinders and PQ Triple Barrel (PQ3) coring/trenching. The performance requirements for the ISS testing are to have the solidified soil cells attain a minimum UCS of 50 psi and a maximum hydraulic conductivity of 1×10^{-6} cm/s based on testing of the cylinders at 28 days. Test cylinder samples will be collected from two locations (one in the top half and one in the bottom half) within each mixed solidified soil cell. The soil-cement/slag samples will be extracted from the various depths utilizing the excavator bucket within 30 minutes of mixing completion. Extracted samples will then be screened through a 3/8-inch sieve to remove oversized particles and molded in 2-inch by 4-inch or 3-inch by 6-inch grout molds. The samples will be labeled with the date sampled, sampler’s initials, depth sampled, and cell number, and the sample molds will be stored at room temperature in airtight containers. Samples will be submitted to a geotechnical laboratory for third-party UCS testing using ASTM Method D2166 and for hydraulic conductivity using Method D5084 at day seven, day 14, and day 28 after mixing. Therefore, each sample set will have at a minimum, a total of six cylinders formed, including three for UCS and three for hydraulic conductivity testing.

To confirm complete mixing and solidification of the ISS cell, PQ3 cores and/or trenches will be completed within each solidified soil cell. The coring/trenching will be performed to document the effectiveness of the ISS and will be performed based on the *NYSDEC In-Situ Solidification QA/QC* guidance document dated November 8, 2019 (Appendix C). The coring and/or trenching will be performed at a minimum of seven days after mixing the cell.

2.7.1 ISS Performance Criteria

Performance criteria for the ISS material during the pilot test include:

- A UCS greater than 50 psi;

- A hydraulic conductivity of less than 1×10^{-6} cm/s; and,
- No visible presence of free product or unmixed material observed during coring and/or trenching activities after mixing is complete.

2.8 CORRECTIVE ACTION

If any performance criteria are unable to be achieved for any of the proposed mixes, the cells will be remixed during full-scale ISS implementation.

3. Community Air Monitoring Program

Real-time air monitoring will be conducted in three locations during ground-intrusive activities and will be based on the location of work, Site conditions, and nearest receptors. Continuous monitoring will be performed for all ground-intrusive activities and during the handling of contaminated or potentially contaminated media.

The contaminants of concern (COCs) at the Site include volatile organic compounds (VOCs), lead, polycyclic aromatic hydrocarbons (PAHs), perfluorooctanoic acid (PFOA), and perfluorooctanesulfonic acid (PFOS). The VOCs include benzene, toluene, ethylbenzene, xylene (collectively, BTEX compounds), 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. The PAHs include benzo[a]anthracene and naphthalene. VOCs may volatilize directly into the air during intrusive work activities. Lead, PAHs, PFOA, and PFOS are not volatile compounds and may be adsorbed to particulates (i.e., dust). Baseline levels will be established prior to work commencing, which will allow for correlations to be evaluated between Site activities and Community Air Monitoring Program (CAMP) results. This work will be completed in accordance with the approved CAMP included in the *Interim Remedial Measures 1 Work Plan* (Haley & Aldrich of New York, 2024).

3.1 VOC MONITORING, RESPONSE LEVELS, AND ACTIONS

VOCs will be monitored at CAMP stations at the three locations during ground-intrusive activities and will be based on the location of the work, Site conditions, and nearest receptors. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. Roaming equipment to assess VOCs will be carried by the field support staff overseeing implementation of the waste characterization scope. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the COCs or an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume, provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 feet) is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shut down.

All 15-minute readings must be recorded and be available for NYSDEC and USEPA personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded. Proactive measures will

be taken to control VOCs, such as the use of a foaming agent and wintergreen misting to prevent off-Site migration of VOCs and to suppress odors.

3.2 PARTICULATE MONITORING, RESPONSE LEVELS, AND ACTIONS

Dust particulates will be monitored at CAMP stations at the three locations during ground-intrusive activities and will be based on the location of the work, Site conditions, and nearest receptors. Particulate concentrations will be evaluated through particulate monitoring via real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM₁₀). The equipment will be capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level discussed below:

- If the downwind PM₁₀ particulate level is 100 micrograms per cubic meter (µg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM₁₀ particulate levels do not exceed 150 µg/m³ greater than the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM₁₀ particulate levels are greater than 150 µg/m³ above the upwind level, work will be stopped, and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM₁₀ particulate concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration.

All 15-minute readings must be recorded and be available for NYSDEC and USEPA personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded. Proactive measures will be taken to control dust particulates, such as the use of water sprayers to suppress dust generation and off-Site migration.

3.3 FUGITIVE DUST SUPPRESSION TECHNIQUES

Reasonable fugitive dust suppression techniques must be employed during all Site activities that may generate fugitive dust. The following techniques have been shown effective for controlling the generation and migration of dust during ground-intrusive activities, and they will be employed as needed during all ground-intrusive Site activities:

- Applying water on haul roads;
- Wetting equipment prior to and during use;
- Hauling materials in properly tarped or watertight containers; and
- Restricting on-Site vehicle speeds to 10 miles per hour (mph).

By employing the above techniques, the chance of exceeding the 150 µg/m³ action level becomes extremely remote. In techniques involving water application, care must be taken not to generate unacceptably wet conditions. Using atomizing sprays will prevent such overly wet conditions, conserve water, and provide an effective means of fugitive dust suppression.

4. Reporting

Reporting will be conducted throughout the execution of the ISS Pilot Study as described below.

4.1 DAILY FIELD REPORTS

During implementation of the ISS Pilot Study, daily field reports will be submitted electronically to the NYSDEC, USEPA, and New York State Department of Health (NYSDOH) on the business day following the field activities. These daily reports will include representative photos, an updated Site figure, and a description of the work performed.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (e.g., accidents or spills), identification of previously unidentified contaminated media, or other sensitive or time-critical information. However, such conditions must also be included in the daily reports. Emergency conditions and changes to the ISS Pilot Test scope will be addressed directly to the USEPA Project Coordinator and NYSDEC Project Manager via email (and verbal, as deemed appropriate) communication.

Exceedances of action levels observed during performance of the CAMP will be reported to the NYSDEC, USEPA, and NYSDOH via email and will be included in the daily field reports to be submitted to NYSDEC and USEPA the day after Site activities are completed, along with actions and responses. Daily field reports will include the following information:

- Date;
- Personnel;
- Wind direction;
- Meteorological data (i.e., temperature, weather, atmospheric pressure);
- Site map showing the area where the ISS Pilot Test is being conducted;
- CAMP station locations;
- Notes regarding any equipment malfunctions; and
- Notes regarding any mitigation efforts or work stoppage due to CAMP exceedances.

4.2 ISS PILOT TEST SUMMARY REPORT AND FULL-SCALE ISS DESIGN

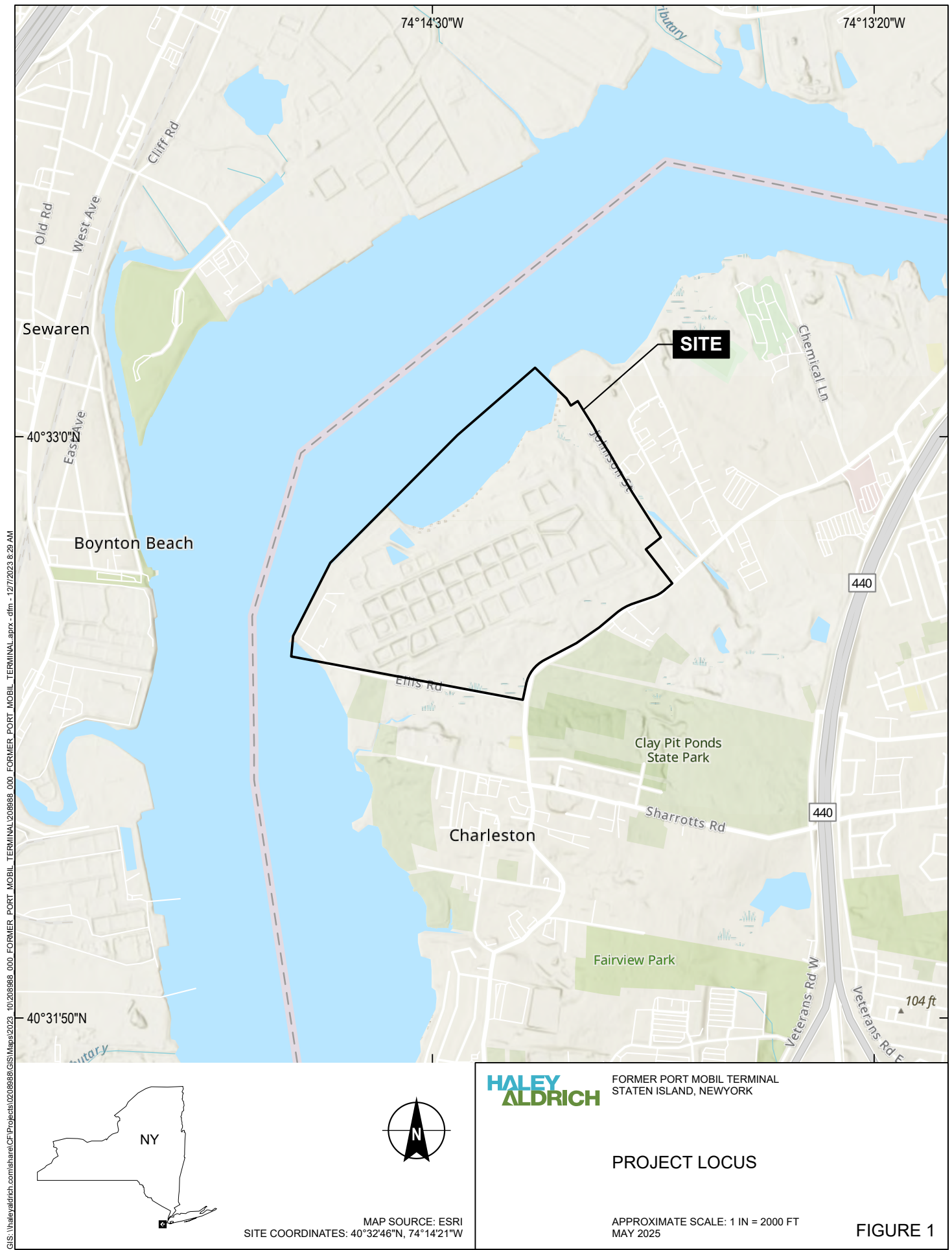
Results of the ISS Pilot Study will be provided to the NYSDEC and USEPA in a letter report. The ISS Pilot Test Summary Report will include the sample results, coring/trenching sample documentation, and the certificate of accreditation for the laboratory conducting the quality control sampling. Included with the ISS Pilot Test Summary Report will be the full-scale ISS design package. The design will include the selected reagent mix, the means and methods for mixing the soils, and the proposed mixing cell layout.

References

1. Haley & Aldrich of New York, 2024. Former Port Mobil Site – Interim Remedial Measures 1 Work Plan, 4101 Arthur Kill Road, Staten Island, New York. August 30, 2024.
2. Industrial Development Advantage Port Mobil, LLC and Weston Solutions of New York, Inc., 2021. Demolition Plan. Former Port Mobil Terminal, 4101 Arthur Kill Road, Staten Island, New York. May 4, 2021.
3. Weston Solutions of New York, Inc., 2024. Remedial Investigation Report. Former Port Mobil Terminal, 4101 Arthur Kill Road, Staten Island, New York. December 20, 2024.

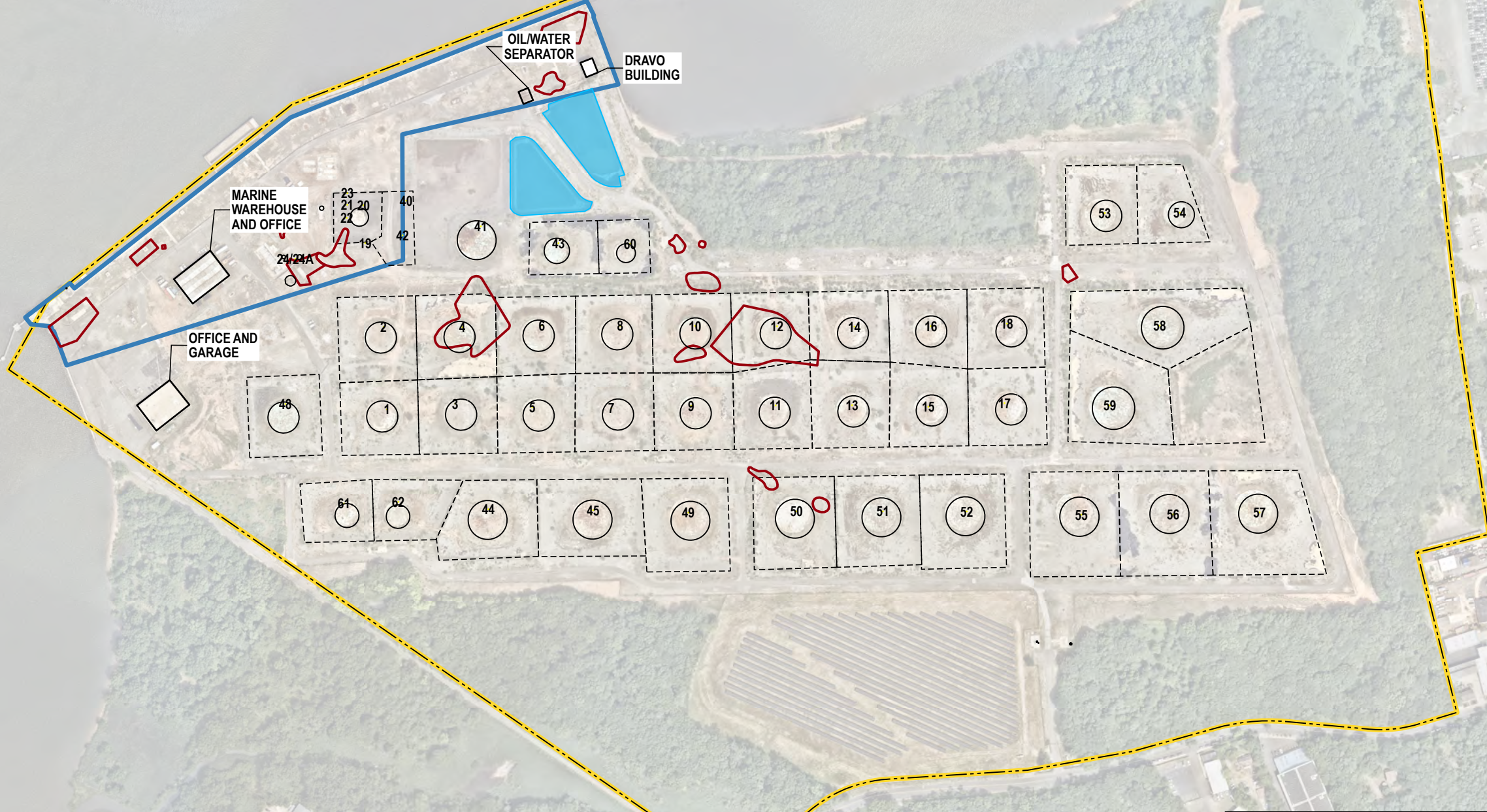
https://haleyaldrich.sharepoint.com/sites/NorthPointDevelopment/Shared Documents/0208988.FORMER PORT MOBIL TERMINAL/Deliverables/21. ISS Pilot Test Work Plan/2025_0603_HANY_Former Port Mobil_ISS Pilot Study Work Plan_F.docx

FIGURES



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ARTHUR KILL



LEGEND

----- CONTAINMENT BERM

IRM 1 BOUNDARY

APPROXIMATE EXTENT OF LNAPL

SURFACE IMPOUNDMENT

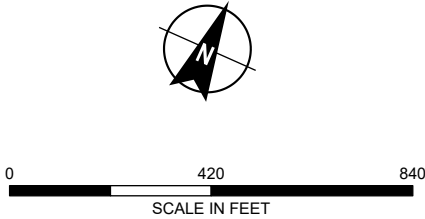
PROJECT SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. ASSESSOR PARCEL DATA SOURCE: RICHMOND COUNTY

3. AERIAL IMAGERY SOURCE: NEARMAP, 20 JUNE 2024



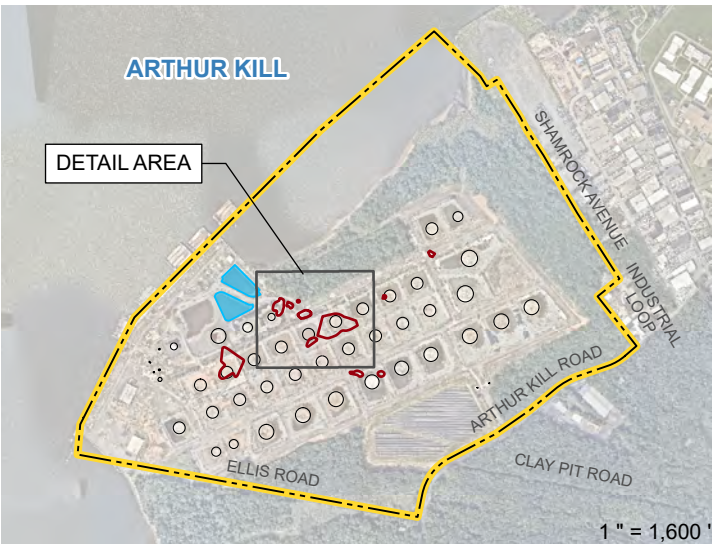
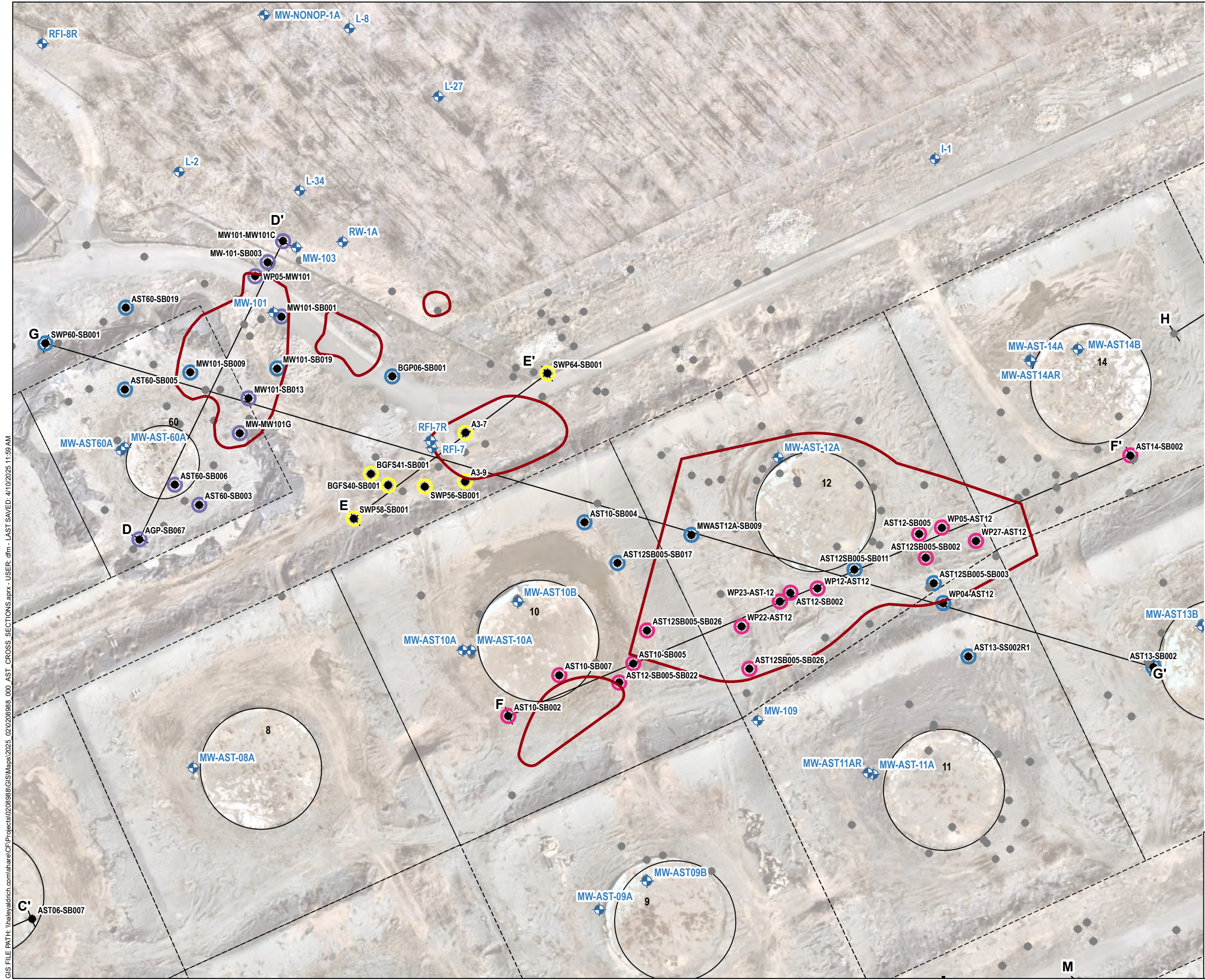
**HALEY
ALDRICH**

FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

SITE PLAN WITH LNAPL EXTENTS

MAY 2025

FIGURE 2

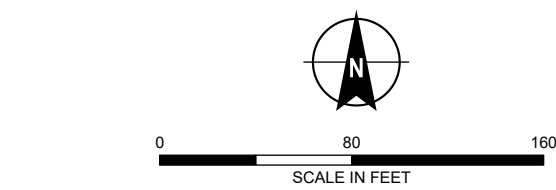


LEGEND

- MONITORING WELL
- BORING LOCATION NOT INCLUDED IN CROSS SECTIONS
- BORING LOCATION INCLUDED IN CROSS SECTIONS
- BORING USED IN CROSS SECTION**
- D - D'
- E - E'
- F - F'
- G - G'
- CROSS SECTION LINE
- APPROXIMATE EXTENT OF LNAPL

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. REMEDIAL INVESTIGATION BORINGS WITH MULTIPLE NOMENCLATURE IDS - THE FIRST ID AS LISTED IN THE CORRESPONDING CROSS SECTIONS IS INDICATED ON THIS FIGURE
3. AERIAL IMAGERY SOURCE: NEARMAP, APRIL 9, 2025



**HALEY
ALDRICH**

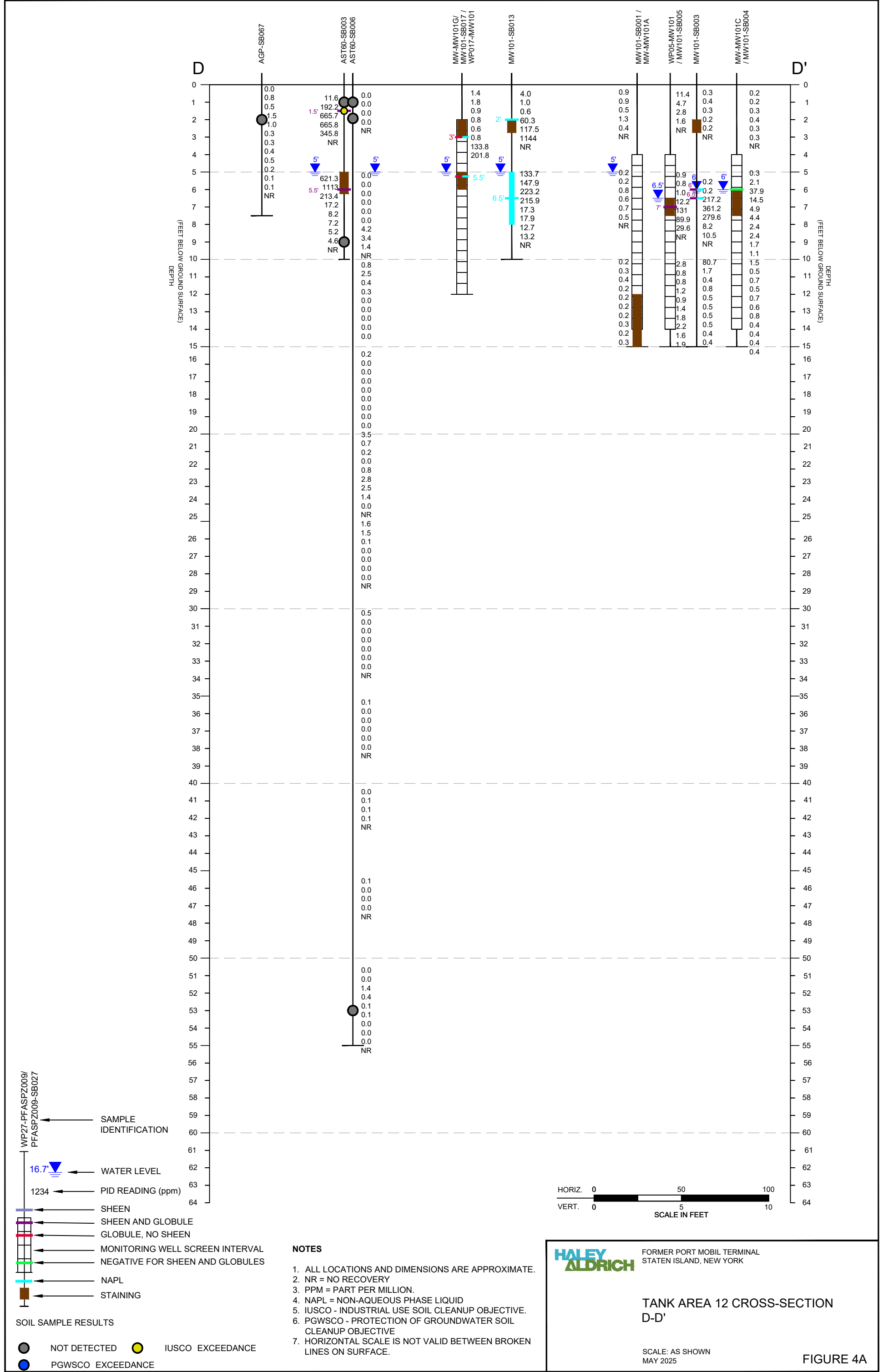
FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

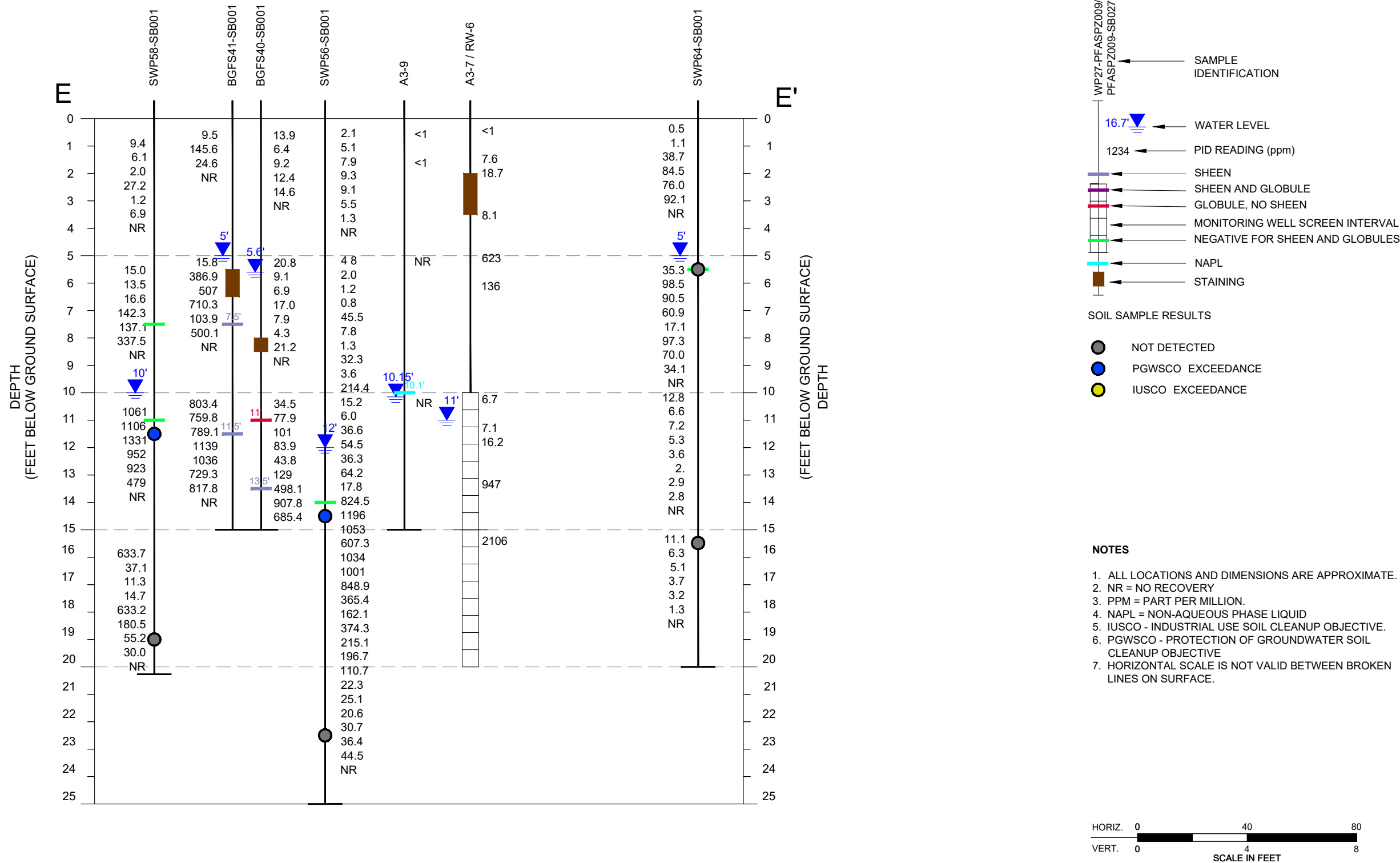
**TANK AREA 12 WITH REMEDIAL
INVESTIGATION BORING LOCATIONS**

MAY 2025

FIGURE 3

G:\S FILE PATH: \haley\aldrich.com\share\CF\Projects\0208888\GIS\Maps\2025_02\0208888_000_AST_CROSS_SECTIONS.aprx - USER: dhf - LAST SAVED: 4/10/2025 11:59 AM





FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

TANK AREA 12 CROSS-SECTION E-E'

SCALE: AS SHOWN
MAY 2025

FIGURE 4B

WP27-PFASPZ009/
PFASPZ009-SB027

SAMPLE
IDENTIFICATION

16.7' WATER LEVEL
1234 PID READING (ppm)

SHEEN
SHEEN AND GLOBULE
GLOBULE, NO SHEEN
MONITORING WELL SCREEN INTERVAL
NEGATIVE FOR SHEEN AND GLOBULES
NAPL
STAINING

SOIL SAMPLE RESULTS

NOT DETECTED
PGWSCO EXCEEDANCE
IUSCO EXCEEDANCE

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. NR = NO RECOVERY
3. PPM = PART PER MILLION.
4. NAPL = NON-AQUEOUS PHASE LIQUID
5. IUSCO - INDUSTRIAL USE SOIL CLEANUP OBJECTIVE.
6. PGWSCO - PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE
7. HORIZONTAL SCALE IS NOT VALID BETWEEN BROKEN LINES ON SURFACE.

HORIZ. 0 50 100
VERT. 0 5 10
SCALE IN FEET

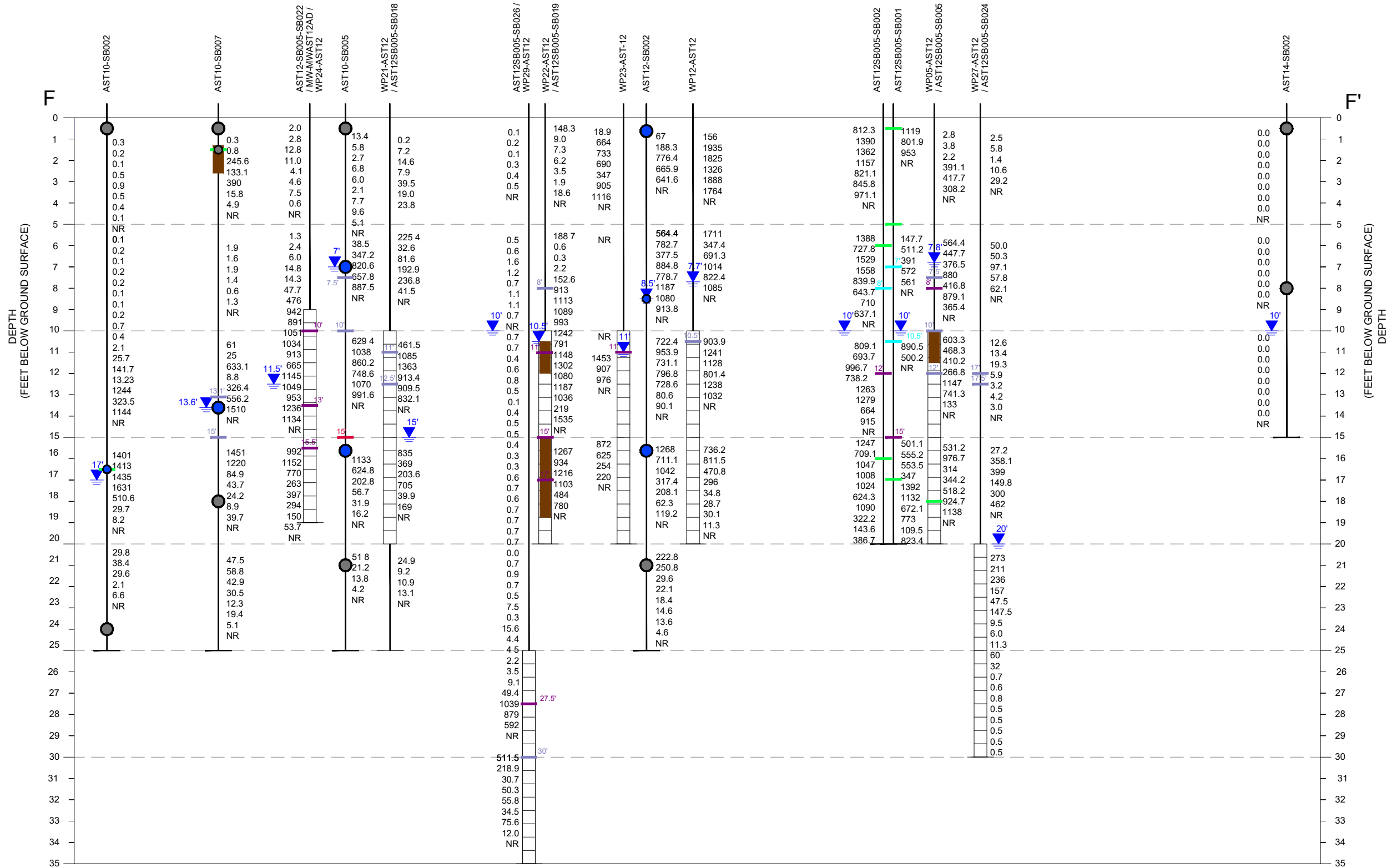
HALEY
ALDRICH

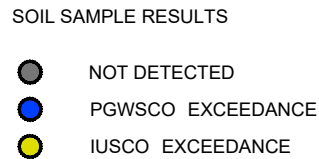
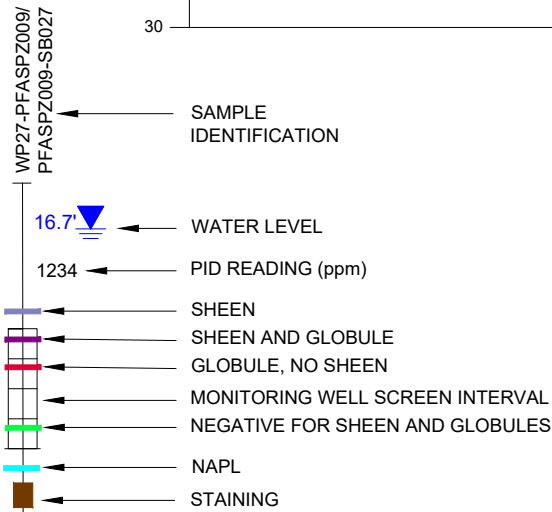
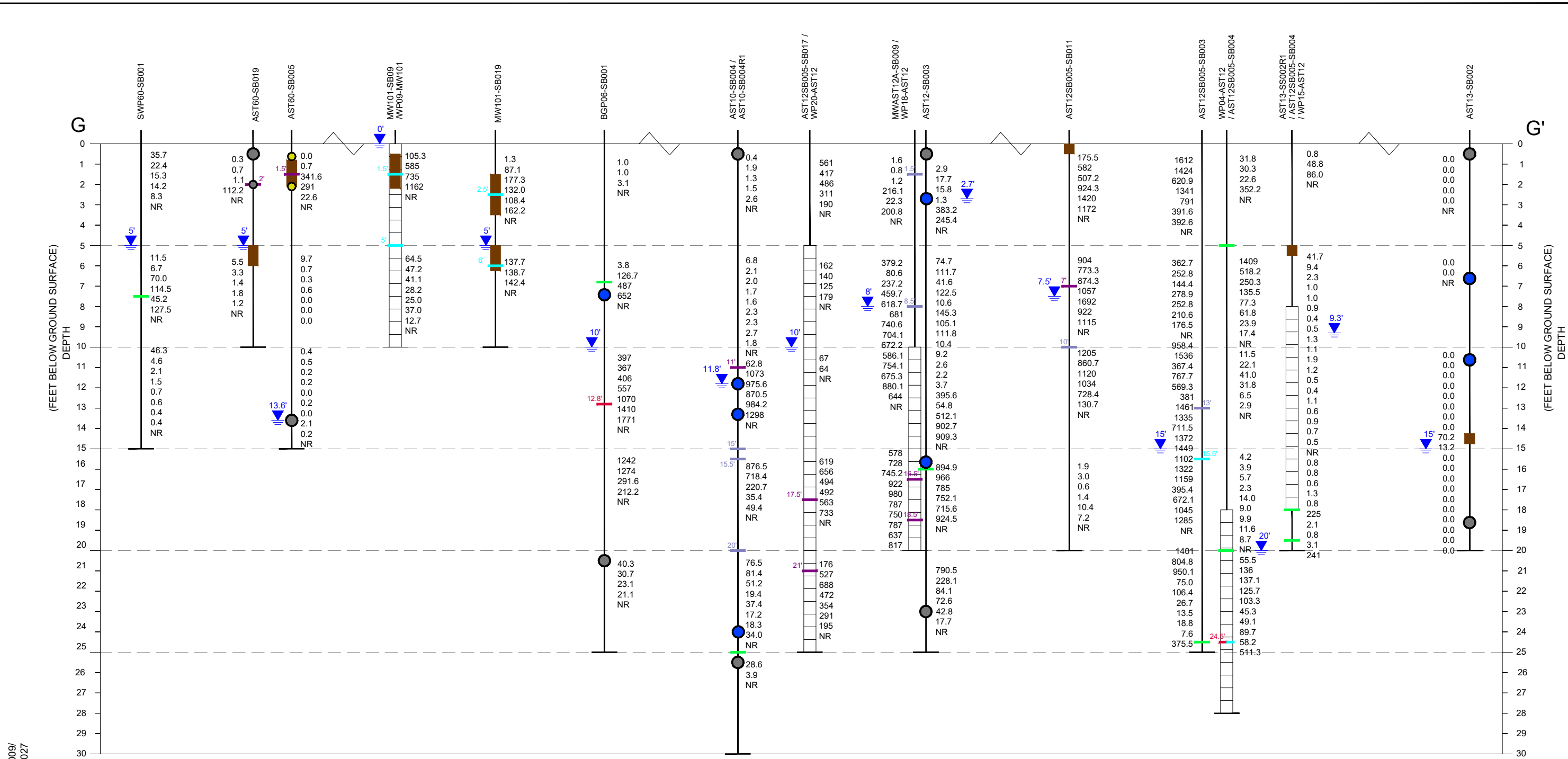
FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

TANK AREA 12 CROSS-SECTION
F-F'

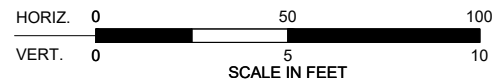
SCALE: AS SHOWN
MAY 2025

FIGURE 4C





- NOTES**
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
 2. NR = NO RECOVERY
 3. PPM = PART PER MILLION.
 4. NAPL = NON-AQUEOUS PHASE LIQUID
 5. IUSCO - INDUSTRIAL USE SOIL CLEANUP OBJECTIVE.
 6. PGWSO - PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE
 7. HORIZONTAL SCALE IS NOT VALID BETWEEN BROKEN LINES ON SURFACE.



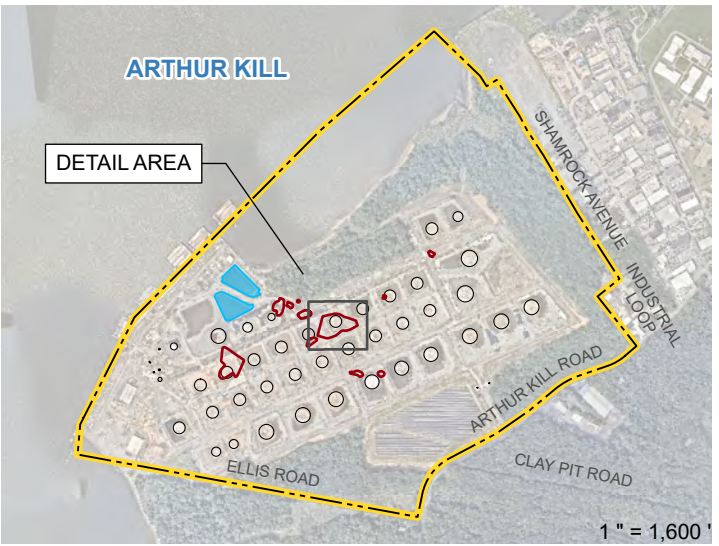
FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

**TANK AREA 12 CROSS-SECTION
G-G'**

SCALE: AS SHOWN
MAY 2025

FIGURE 4D

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\0208888\GIS\Maps\2025_02\0208888_000_AST_CROSS_SECTIONS.aprx - USER: dfm - LAST SAVED: 5/29/2025 3:06 PM

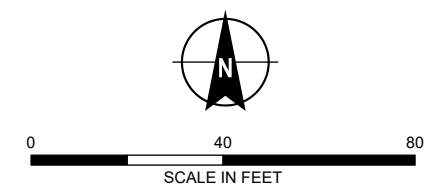


LEGEND

 APPROXIMATE EXTENT OF LNAPL

 PROPOSED ISS TREATMENT AREA (WITH TEST CELL ID) - 15X15 FEET

- NOTES**
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
 2. ISS = IN-SITU SOLIDIFICATION
 3. AERIAL IMAGERY SOURCE: NEARMAP, APRIL 9, 2025



HALEY ALDRICH FORMER PORT MOBIL TERMINAL
STATEN ISLAND, NEW YORK

**TANK AREA 12 PROPOSED
ISS PILOT TEST AREA**

MAY 2025 **FIGURE 5**

APPENDIX A

Bench Scale Treatability Study Report

IN SITU SOLIDIFICATION/STABILIZATION BENCH SCALE STUDY REPORT

Former Port Mobil Terminal Property
Staten Island, NY

Prepared For:
NorthPoint Development
3315 N. Oak Trafficway
Kansas City, MO

Prepared By:
 **ENTACT.**
2873 W Hardies Road, Suite 300
Gibsonia, PA

August 29, 2024

Version 0



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TABLE 1 Composite Sample Geotechnical Index Test Results

TABLE 2 ISS Sample Unconfined Compressive Strength & Hydraulic Conductivity Results

TABLE 3 Composite and ISS Sample Analytical Results

Attachment 1 Composite Samples Baseline Index Testing Reports

Attachment 2 ISS Samples UCS Reports

Attachment 3 ISS Samples Hydraulic Conductivity Results

Attachment 4 Composite and ISS Samples Analytical Reports

1.0 INTRODUCTION

ENTACT, LLC. ("ENTACT," Contractor) has prepared this In Situ Solidification/Stabilization (ISS) Bench Scale Study Report to summarize the ISS bench scale study conducted in accordance with ENTACT's proposal dated February 21, 2024, for NorthPoint Development on the Former Kinder Morgan Terminal Property at 4101 Arthur Kill Road in Staten Island, New York (Site). The following sections detail the specifics of the completed bench scale study.

The Site is located at the 4101 Arthur Kill Road in Staten Island, New York. The approximately 206-acre Site previously contained former Kinder Morgan Terminal operations. The Site generally consists of granular soils interbedded with discontinuous layers of cohesive deposits. The discontinuous cohesive deposits vary in thickness and include layers of compressible organic silts as well as inorganic silts and clays. Organic silt deposits were encountered at depths ranging from 15 feet to 25 feet from the existing ground surface.

1.1 Purpose

The ISS bench scale study evaluated the potential reuse of former disposal area materials and site soils. These materials may be amended and solidified in-situ through the soil mixing process for improved strength, reduced hydraulic conductivity and reduced leachability.

Performance criteria for the ISS material during the bench scale study and full-scale implementation include a monolithic mass containing:

- An average unconfined compressive strength (UCS) greater than 50 pounds per square inch (psi);
- An average hydraulic conductivity of less than 1×10^{-6} centimeters per second (cm/sec) with no single sample higher than 5×10^{-6} cm/sec; and,
- No visible presence of free product observed during field implementation after mixing is complete.

Performance criteria as described above was expected to be achieved by a cure duration of 7 days; however, performance criteria were allowed to be met after a longer cure duration. Leachability of the ISS mixes was also evaluated by analyzing the Synthetic Precipitation Leaching Procedure (SPLP) concentrations for VOCs (EPA Method 8060D), SVOCs (EPA Method 8070D) and metals (EPA Method 6010C/7471B).

1.2 Testing Summary

Below is a summary of the testing conducted on the composite samples and ISS samples.

- **Composite Soil Index/Baseline Testing:**
 - o Soil pH (ASTM D4972)
 - o Moisture content (ASTM D2216)
 - o USCS Soil Classification (ASTM D2488)
 - o One-Point Standard Proctor (ASTM D698)

- o Hydraulic conductivity (remolded sample) (ASTM D5084)
- o Baseline Composite Soil Analytical – Total VOCs (EPA 8260C), SVOCs (EPA 8270D), RCRA Metals (EPA 6010C) + mercury, and PFAS (EPA Draft Method 1633) with and without methanol extraction for Test Area 4
- o Baseline Composite Soil Leaching – SPLP (EPA 1312) VOCs, SVOCs, RCRA metals, and PFAS (Test Area 4 only).
- **ISS Mix Testing:**
 - o Strength via Pocket Penetrometer of each mix at 1, 3, and 7 days of cure
 - o UCS (ASTM D2166) at 7, 14, and 28-days of cure and
 - o Hydraulic Conductivity (ASTM D5084) at 7 and 28-days of cure
 - o Analytical - SPLP (EPA 1312) VOCs, SVOCs, Metals, and PFAS for Test Area 4

2.0 METHODOLOGY

Necessary equipment and materials were procured and obtained at the start of the study. This included samples of the specified reagents that were shipped to ENTACT's treatability laboratory from the supplier. The following reagents were utilized in this study:

- Type I/II Portland Cement from Heidelberg Materials (LeHigh) in Brooklyn, NY
- Ground Granulated Blast Furnace Slag (BFS) Grade 100 from Heidelberg (Lehigh) Materials in Camden, NJ
- Granular Activated Carbon (GAC) from Regenesis

2.1 Sample Receipt and Homogenization

ENTACT received nine (9) 5-gallon buckets of site soil collected by Haley and Aldrich for ENTACT to perform the bench scale study at the ENTACT Treatability Laboratory located at 2873 West Hardies Road, Suite 3 in Gibsonia, PA. No mix water sample was received for this study; therefore, potable water from the lab was used for the ISS mixes.

Upon receipt of the samples, the containers were inspected and logged. Sample material was generated from Test Pits ISS-2, ISS-3, and ISS-4 by Haley & Aldrich. On 4/19/2024, the raw soil was homogenized and sized down through a 3/8" sieve to create three composite samples that are representative of the vertical mixing limits. The following details the vertical limits for each sample:

- COMP-2 – 0 to 20ft below ground surface (bgs) from Test Area 2
- COMP-3 – 0 to 20ft bgs from Test Area 3
- COMP-4 – 0 to 20ft bgs from Test Area 4

Material characteristics of the composite sample were analyzed for the index/baseline testing parameters identified in Section 1.2 of this report. Remolded hydraulic conductivity was tested on the composited samples (from 0-20 ft) and also on the COMP-2 12-20ft interval as that interval was visually observed to have a higher permeability and visually classified as USCS (SP) poorly graded sand.

The results of the geotechnical index testing for the composite sample are presented in **Table 1. Attachment 1** presents the composite geotechnical reports including baseline permeability reports for each composite sample.

2.2 Mixing and Specimen Preparation

ISS sample mixing occurred on 5/1/2024 through 6/10/2024. After the composite sample was appropriately processed, adequate aliquots were then pulled from the composited soil. The composite soil aliquot was weighed and set aside. The reagent dosage was weighed then incorporated into the composite soil until the mixture was homogenous. Water was added to the soil-reagent mixture to render the material to a consistency for mixing during full scale application. A water to cement ratio of 1:1 was used for each ISS mix. **Table 2** presents the ISS mix details.

Once the mixture was visually homogenized, each mixed specimen was packed in accordance with ASTM D1632 into individually labeled gray plastic cylinder molds measuring 3 inches by 6 inches and 2 inches by 4 inches, in diameter and height respectively. Eight-cylinder molds were created per mix. Each mold was capped, and then set in a designated curing area in ambient conditions.

The following initial mix designs were generated for the ISS mixes for composites COMP-2 and COMP-3:

- 7.5% total reagent dosage (100% Type I/II Portland Cement)
- 7.5% total reagent dosage (67% Type I/II Portland Cement, 33% blast furnace slag (BFS))
- 10% total reagent dosage (75% Type I/II Portland Cement, 25% BFS)
- 10% total reagent dosage (50% Type I/II Portland Cement, 50% BFS)

For COMP-4, reagent dosage was based on the best performing mixes from COMP-2 and COMP-3 which was the 7.5% Portland Cement only mix design. ISS mixes for composite COMP-4 consisted of the following:

- 7.5% total reagent dosage (100% Type I/II Portland Cement)
- 7.5% total reagent dosage (100% Type I/II Portland Cement) + 0.5% GAC
- 7.5% total reagent dosage (100% Type I/II Portland Cement) + 1% GAC
- 7.5% total reagent dosage (100% Type I/II Portland Cement) + 1.5% GAC

Granular activated carbon (GAC) dosage was recommended based on the review of COMP-4 PFAS analytical results and discussion with the GAC manufacturer, Regenesis.

The prepared cylinders were allowed to cure in a laboratory temperature-controlled environment for the prescribed cure periods. Specimens were then monitored for specific parameters in ENTACT's laboratory or transported to the third-party geotechnical laboratory for testing.

2.3 Monitoring and Geotechnical Testing

Once specimens were prepared and logged, each mix design was monitored at the ENTACT laboratory for physical characteristics and penetration resistance with a pocket penetrometer (ASTM WK27337) on Days 1, 3, and 7 of curing.

Specimen molds were transported by ENTACT to the accredited geotechnical laboratory, Geotechnics of Pittsburgh, PA for hydraulic conductivity testing (ASTM D5084) at 7 and 28-days of cure. Strength testing was conducted at ENTACT's lab in Gibsonia, PA on Days 7, 14, and 28 of curing.

The results of the geotechnical testing are provided in **Table 2**. Geotechnical reports for UCS and hydraulic conductivity are included as **Attachments 2 and 3**, respectively.

2.4 Analytical Testing

Composite mixes were tested for Total VOCs (EPA 8260D), SVOCS (EPA 8270D), and RCRA Metals + Mercury (6010C/7471B) and SPLP VOCs (EPA 8260D), SVOCS (EPA 8270D), and RCRA Metals + Mercury (6010C/7471B). ISS mixes were tested for Modified SPLP VOCs (EPA 8260D), SVOCS (EPA 8270D), and RCRA Metals + Mercury (6010C/7471B) at the third-party analytical laboratory, Eurofins, located at Pittsburgh, PA after 28-days of cure. Broken pieces (approximately 1 inch or less in all dimensions) from the UCS testing for each mix were used for the modified SPLP (EPA Method 1312) analytical testing to avoid further sizing by the lab, maintain integrity of the monolith, and to more accurately represent field conditions after construction. Results of the analytical testing for the ISS mixes are provided in **Table 3**. Analytical reports for both the composite and ISS samples are included as **Attachment 4**.

3.0 EVALUATION

The results generated from the laboratory observations, geotechnical laboratory testing, and analytical laboratory testing are provided in the report attachments. Below highlights notable findings:

- **Strength (UCS)**
 - All mixes achieved the performance criteria of 50 psi within 7 days of cure with the exception of MIX-ISS2-5PC-2.5S. COMP-2 mix with the highest 28-day strength was MIX-ISS2-5PC-5S, COMP-3 mix with the highest 28-day strength was MIX-ISS3-5PC-5S, and COMP-4 mix with the highest 28-day strength was MIX-ISS4-7.5PC-1.5C.
 - In general, the UCS increased as the total cementitious reagent dosage increased.
- **Hydraulic Conductivity**
 - All mixes achieved the performance criteria of less than 1×10^{-6} cm/sec at 28-days of cure.
 - COMP-2 mix with the lowest 28-day permeability was MIX-ISS2-5PC-5S, COMP-3 mix with the lowest 28-day permeability was MIX-ISS3-7.5PC-2.5S, and COMP-4 mix with the lowest 28-day permeability was MIX-ISS4-7.5PC.
- **Composite Analytical**
 - For Total Metals, the composites had detections for aluminum, arsenic, barium, beryllium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel,

potassium, thallium, vanadium, and zinc. Arsenic and thallium exceeded the EPA RSLs for 1.0 HQ for Industrial Soil.

- o For SPLP Metals, the composites had detections for aluminum, chromium, iron, lead, manganese, sodium, and zinc. RCRA TCLP limits were not exceeded.
- o For Total VOCs, the composites did not have any detections for the analyzed compounds. Reported concentrations for 1,2-Dibromo-3-Chloropropane, chloroform, 1,2-Dibromoethane, and vinyl chloride exceeded the EPA RSLs for 1.0 HQ for Industrial Soil.
- o For SPLP VOCs, both the composites had non-detections for the analyzed compounds.
- o For Total SVOCs, the composites had detections for 2-methylnaphthalene and phenanthrene. EPA RSLs were not exceeded.
- o For SPLP SVOCs, the composites had detections for 2-methylnaphthalene, acenaphthene, anthracene, carbazole, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene.
- o For Total PFAS (Area 4 only), there were significant concentration differences between the preparation method. The Draft 1633 extraction method resulted in more compounds detected and at higher concentrations than the methanol only extraction method. In addition, perfluorooctanoic acid (PFOA) concentration under the Draft 1633 extraction method exceeded the EPA RSLs in the composite sample.
- o For SPLP PFAS (Area 4 only), all PFAS compounds analyzed other than PFDA were detected in the composite sample.
- **Leachability**
 - o **For SPLP Metals:**
 - Area 2 ISS mixes observed a decrease in detected concentrations of chromium, iron, lead, manganese, sodium, and zinc and an increase in aluminum, barium, calcium, and potassium.
 - Area 3 ISS mixes observed a decrease in detected concentrations of chromium, and manganese and an increase in aluminum, barium, calcium, potassium, and sodium.
 - Area 4 ISS mixes observed a decrease in detected concentrations of iron and an increase in aluminum and barium.
 - o **For SPLP VOCs:**
 - Area 2 ISS mixes observed an increase in detected concentrations of methylene chloride. All other VOC compounds remained non-detected from the baseline.
 - Area 3 ISS mixes observed an increase in detected concentrations of ethylbenzene and methylene chloride and a decrease in xylene concentrations. All other VOC compounds remained non-detected from the baseline.
 - Area 4 ISS mixes observed an increase in detected concentrations of methylene chloride. All other VOC compounds remained non-detected from the baseline.

o For SPLP SVOCs:

- Area 2 ISS mixes observed an increase in detected concentrations of 2-methylnaphthalene, acenaphthene, fluorene, naphthalene, and phenanthrene. All other SVOC compounds remained non-detected from the baseline.
- Area 3 ISS mixes observed an increase in detected concentrations of 2-methylnaphthalene and naphthalene and a decrease in acenaphthene, anthracene, carbazole, fluoranthene, fluorene, phenanthrene, and pyrene. All other SVOC compounds remained non-detected from the baseline.
- Area 4 ISS mixes observed an increase in detected concentrations of 2-methylnaphthalene, acenaphthene, anthracene, carbazole, fluorene, phenanthrene, and pyrene. All other SVOC compounds remained non-detected from the baseline.

- o For SPLP PFAS most of the Area 4 ISS mixes observed a decrease in detected concentrations of PFAS compounds. However, a slight increase from the composite analytical in HFPO-DA was observed in all samples.

4.0 CONCLUSION

The results of the ISS bench scale study identified that an unconfined compressive strength of at least 50 psi and a permeability less than 1×10^{-6} cm/sec was able to be achieved with a minimum cement dosage of 7.5% by wet weight of soil. The remolded permeability for the composite samples may have resulted in a conservatively lower permeability as the clay and sand layers were composited together compared to the average permeability of each in-situ lithologic layer (approximately 1×10^{-3} to 1×10^{-4} cm/sec for sandy soils). Areas 2 and 3 ISS mixes achieved a minimum permeability of 1.2×10^{-8} and 1.6×10^{-7} cm/sec while Area 4 mixes achieved an average permeability of 6×10^{-7} cm/sec. The permeability results were higher in Area 4 likely due to the lack of slag in the mixes and the introduction of carbon for PFAS reduction as carbon has the potential to interfere with the cement hydration reaction. These results indicate that the minimum cement dosage of 7.5% was able to reduce the permeability of the treated composite soil by two orders of magnitude and likely reduce permeability by three to four orders of magnitude reduction compared to the estimated sand layer permeability by 28-days of cure.

Overall, for leachability, the ISS mixes trended with a decrease in concentration of detected compounds from the composite soils with some detections of additional compounds likely due to the difference in aliquot of composite soil/ISS mix material used as the SPLP test method requires a small sample size (100 grams) for analysis. The ISS mix samples were analyzed using a modified SPLP method where the sample is not further pulverized to a small sample size of less than 1 centimeter, but rather uses the natural breakage from the UCS testing for analysis. The extent of pulverization greatly increases the sample's surface area and is not representative of the leachability to groundwater of the monolith under normal in-situ conditions.

When comparing the results for UCS, permeability, and SPLP testing between remediation areas and ISS mixes, the following are recommended mix designs for a future ISS pilot study:

- Area 2 – 7.5% Portland Cement
- Area 3 – 7.5% Portland Cement and 2.5% Slag or 5% Portland Cement and 5% Slag
- Area 4 – 7.5% Portland Cement and 1% Carbon

TABLES

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 1 - COMPOSITE SAMPLE GEOTECHNICAL RESULTS

Sample Name		ISS 2 0-4'	ISS 2 4-12'	ISS 2 12-20	COMP-2	ISS 3 0-4'	ISS 3 4-12'	ISS 3 12-20	COMP-3	ISS 4 0-4'	ISS 4 4-12'	ISS 4 12-20	COMP-4
Date		4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024	4/19/2024
Average Moisture Content (%)	ASTM D2216	9.0%	24.0%	29.6%		20.5%	14.4%	26.7%		11.6%	20.3%	25.5%	
1 pt Std Proctor Wet Density (pcf)	ASTM D698	120.60	126.27	126.33	127.19	127.54	130.21	129.66	129.08	121.29	117.84	125.99	121.53
Remolded Permeability (cm/sec)	ASTM D5084	NT	NT	4.20E-06	1.10E-06	NT	NT	NT	3.00E-07	NT	NT	NT	2.90E-06
Soil pH	ASTM D4972	6.96	6.77	6.72		6.00	5.25	6.71		6.77	6.46	6.04	
USCS Description	ASTM D2488	SM*	SP*	SP*	SP*	CL*	CL*	SP*		CL*	SP*	SP*	

*Classified visually

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 2 - INITIAL ISS MIX UCS AND PERM RESULTS

Date Mixed	Mix ID	Composite	Portland Cement IL Dosage *	Slag Dosage *	GAC Dosage *	Water: Cement	Pocket Penetrometer (ASTM WK27337)			Unconfined Compressive Strength (ASTM D2166)			Hydraulic Conductivity (ASTM D5084)	
							tsf (1tsf=13.89psi)			psi			cm/sec	
			%	%	%		2 days	3 days	7 days	7 days	14 days	28 days	7 days	28 days
			CRITERIA							> 50 psi			< 1E-06 cm/sec	
5/1/2024	MIX-ISS2-7.5PC	COMP-2	7.5%	-	-	1:1	>4.5	>4.5	>4.5	61.27	74.83	108.48	8.70E-07	1.30E-07
5/1/2024	MIX-ISS2-5PC-2.5S	COMP-2	5.0%	2.5%	-	1:1	4.25	>4.5	>4.5	47.52	73.78	95.91	1.20E-06	6.40E-07
5/1/2024	MIX-ISS2-7.5PC-2.5S	COMP-2	7.5%	2.5%	-	1:1	>4.5	>4.5	>4.5	61.37	106.09	153.33	1.00E-06	2.50E-07
5/1/2024	MIX-ISS2-5PC-5S	COMP-2	5.0%	5.0%	-	1:1	>4.5	>4.5	>4.5	71.05	125.67	203.88	8.40E-07	1.20E-08
5/1/2024	MIX-ISS3-7.5PC	COMP-3	7.5%	-	-	1:1	>4.5	>4.5	>4.5	62.99	79.42	95.68	3.40E-07	3.20E-07
5/1/2024	MIX-ISS3-5PC-2.5S	COMP-3	5.0%	2.5%	-	1:1	>4.5	>4.5	>4.5	51.22	100.75	116.69	4.60E-07	3.60E-07
5/1/2024	MIX-ISS3-7.5PC-2.5S	COMP-3	7.5%	2.5%	-	1:1	>4.5	>4.5	>4.5	146.45	134.04	232.33	2.90E-07	1.60E-07
5/1/2024	MIX-ISS3-5PC-5S	COMP-3	5.0%	5.0%	-	1:1	>4.5	>4.5	>4.5	120.54	103.20	277.50	7.20E-07	1.80E-07
6/10/2024	MIX-ISS4-7.5PC-0.5C	COMP-4	7.5%	-	0.50%	1:1	>4.5	>4.5	>4.5	68.98	165.17	126.94	4.20E-07	5.20E-07
6/11/2024	MIX-ISS4-7.5PC-1.0C	COMP-4	7.5%	-	1.00%	1:1	>4.5	>4.5	>4.5	95.11	109.31	117.04	6.20E-07	4.60E-07
6/11/2024	MIX-ISS4-7.5PC-1.5C	COMP-4	7.5%	-	1.50%	1:1	>4.5	>4.5	>4.5	114.27	106.00	173.26	6.20E-07	1.10E-06
6/11/2024	MIX-ISS4-7.5PC	COMP-4	7.5%	-	0.00%	1:1	>4.5	>4.5	>4.5	71.27	101.92	113.32	5.80E-07	3.10E-07

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2	MIX-ISS2-7.5PC	MIX-ISS2-5PC2.5S	MIX-ISS2-7.5PC2.5S	MIX-ISS2-5PC5S
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024
TOTAL METALS 6010D mg/kg								
Aluminum	1100000			3600		NS		NS
Arsenic	3	16	n/a	4.2		NS		NS
Antimony	470			0.53	J U	NS		NS
Barium	220000	10000	n/a	22		NS		NS
Beryllium	2300	2700		0.32		NS		NS
Cadmium	100	60	n/a	0.27	J U	NS		NS
Calcium				600		NS		NS
Chromium			n/a	9.5		NS		NS
Cobalt	350			5		NS		NS
Copper	47000	10000		28		NS		NS
Iron	820000			12000		NS		NS
Lead	800	3900	n/a	60		NS		NS
Magnesium				1200		NS		NS
Manganese	26000	10000		110		NS		NS
Nickel	17000	10000		14		NS		NS
Potassium				450		NS		NS
Selenium	5800	6800	n/a	1.2	U	NS		NS
Sodium				270	J U	NS		NS
Thallium	12			0.15	U	NS		NS
Vanadium	5800			16		NS		NS
Zinc	350000	10000		73		NS		NS
Mercury	46	5.7	n/a	0.02	U	NS		NS
Silver	5800	6800	n/a	0.055	U	NS		NS
SPLP METALS 6010D ug/L								
Aluminum	n/a			8500		1400		4300
Arsenic	n/a	n/a	5000	8.3	U	8.3	U	8.3
Antimony	n/a			6.2	U	6.2	U	6.2
Barium	n/a	n/a	100000	200	J U	410	B	440
Beryllium	n/a	n/a		1.5	U	1.5	U	1.5
Cadmium	n/a	n/a	1000	0.3	U	0.3	U	0.3
Calcium				5000	J U	430000	4 B	240000
Chromium			5000	13		7.1		3.1
Cobalt	n/a			50	J U	3.4	U	3.4
Copper	n/a	n/a		25	J U	25	J U	25
Iron	n/a			15000	^2	72	U	72
Lead	n/a	n/a	5000	60		4.4	U	4.4
Magnesium				5000	J U	690	U	690
Manganese	n/a	n/a		98		2.4	U	2.4
Nickel	n/a	n/a		40	J U	3.5	U	40
Potassium				2600	U	10000		8800
Selenium	n/a	n/a	1000	3.7	U	3.7	U	10
Sodium				31000	B	5000	J B U	5000
Thallium	n/a			20	J U	3	U	3
Vanadium	n/a			50	J U	5.3	U	5.3
Zinc	n/a	n/a		72		42	U	42
Mercury	n/a	n/a	200	0.13	I U	0.13	I U	0.13
Silver	n/a	n/a	5000	0.91	U	0.91	U	0.91

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soils_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2	MIX-ISS2-7.5PC	MIX-ISS2-5PC2.5S	MIX-ISS2-7.5PC2.5S	MIX-ISS2-5PC2.5S
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024
TOTAL VOCs 8260 D ug/kg								
1,1,1-Trichloroethane	36000000	1000000		1.7	U	NS		NS
1,1,2,2-Tetrachloroethane	2700			1.5	*+ *1 U	NS		NS
1,1,2-Trichloro-1,2,2-trifluoroethane	28000000			2	^c *+ U	NS		NS
1,1,2-Trichloroethane	5000			0.98	*+ U	NS		NS
1,1-Dichloroethane	16000	480000		1.6	U	NS		NS
1,1-Dichloroethene	1000000	1000000	n/a	2.2	U	NS		NS
1,2-Dibromo-3-Chloropropane	64			3.2	^c *1 U	NS		NS
1,2-Dichlorobenzene	9300000	1000000		1.7	U	NS		NS
1,2-Dichloroethane	2000	60000	n/a	1.4	U	NS		NS
1,2-Dichloropropane	11000			1.3	^c U	NS		NS
1,2,4-Trichlorobenzene	110000			2.5	U	NS		NS
1,3-Dichlorobenzene		560000		3.1	^c U	NS		NS
1,4-Dichlorobenzene	11000	250000	n/a	1.5	U	NS		NS
2-Butanone (MEK)	190000000	1000000	n/a	2.5	*+ *1 U	NS		NS
2-Hexanone	1300000			1.6	^c *1 U	NS		NS
4-Methyl-2-pentanone (MIBK)	140000000			1.8	^c *+ *1 U	NS		NS
Acetone	1100000000	1000000		3.9	^c *+ *1 U	NS		NS
Benzene	5100	89000	n/a	1.4	U	NS		NS
Bromoform	86000			2.5	U	NS		NS
Bromomethane	30000			2.3	^c *+ U	NS		NS
Carbon disulfide	3500000			4	U	NS		NS
Carbon tetrachloride	2900	44000	n/a	2	U	NS		NS
Chlorobenzene	1300000	1000000	n/a	1.3	U	NS		NS
Chlorodibromomethane	39000			2.5	U	NS		NS
Chloroform	1400	700000	n/a	3.3	U	NS		NS
Chloromethane	460000			2	U	NS		NS
Chloroethane	23000000			2.9	^c *1 *+ U	NS		NS
cis-1,2-Dichloroethene	370000	1000000		1.5	U	NS		NS
cis-1,3-Dichloropropene				2.2	U	NS		NS
Dichlorobromomethane	1300			2.3	U	NS		NS
Dichlorodifluoromethane	370000			2.5	U	NS		NS
Ethylbenzene	25000	780000		1.8	U	NS		NS
1,2-Dibromoethane	160			1.4	*+ *1 U	NS		NS
Cyclohexane	27000000			2.4	U	NS		NS
Isopropylbenzene	9900000			2.6	U	NS		NS
Methyl acetate	1200000000			7.3	*+ *1 U	NS		NS
Methyl tert-butyl ether	210000	1000000		1.5	*+ U	NS		NS
Methylcyclohexane	410000			2.4	U	NS		NS
Methylene Chloride	1000000	1000000		4.5	*+ U	NS		NS
Styrene	35000000			1.5	^c *+ U	NS		NS
Tetrachloroethene	100000	300000	n/a	2	U	NS		NS
Toluene	47000000	1000000		1.4	U	NS		NS
trans-1,2-Dichloroethene	300000	1000000		1.7	U	NS		NS
trans-1,3-Dichloropropene				2.2	^c U	NS		NS
Trichloroethene	6000	400000	n/a	1.6	U	NS		NS
Trichlorofluoromethane	350000000			4.1	^c U	NS		NS
Vinyl chloride	1700	27000	n/a	3.6	*+ U	NS		NS
Xylenes, Total	2500000	1000000		7.2	U	NS		NS

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2	MIX-ISS2-7.5PC		MIX-ISS2-5PC2.5S		MIX-ISS2-7.5PC2.5S		MIX-ISS2-5PC5S		
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024					
SPLP VOCs 8260 D ug/L													
1,1,1-Trichloroethane	n/a	n/a		60	U	3	U	3	U	3	U	3	U
1,1,2,2-Tetrachloroethane	n/a			60	U	3	^c U	3	^c U	3	^c U	3	^c U
1,1,2-Trichloro-1,2,2-trifluoroethane	n/a			86	U	4.3	U	4.3	U	4.3	U	4.3	U
1,1,2-Trichloroethane	n/a			45	U	2.3	U	2.3	U	2.3	U	2.3	U
1,1-Dichloroethane	n/a	n/a		63	U	3.1	U	3.1	U	3.1	U	3.1	U
1,1-Dichloroethene	n/a	n/a	700	55	U	2.8	U	2.8	U	2.8	U	2.8	U
1,2-Dibromo-3-Chloropropane	n/a			89	^c U	4.4	U	4.4	U	4.4	U	4.4	U
1,2-Dichlorobenzene	n/a	n/a		36	U	1.8	U	1.8	U	1.8	U	1.8	U
1,2-Dichloroethane	n/a	n/a	500	57	U	2.9	U	2.9	U	2.9	U	2.9	U
1,2-Dichloropropane	n/a			66	U	3.3	U	3.3	U	3.3	U	3.3	U
1,2,4-Trichlorobenzene	n/a			77	^c U	3.9	^c U	3.9	^c U	3.9	^c U	3.9	^c U
1,3-Dichlorobenzene		n/a		50	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	n/a	n/a	7500	54	U	2.7	U	2.7	U	2.7	U	2.7	U
2-Butanone (MEK)	n/a	n/a	200000	260	U	13	U	13	U	13	U	13	U
2-Hexanone	n/a			330	U	16	U	16	U	16	U	16	U
4-Methyl-2-pentanone (MIBK)	n/a			310	U	15	U	15	U	15	U	15	U
Acetone	n/a	n/a		340	^c U	17	U	17	U	17	U	17	U
Benzene	n/a	n/a	500	60	U	3	U	3	U	3	U	3	U
Bromoform	n/a			98	U	4.9	U	4.9	U	4.9	U	4.9	U
Bromomethane	n/a			89	^c U	4.4	U	4.4	U	4.4	U	4.4	U
Carbon disulfide	n/a			88	^c U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Carbon tetrachloride	n/a	n/a	500	88	U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Chlorobenzene	n/a	n/a	100000	50	U	2.5	U	2.5	U	2.5	U	2.5	U
Chlorodibromomethane	n/a			84	U	4.2	U	4.2	U	4.2	U	4.2	U
Chloroform	n/a	n/a	6000	60	U	3	U	3	U	3	U	3	U
Chloromethane	n/a			90	U	4.5	U	4.5	U	4.5	U	4.5	U
Chloroethane	n/a			90	^c U	4.5	U	4.5	U	4.5	U	4.5	U
cis-1,2-Dichloroethene	n/a	n/a		71	U	3.5	U	3.5	U	3.5	U	3.5	U
cis-1,3-Dichloropropene				59	U	3	U	3	U	3	U	3	U
Dichlorobromomethane	n/a			64	U	3.2	U	3.2	U	3.2	U	3.2	U
Dichlorodifluoromethane	n/a			83	U	4.2	^c U	4.2	^c U	4.2	^c U	4.2	^c U
Ethylbenzene	n/a	n/a		51	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	n/a			50	U	2.5	U	2.5	U	2.5	U	2.5	U
Cyclohexane	n/a			63	U	3.2	U	3.2	U	3.2	U	3.2	U
Isopropylbenzene	n/a			34	U	1.7	U	1.7	U	1.7	U	1.7	U
Methyl acetate	n/a			170	U	8.4	^c U	8.4	^c U	8.4	^c U	8.4	^c U
Methyl tert-butyl ether	n/a	n/a		59	U	3	^c U	3	^c U	3	^c U	3	^c U
Methylcyclohexane	n/a			61	U	3	U	3	U	3	U	3	U
Methylene Chloride	n/a	n/a		89	U	5	J U	11		5.1		4.4	U
Styrene	n/a			47	U	2.4	U	2.4	U	2.4	U	2.4	U
Tetrachloroethene	n/a	n/a	700	47	U	2.3	^c U	2.3	^c U	2.3	^c U	2.3	^c U
Toluene	n/a	n/a		46	U	2.3	U	2.3	U	2.3	U	2.3	U
trans-1,2-Dichloroethene	n/a	n/a		67	U	3.4	U	3.4	U	3.4	U	3.4	U
trans-1,3-Dichloropropene				58	U	2.9	^c U	2.9	^c U	2.9	^c U	2.9	^c U
Trichloroethene	n/a	n/a	500	69	U	3.4	^c U	3.4	^c U	3.4	^c U	3.4	^c U
Trichlorofluoromethane	n/a			87	U	4.4	U	4.4	U	4.4	U	4.4	U
Vinyl chloride	n/a	n/a	200	41	^c U	2	U	2	U	2	U	2	U
Xylenes, Total	n/a	n/a		89	U	4.5	U	4.5	U	4.5	U	4.5	U

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2		MIX-ISS2-7.5PC		MIX-ISS2-5PC2.5S		MIX-ISS2-7.5PC2.5S		MIX-ISS2-5PC5S	
				4/29/2024		5/28/2024		5/28/2024		5/28/2024		5/28/2024	
TOTAL SVOCs 8260 D ug/kg													
1,1'-Biphenyl	200000			120	U	NS		NS		NS		NS	
2,2'-oxybis[1-chloropropane]	47000000			24	^c U	NS		NS		NS		NS	
2,4,5-Trichlorophenol	82000000		n/a	110	U	NS		NS		NS		NS	
2,4,6-Trichlorophenol	210000		n/a	110	U	NS		NS		NS		NS	
2,4-Dichlorophenol	2500000			25	U	NS		NS		NS		NS	
2,4-Dimethylphenol	16000000			110	U	NS		NS		NS		NS	
2,4-Dinitrophenol	1600000			2000	U	NS		NS		NS		NS	
2,4-Dinitrotoluene	7400		n/a	190	U	NS		NS		NS		NS	
2,6-Dinitrotoluene	1500			130	U	NS		NS		NS		NS	
2-Chloronaphthalene	60000000			15	U	NS		NS		NS		NS	
2-Chlorophenol	5800000			120	U	NS		NS		NS		NS	
2-Methylnaphthalene	3000000			74		NS		NS		NS		NS	
2-Methylphenol	41000000	1000000	n/a	93	U	NS		NS		NS		NS	
2-Nitroaniline	8000000			150	^c U	NS		NS		NS		NS	
2-Nitrophenol				120	U	NS		NS		NS		NS	
3,3'-Dichlorobenzidine	5100			300	U	NS		NS		NS		NS	
3-Nitroaniline				82	U	NS		NS		NS		NS	
4,6-Dinitro-2-methylphenol	66000			560	U	NS		NS		NS		NS	
4-Bromophenyl phenyl ether				140	U	NS		NS		NS		NS	
4-Chloro-3-methylphenol	82000000			110	U	NS		NS		NS		NS	
4-Chloroaniline	11000			85	U	NS		NS		NS		NS	
4-Chlorophenyl phenyl ether				110	U	NS		NS		NS		NS	
Methylphenol, 3 & 4	16000000	1000000	n/a	95	U	NS		NS		NS		NS	
4-Nitroaniline	110000			120	U	NS		NS		NS		NS	
4-Nitrophenol				230	U	NS		NS		NS		NS	
Acenaphthene	45000000	1000000		19	U	NS		NS		NS		NS	
Acenaphthylene		1000000		14	U	NS		NS		NS		NS	
Acetophenone	120000000			120	U	NS		NS		NS		NS	
Anthracene	230000000	1000000		17	U	NS		NS		NS		NS	
Atrazine	10000			140	U	NS		NS		NS		NS	
Benzaldehyde	820000			40	U	NS		NS		NS		NS	
Benzo[a]anthracene	21000	11000		29	U	NS		NS		NS		NS	
Benzo[a]pyrene	2100	1100		28	U	NS		NS		NS		NS	
Benzo[b]fluoranthene	21000	11000		16	U	NS		NS		NS		NS	
Benzo[g,h,i]perylene		1000000		14	U	NS		NS		NS		NS	
Benzo[k]fluoranthene	210000	110000		19	U	NS		NS		NS		NS	
Bis(2-chloroethoxy)methane	2500000			120	U	NS		NS		NS		NS	
Bis(2-chloroethyl)ether	1000			20	U	NS		NS		NS		NS	
Bis(2-ethylhexyl) phthalate	160000			340	U	NS		NS		NS		NS	
Butyl benzyl phthalate	1200000			220	U	NS		NS		NS		NS	
Caprolactam	400000000			210	U	NS		NS		NS		NS	
Carbazole				15	U	NS		NS		NS		NS	
Chrysene	2100000	110000		36	U	NS		NS		NS		NS	
Dibenz[a,h]anthracene	2100	1100		41	U	NS		NS		NS		NS	
Dibenzofuran	1200000	1000000		120	U	NS		NS		NS		NS	
Diethyl phthalate	660000000			110	U	NS		NS		NS		NS	
Dimethyl phthalate				360	U	NS		NS		NS		NS	
Di-n-butyl phthalate	82000000			670	U	NS		NS		NS		NS	
Di-n-octyl phthalate	8200000			190	U	NS		NS		NS		NS	
Fluoranthene	30000000	1000000		17	U	NS		NS		NS		NS	
Fluorene	30000000	1000000		13	U	NS		NS		NS		NS	
Hexachlorobenzene	960	12000	n/a	23	U	NS		NS		NS		NS	
Hexachlorobutadiene	5300		n/a	19	U	NS		NS		NS		NS	
Hexachlorocyclopentadiene	7500			87	U	NS		NS		NS		NS	
Hexachloroethane	8000		n/a	110	U	NS		NS		NS		NS	
Indeno[1,2,3-cd]pyrene	21000	11000		32	U	NS		NS		NS		NS	
Isophorone	2400000			120	U	NS		NS		NS		NS	
Naphthalene	8600	1000000		13	U	NS		NS		NS		NS	
Nitrobenzene	22000		n/a	120	^c U	NS		NS		NS		NS	
N-Nitrosodi-n-propylamine	330			22	^c U	NS		NS		NS		NS	
N-Nitrosodiphenylamine	470000			110	U	NS		NS		NS		NS	
Pentachlorophenol	4000	55000	n/a	520	U	NS		NS		NS		NS	
Phenanthrene		1000000		210		NS		NS		NS		NS	
Phenol	250000000	1000000		98	U	NS		NS		NS		NS	
Pyrene	23000000	1000000		23	U	NS		NS		NS		NS	

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2		MIX-ISS2-7.5PC		MIX-ISS2-5PC2.5S		MIX-ISS2-7.5PC2.5S		MIX-ISS2-5PC2.5S	
				4/29/2024		5/28/2024		5/28/2024		5/28/2024		5/28/2024	
SPLP SVOCs 8260 D ug/L													
1,1'-Biphenyl	n/a			1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
2,2'-oxybis[1-chloropropane]	n/a			0.58	U	0.58	U	0.58	U	0.58	U	0.58	U
2,4,5-Trichlorophenol	n/a		400000	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2,4,6-Trichlorophenol	n/a		2000	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
2,4-Dichlorophenol	n/a			0.51	U	0.51	U	0.51	U	0.51	U	0.51	U
2,4-Dimethylphenol	n/a			5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
2,4-Dinitrophenol	n/a			33	U	33	U	33	U	33	U	33	U
2,4-Dinitrotoluene	n/a		130	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U
2,6-Dinitrotoluene	n/a			1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
2-Chloronaphthalene	n/a			0.59	U	0.59	U	0.59	U	0.59	U	0.59	U
2-Chlorophenol	n/a			2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
2-Methylnaphthalene	n/a			0.62	U	13		17		18		12	
2-Methylphenol	n/a	n/a	200000	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
2-Nitroaniline	n/a			5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
2-Nitrophenol				1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
3,3'-Dichlorobenzidine	n/a			5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
3-Nitroaniline				4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
4,6-Dinitro-2-methylphenol	n/a			15	U	15	U	15	U	15	U	15	U
4-Bromophenyl phenyl ether				3.2	U	3.2	U	3.2	U	3.2	U	3.2	U
4-Chloro-3-methylphenol	n/a			4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
4-Chloroaniline	n/a			3.8	U	3.8	U	3.8	U	3.8	U	3.8	U
4-Chlorophenyl phenyl ether				2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Methylphenol, 3 & 4	n/a	n/a	200000	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
4-Nitroaniline	n/a			3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
4-Nitrophenol				9.4	U	9.4	U	9.4	U	9.4	U	9.4	U
Acenaphthene	n/a	n/a		0.65	U	2		2.9		2.8		2.1	
Acenaphthylene		n/a		0.65	U	0.65	U	0.65	U	0.65	U	0.65	U
Acetophenone	n/a			1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Anthracene	n/a	n/a		0.49	U	0.49	U	0.49	U	0.49	U	0.49	U
Atrazine	n/a			6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
Benzaldehyde	n/a			5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
Benzo[a]anthracene	n/a	n/a		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
Benzo[a]pyrene	n/a	n/a		0.53	U	0.53	U	0.53	U	0.53	U	0.53	U
Benzo[b]fluoranthene	n/a	n/a		0.97	U	0.97	U	0.97	U	0.97	U	0.97	U
Benzo[g,h]perylene		n/a		0.69	U	0.69	U	0.69	U	0.69	U	0.69	U
Benzo[k]fluoranthene	n/a	n/a		0.88	U	0.88	U	0.88	U	0.88	U	0.88	U
Bis(2-chloroethoxy)methane	n/a			1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Bis(2-chloroethyl)ether	n/a			0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Bis(2-ethylhexyl) phthalate				62	U	62	U	62	U	62	U	62	U
Butyl benzyl phthalate	n/a			9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
Caprolactam	n/a			14	U	14	U	14	U	14	U	14	U
Carbazole				0.51	U	0.51	U	0.51	U	0.51	U	0.51	U
Chrysene	n/a	n/a		0.81	U	0.81	U	0.81	U	0.81	U	0.81	U
Dibenz[a,h]anthracene	n/a	n/a		0.72	U	0.72	U	0.72	U	0.72	U	0.72	U
Dibenzofuran	n/a	n/a		1.9	U	1.9	U	1.9	U	10	J U	10	J U
Diethyl phthalate	n/a			5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
Dimethyl phthalate				2	U	2	U	2	U	2	U	2	U
Di-n-butyl phthalate	n/a			49	U	49	U	49	U	49	U	49	U
Di-n-octyl phthalate	n/a			6.9	U	6.9	U	6.9	U	6.9	U	6.9	U
Fluoranthene	n/a	n/a		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Fluorene	n/a	n/a		0.69	U	2.9		4.4		4.3		3.5	
Hexachlorobenzene	n/a	n/a	130	0.56	U	0.56	U	0.56	U	0.56	U	0.56	U
Hexachlorobutadiene	n/a		500	0.69	U	0.69	U	0.69	U	0.69	U	0.69	U
Hexachlorocyclopentadiene	n/a			5	U	5	U	5	U	5	U	5	U
Hexachloroethane	n/a		3000	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Indeno[1,2,3-cd]pyrene	n/a	n/a		0.85	U	0.85	U	0.85	U	0.85	U	0.85	U
Isophorone	n/a			1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Naphthalene	n/a	n/a		0.59	U	1.9	J U	2.6		0.59	U	0.59	U
Nitrobenzene	n/a		2000	5	U	5	U	5	U	5	U	5	U
N-Nitrosodi-n-propylamine	n/a			0.71	U	0.71	U	0.71	U	0.71	U	0.71	U
N-Nitrosodiphenylamine	n/a			1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Pentachlorophenol	n/a	n/a	100000	8.5	^c U	8.5	U	8.5	U	8.5	U	8.5	U
Phenanthrene		n/a		1.6	U	4		4.9		5.3		4.3	
Phenol	n/a	n/a		4.9	U	4.9	U	4.9	U	4.9	U	4.9	U
Pyrene	n/a	n/a		0.54	U	0.54	U	0.54	U	0.54	U	0.54	U

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

TABLE 3 - PFAS PRELIMINARY AND ISS MIX ANALYTICAL RESULTS												
Analyte	USEPA RSLs THQ_1.0_Indust Soil_May2024	INV 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-2	MIX-ISS2-7-SPC	MIX-ISS2-5PC2.55	MIX-ISS2-7.5PC2.55	MIX-ISS2-5PC5S				
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024				
TOTAL PFAS ng/g - Draft 1633 extraction method												
Perfluorobutanoic acid (PFBA)	1200000			NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)	58			NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)	0.078			NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)	410000			NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)	2500			NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)	250000			NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)	16000			NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			NS	NS	NS	NS	NS				
TOTAL PFAS ng/g - methanol only extraction method												
Perfluorobutanoic acid (PFBA)	1200000			NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)	58			NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)	0.078			NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)	410000			NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)	2500			NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)	250000			NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)	16000			NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			NS	NS	NS	NS	NS				
SPLP PFAS ng/L												
Perfluorobutanoic acid (PFBA)				NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)				NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)				NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)				NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)				NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)				NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)				NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				NS	NS	NS	NS	NS				
General Chemistry												
Percent Moisture (%)				14.7								
Notes:												
indicated sample was detected above the reporting limit.				0.001								
indicated sample was below the method detection limit.				U								
indicated sample exceeded regulatory criteria				0.001								
indicated analyte was not sampled.				NS								

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSL THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-	MIX-ISS3-7.5PC	MIX-ISS3-5PC2.5S	MIX-ISS3-7.5PC2.5S	MIX-ISS3-5PC5S					
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024					
TOTAL METALS 6010D mg/kg													
Aluminum	1100000			4300	NS	NS	NS	NS					
Arsenic	3	16	n/a	2.8	NS	NS	NS	NS					
Antimony	470			0.85	J U	NS	NS	NS					
Barium	220000	10000	n/a	31	NS	NS	NS	NS					
Beryllium	2300	2700		0.34	NS	NS	NS	NS					
Cadmium	100	60	n/a	0.062	U	NS	NS	NS					
Calcium				600	NS	NS	NS	NS					
Chromium			n/a	9	NS	NS	NS	NS					
Cobalt	350			5	NS	NS	NS	NS					
Copper	47000	10000		13	NS	NS	NS	NS					
Iron	820000			12000	NS	NS	NS	NS					
Lead	800	3900	n/a	17	NS	NS	NS	NS					
Magnesium				1700	NS	NS	NS	NS					
Manganese	26000	10000		240	NS	NS	NS	NS					
Nickel	17000	10000		9.4	NS	NS	NS	NS					
Potassium				650	NS	NS	NS	NS					
Selenium	5800	6800	n/a	2	U	NS	NS	NS					
Sodium				420	J U	NS	NS	NS					
Thallium	12			0.24	U	NS	NS	NS					
Vanadium	5800			15	NS	NS	NS	NS					
Zinc	350000	10000		34	NS	NS	NS	NS					
Mercury	46	5.7	n/a	0.019	U	NS	NS	NS					
Silver	5800	6800	n/a	0.088	U	NS	NS	NS					
SPLP METALS 6010D ug/L													
Aluminum	n/a			110	U	3400	7000	3900	6600				
Arsenic	n/a	n/a	5000	8.3	U	8.3	U	8.3	U	8.3	U		
Antimony	n/a			6.2	U	6.2	U	6.2	U	6.2	U		
Barium	n/a	n/a	100000	27	U	330	B	240	B	460	B		
Beryllium	n/a	n/a		1.5	U	1.5	U	1.5	U	1.5	U		
Cadmium	n/a	n/a	1000	0.3	U	0.3	U	0.3	U	0.3	U		
Calcium				5000	J U	250000	B	170000	B	250000	B		
Chromium			5000	3.1	U	5	J U	6.8		3.1	U	3.1	U
Cobalt	n/a			3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Copper	n/a	n/a		2.2	U	25	J U	25	J U	25	J U	25	J U
Iron	n/a			72	U	72	U	72	U	72	U	72	U
Lead	n/a	n/a	5000	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Magnesium				5000	J U	690	U	690	U	690	U	690	U
Manganese	n/a	n/a		160		2.4	U	2.4	U	2.4	U	2.4	U
Nickel	n/a	n/a		3.5	U	40	J U	3.5	U	40	J U	40	J U
Potassium				2600	U	11000		8200		12000		9900	
Selenium	n/a	n/a	1000	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Sodium				5000	J B U	5000	J B U	5000	J B U	5000	J B U	6000	B
Thallium	n/a			3	U	3	U	3	U	20	J U	3	U
Vanadium	n/a			5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
Zinc	n/a	n/a		42	U	42	U	42	U	42	U	42	U
Mercury	n/a	n/a	200	0.13	I U	0.13	I U	0.13	I U	0.13	I U	0.13	I U
Silver	n/a	n/a	5000	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-3		MIX-ISS3-7.5PC		MIX-ISS3-5PC2.5S		MIX-ISS3-7.5PC2.5S		MIX-ISS3-5PC5S	
				4/29/2024		5/28/2024		5/28/2024		5/28/2024		5/28/2024	
TOTAL VOCs 8260 D ug/kg													
1,1,1-Trichloroethane	36000000	1000000		830	U	NS		NS		NS		NS	
1,1,2,2-Tetrachloroethane	2700			760	U	NS		NS		NS		NS	
1,1,2-Trichloro-1,2,2-trifluoroethane	28000000			1000	U	NS		NS		NS		NS	
1,1,2-Trichloroethane	5000			490	U	NS		NS		NS		NS	
1,1-Dichloroethane	16000	480000		800	U	NS		NS		NS		NS	
1,1-Dichloroethene	1000000	1000000	n/a	1100	U	NS		NS		NS		NS	
1,2-Dibromo-3-Chloropropane	64			1600	^c U	NS		NS		NS		NS	
1,2-Dichlorobenzene	9300000	1000000		840	U	NS		NS		NS		NS	
1,2-Dichloroethane	2000	60000	n/a	720	U	NS		NS		NS		NS	
1,2-Dichloropropane	11000			660	U	NS		NS		NS		NS	
1,2,4-Trichlorobenzene	110000			1300	^c U	NS		NS		NS		NS	
1,3-Dichlorobenzene		560000		1500	U	NS		NS		NS		NS	
1,4-Dichlorobenzene	11000	250000	n/a	750	U	NS		NS		NS		NS	
2-Butanone (MEK)	190000000	1000000	n/a	1300	^c U	NS		NS		NS		NS	
2-Hexanone	1300000			780	^c U	NS		NS		NS		NS	
4-Methyl-2-pentanone (MIBK)	140000000			910	^c U	NS		NS		NS		NS	
Acetone	1100000000	1000000		1900	U	NS		NS		NS		NS	
Benzene	5100	89000	n/a	700	U	NS		NS		NS		NS	
Bromoform	86000			1300	U	NS		NS		NS		NS	
Bromomethane	30000			1100	U	NS		NS		NS		NS	
Carbon disulfide	3500000			2000	^c U	NS		NS		NS		NS	
Carbon tetrachloride	2900	44000	n/a	1000	U	NS		NS		NS		NS	
Chlorobenzene	1300000	1000000	n/a	650	U	NS		NS		NS		NS	
Chlorodibromomethane	39000			1200	U	NS		NS		NS		NS	
Chloroform	1400	700000	n/a	1700	U	NS		NS		NS		NS	
Chloromethane	460000			990	^c U	NS		NS		NS		NS	
Chloroethane	23000000			1500	^c U	NS		NS		NS		NS	
cis-1,2-Dichloroethene	370000	1000000		750	U	NS		NS		NS		NS	
cis-1,3-Dichloropropene				1100	U	NS		NS		NS		NS	
Dichlorobromomethane	1300			1200	U	NS		NS		NS		NS	
Dichlorodifluoromethane	370000			1200	^c U	NS		NS		NS		NS	
Ethylbenzene	25000	780000		6100	U	NS		NS		NS		NS	
1,2-Dibromoethane	160			680	U	NS		NS		NS		NS	
Cyclohexane	27000000			1200	U	NS		NS		NS		NS	
Isopropylbenzene	9900000			1300	U	NS		NS		NS		NS	
Methyl acetate	1200000000			3700	U	NS		NS		NS		NS	
Methyl tert-butyl ether	210000	1000000		730	U	NS		NS		NS		NS	
Methylcyclohexane	410000			2500	J U	NS		NS		NS		NS	
Methylene Chloride	1000000	1000000		2300	U	NS		NS		NS		NS	
Styrene	35000000			750	U	NS		NS		NS		NS	
Tetrachloroethene	100000	300000	n/a	1000	U	NS		NS		NS		NS	
Toluene	47000000	1000000		2500	J U	NS		NS		NS		NS	
trans-1,2-Dichloroethene	300000	1000000		870	U	NS		NS		NS		NS	
trans-1,3-Dichloropropene				1100	U	NS		NS		NS		NS	
Trichloroethene	6000	400000	n/a	780	U	NS		NS		NS		NS	
Trichlorofluoromethane	350000000			2100	^c U	NS		NS		NS		NS	
Vinyl chloride	1700	27000	n/a	1800	U	NS		NS		NS		NS	
Xylenes, Total	2500000	1000000		85000		NS		NS		NS		NS	

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-3	MIX-ISS3-7.5PC		MIX-ISS3-5PC2.5S		MIX-ISS3-7.5PC2.5S		MIX-ISS3-5PC5S		
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024					
SPLP VOCs 8260 D ug/L													
1,1,1-Trichloroethane	n/a	n/a		60	U	3	U	3	U	3	U	3	U
1,1,2,2-Tetrachloroethane	n/a			60	U	3	^c U	3	^c U	3	^c U	3	^c U
1,1,2-Trichloro-1,2,2-trifluoroethane	n/a			86	U	4.3	U	4.3	U	4.3	U	4.3	U
1,1,2-Trichloroethane	n/a			45	U	2.3	U	2.3	U	2.3	U	2.3	U
1,1-Dichloroethane	n/a	n/a		63	U	3.1	U	3.1	U	3.1	U	3.1	U
1,1-Dichloroethene	n/a	n/a	700	55	U	2.8	U	2.8	U	2.8	U	2.8	U
1,2-Dibromo-3-Chloropropane	n/a			89	^c U	4.4	U	4.4	U	4.4	U	4.4	U
1,2-Dichlorobenzene	n/a	n/a		36	U	1.8	U	1.8	U	1.8	U	1.8	U
1,2-Dichloroethane	n/a	n/a	500	57	U	2.9	U	2.9	U	2.9	U	2.9	U
1,2-Dichloropropane	n/a			66	U	3.3	U	3.3	U	3.3	U	3.3	U
1,2,4-Trichlorobenzene	n/a			77	^c U	3.9	^c U	3.9	^c U	3.9	^c U	3.9	^c U
1,3-Dichlorobenzene		n/a		50	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	n/a	n/a	7500	54	U	2.7	U	2.7	U	2.7	U	2.7	U
2-Butanone (MEK)	n/a	n/a	200000	260	U	13	U	13	U	13	U	13	U
2-Hexanone	n/a			330	U	16	U	16	U	16	U	16	U
4-Methyl-2-pentanone (MIBK)	n/a			310	U	15	U	15	U	15	U	15	U
Acetone	n/a	n/a		340	^c U	17	U	17	U	17	U	17	U
Benzene	n/a	n/a	500	60	U	3	U	3	U	3	U	3	U
Bromoform	n/a			98	U	4.9	U	4.9	U	4.9	U	4.9	U
Bromomethane	n/a			89	^c U	4.4	U	4.4	U	4.4	U	4.4	U
Carbon disulfide	n/a			88	^c U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Carbon tetrachloride	n/a	n/a	500	88	U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Chlorobenzene	n/a	n/a	100000	50	U	2.5	U	2.5	U	2.5	U	2.5	U
Chlorodibromomethane	n/a			84	U	4.2	U	4.2	U	4.2	U	4.2	U
Chloroform	n/a	n/a	6000	60	U	3	U	3	U	3	U	3	U
Chloromethane	n/a			90	U	4.5	U	4.5	U	4.5	U	4.5	U
Chloroethane	n/a			90	^c U	4.5	U	4.5	U	4.5	U	4.5	U
cis-1,2-Dichloroethene	n/a	n/a		71	U	3.5	U	3.5	U	3.5	U	3.5	U
cis-1,3-Dichloropropene				59	U	3	U	3	U	3	U	3	U
Dichlorobromomethane	n/a			64	U	3.2	U	3.2	U	3.2	U	3.2	U
Dichlorodifluoromethane	n/a			83	U	4.2	^c U	4.2	^c U	4.2	^c U	4.2	^c U
Ethylbenzene	n/a	n/a		51	U	37		21		18		6.2	
1,2-Dibromoethane	n/a			50	U	2.5	U	2.5	U	2.5	U	2.5	U
Cyclohexane	n/a			63	U	3.2	U	3.2	U	3.2	U	3.2	U
Isopropylbenzene	n/a			34	U	5	J U	5	J U	1.7	U	1.7	U
Methyl acetate	n/a			170	U	8.4	^c U	8.4	^c U	8.4	^c U	8.4	^c U
Methyl tert-butyl ether	n/a	n/a		59	U	3	^c U	3	^c U	3	^c U	3	^c U
Methylcyclohexane	n/a			61	U	3	U	3	U	3	U	3	U
Methylene Chloride	n/a	n/a		89	U	4.4	U	4.4	U	8.2		4.4	U
Styrene	n/a			47	U	2.4	U	2.4	U	2.4	U	2.4	U
Tetrachloroethene	n/a	n/a	700	47	U	2.3	^c U	2.3	^c U	2.3	^c U	2.3	^c U
Toluene	n/a	n/a		46	U	5	J U	2.3	U	2.3	U	2.3	U
trans-1,2-Dichloroethene	n/a	n/a		67	U	3.4	U	3.4	U	3.4	U	3.4	U
trans-1,3-Dichloropropene				58	U	2.9	^c U	2.9	^c U	2.9	^c U	2.9	^c U
Trichloroethene	n/a	n/a	500	69	U	3.4	^c U	3.4	^c U	3.4	^c U	3.4	^c U
Trichlorofluoromethane	n/a			87	U	4.4	U	4.4	U	4.4	U	4.4	U
Vinyl chloride	n/a	n/a	200	41	^c U	2	U	2	U	2	U	2	U
Xylenes, Total	n/a	n/a		310		280	J	200		220		37	

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_ Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-3		MIX-ISS3-7.5PC		MIX-ISS3-5PC2.5S		MIX-ISS3-7.5PC2.5S		MIX-ISS3-5PC5S	
				4/29/2024		5/28/2024		5/28/2024		5/28/2024		5/28/2024	
TOTAL SVOCs 8260 D ug/kg													
1,1'-Biphenyl	200000			120	U	NS		NS		NS		NS	
2,2'-oxybis[1-chloropropane]	47000000			24	^c U	NS		NS		NS		NS	
2,4,5-Trichlorophenol	82000000		n/a	110	U	NS		NS		NS		NS	
2,4,6-Trichlorophenol	210000		n/a	110	U	NS		NS		NS		NS	
2,4-Dichlorophenol	2500000			25	U	NS		NS		NS		NS	
2,4-Dimethylphenol	16000000			110	U	NS		NS		NS		NS	
2,4-Dinitrophenol	1600000			2000	U	NS		NS		NS		NS	
2,4-Dinitrotoluene	7400		n/a	200	U	NS		NS		NS		NS	
2,6-Dinitrotoluene	1500			130	U	NS		NS		NS		NS	
2-Chloronaphthalene	60000000			15	U	NS		NS		NS		NS	
2-Chlorophenol	5800000			120	U	NS		NS		NS		NS	
2-Methylnaphthalene	3000000			1900		NS		NS		NS		NS	
2-Methylphenol	41000000	1000000	n/a	94	U	NS		NS		NS		NS	
2-Nitroaniline	8000000			150	^c U	NS		NS		NS		NS	
2-Nitrophenol				120	U	NS		NS		NS		NS	
3,3'-Dichlorobenzidine	5100			310	U	NS		NS		NS		NS	
3-Nitroaniline				84	U	NS		NS		NS		NS	
4,6-Dinitro-2-methylphenol	66000			570	U	NS		NS		NS		NS	
4-Bromophenyl phenyl ether				140	U	NS		NS		NS		NS	
4-Chloro-3-methylphenol	82000000			120	U	NS		NS		NS		NS	
4-Chloroaniline	11000			86	U	NS		NS		NS		NS	
4-Chlorophenyl phenyl ether				110	U	NS		NS		NS		NS	
Methylphenol, 3 & 4	16000000	1000000	n/a	97	U	NS		NS		NS		NS	
4-Nitroaniline	110000			120	U	NS		NS		NS		NS	
4-Nitrophenol				230	U	NS		NS		NS		NS	
Acenaphthene	45000000	1000000		19	U	NS		NS		NS		NS	
Acenaphthylene		1000000		110		NS		NS		NS		NS	
Acetophenone	120000000			120	U	NS		NS		NS		NS	
Anthracene	230000000	1000000		290		NS		NS		NS		NS	
Atrazine	10000			140	U	NS		NS		NS		NS	
Benzaldehyde	820000			41	U	NS		NS		NS		NS	
Benzo[a]anthracene	21000	11000		140		NS		NS		NS		NS	
Benzo[a]pyrene	2100	1100		170		NS		NS		NS		NS	
Benzo[b]fluoranthene	21000	11000		180		NS		NS		NS		NS	
Benzo[g,h,i]perylene		1000000		150		NS		NS		NS		NS	
Benzo[k]fluoranthene	210000	110000		74		NS		NS		NS		NS	
Bis(2-chloroethoxy)methane	25000000			120	U	NS		NS		NS		NS	
Bis(2-chloroethyl)ether	1000			20	U	NS		NS		NS		NS	
Bis(2-ethylhexyl) phthalate	160000			350	U	NS		NS		NS		NS	
Butyl benzyl phthalate	1200000			230	U	NS		NS		NS		NS	
Caprolactam	400000000			210	U	NS		NS		NS		NS	
Carbazole				15	U	NS		NS		NS		NS	
Chrysene	2100000	110000		220		NS		NS		NS		NS	
Dibenz[a,h]anthracene	2100	1100		42	U	NS		NS		NS		NS	
Dibenzofuran	1200000	1000000		120	U	NS		NS		NS		NS	
Diethyl phthalate	660000000			120	U	NS		NS		NS		NS	
Dimethyl phthalate				360	U	NS		NS		NS		NS	
Di-n-butyl phthalate	82000000			680	U	NS		NS		NS		NS	
Di-n-octyl phthalate	8200000			190	U	NS		NS		NS		NS	
Fluoranthene	30000000	1000000		260		NS		NS		NS		NS	
Fluorene	30000000	1000000		200		NS		NS		NS		NS	
Hexachlorobenzene	960	12000	n/a	24	U	NS		NS		NS		NS	
Hexachlorobutadiene	5300		n/a	19	U	NS		NS		NS		NS	
Hexachlorocyclopentadiene	7500			89	U	NS		NS		NS		NS	
Hexachloroethane	8000		n/a	120	U	NS		NS		NS		NS	
Indeno[1,2,3-cd]pyrene	21000	11000		120		NS		NS		NS		NS	
Isophorone	2400000			120	U	NS		NS		NS		NS	
Naphthalene	8600	1000000		1100		NS		NS		NS		NS	
Nitrobenzene	22000		n/a	120	^c U	NS		NS		NS		NS	
N-Nitrosodi-n-propylamine	330			22	^c U	NS		NS		NS		NS	
N-Nitrosodiphenylamine	470000			110	U	NS		NS		NS		NS	
Pentachlorophenol	4000	55000	n/a	530	U	NS		NS		NS		NS	
Phenanthrene		1000000		200		NS		NS		NS		NS	
Phenol	250000000	1000000		100	U	NS		NS		NS		NS	
Pyrene	23000000	1000000		560		NS		NS		NS		NS	

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-3	MIX-ISS3-7.5PC		MIX-ISS3-5PC2.5S		MIX-ISS3-7.5PC2.5S		MIX-ISS3-5PC5S		
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024					
SPLP SVOCs 8260 D ug/L													
1,1'-Biphenyl	n/a			1.6	U	1.4	U	1.4	U	1.4	U	1.4	U
2,2'-oxybis[1-chloropropane]	n/a			0.66	U	0.58	U	0.58	U	0.58	U	0.58	U
2,4,5-Trichlorophenol	n/a		400000	2.9	U	2.5	U	2.5	U	2.5	U	2.5	U
2,4,6-Trichlorophenol	n/a		2000	2.5	U	2.2	U	2.2	U	2.2	U	2.2	U
2,4-Dichlorophenol	n/a			0.58	U	0.51	U	0.51	U	0.51	U	0.51	U
2,4-Dimethylphenol	n/a			6.6	U	5.9	U	5.9	U	5.9	U	5.9	U
2,4-Dinitrophenol	n/a			37	U	33	U	33	U	33	U	33	U
2,4-Dinitrotoluene	n/a		130	4	U	3.5	U	3.5	U	3.5	U	3.5	U
2,6-Dinitrotoluene	n/a			2	U	1.7	U	1.7	U	1.7	U	1.7	U
2-Chloronaphthalene	n/a			0.67	U	0.59	U	0.59	U	0.59	U	0.59	U
2-Chlorophenol	n/a			2.6	U	2.3	U	2.3	U	2.3	U	2.3	U
2-Methylnaphthalene	n/a			3.2		14		18		11		14	
2-Methylphenol	n/a	n/a	200000	6.3	U	5.6	U	5.6	U	5.6	U	5.6	U
2-Nitroaniline	n/a			6.2	U	5.5	U	5.5	U	5.5	U	5.5	U
2-Nitrophenol				2.2	U	1.9	U	1.9	U	1.9	U	1.9	U
3,3'-Dichlorobenzidine	n/a			6.6	U	5.8	U	5.8	U	5.8	U	5.8	U
3-Nitroaniline				5	U	4.4	U	4.4	U	4.4	U	4.4	U
4,6-Dinitro-2-methylphenol	n/a			17	U	15	U	15	U	15	U	15	U
4-Bromophenyl phenyl ether				3.6	U	3.2	U	3.2	U	3.2	U	3.2	U
4-Chloro-3-methylphenol	n/a			4.9	U	4.4	U	4.4	U	4.4	U	4.4	U
4-Chloroaniline	n/a			4.3	U	3.8	U	3.8	U	3.8	U	3.8	U
4-Chlorophenyl phenyl ether				2.5	U	2.2	U	2.2	U	2.2	U	2.2	U
Methylphenol, 3 & 4	n/a	n/a	200000	4.2	U	3.7	U	3.7	U	3.7	U	3.7	U
4-Nitroaniline	n/a			4.1	U	3.6	U	3.6	U	3.6	U	3.6	U
4-Nitrophenol				11	U	9.4	U	9.4	U	9.4	U	9.4	U
Acenaphthene	n/a	n/a		14		1.9	J U	1.9	J U	0.65	U	1.9	J U
Acenaphthylene		n/a		2.2	J U	0.65	U	0.65	U	0.65	U	0.65	U
Acetophenone	n/a			1.8	U	1.6	U	1.6	U	1.6	U	1.6	U
Anthracene	n/a	n/a		19		1.9	J U	1.9	J U	0.49	U	1.9	J U
Atrazine	n/a			7.2	U	6.3	U	6.3	U	6.3	U	6.3	U
Benzaldehyde	n/a			6.1	U	5.4	U	5.4	U	5.4	U	5.4	U
Benzo[a]anthracene	n/a	n/a		0.85	U	0.75	U	0.75	U	0.75	U	0.75	U
Benzo[a]pyrene	n/a	n/a		0.6	U	0.53	U	0.53	U	0.53	U	0.53	U
Benzo[b]fluoranthene	n/a	n/a		1.1	U	0.97	U	0.97	U	0.97	U	0.97	U
Benzo[k]fluoranthene		n/a		0.78	U	0.69	U	0.69	U	0.69	U	0.69	U
Benzo[k]fluoranthene	n/a	n/a		1	U	0.88	U	0.88	U	0.88	U	0.88	U
Bis(2-chloroethoxy)methane	n/a			1.7	U	1.5	U	1.5	U	1.5	U	1.5	U
Bis(2-chloroethyl)ether	n/a			0.45	U	0.4	U	0.4	U	0.4	U	0.4	U
Bis(2-ethylhexyl) phthalate	n/a			71	U	62	U	62	U	62	U	62	U
Butyl benzyl phthalate	n/a			11	U	9.6	U	9.6	U	9.6	U	9.6	U
Caprolactam	n/a			16	U	14	U	14	U	14	U	14	U
Carbazole				77		0.51	U	0.51	U	0.51	U	0.51	U
Chrysene	n/a	n/a		0.92	U	0.81	U	0.81	U	0.81	U	0.81	U
Dibenz[a,h]anthracene	n/a	n/a		0.82	U	0.72	U	0.72	U	0.72	U	0.72	U
Dibenzofuran	n/a	n/a		11	J U	1.9	U	1.9	U	1.9	U	1.9	U
Diethyl phthalate	n/a			6.4	U	5.7	U	5.7	U	5.7	U	5.7	U
Dimethyl phthalate				2.3	U	2	U	2	U	2	U	2	U
Di-n-butyl phthalate	n/a			56	U	49	U	49	U	49	U	49	U
Di-n-octyl phthalate	n/a			7.8	U	6.9	U	6.9	U	6.9	U	6.9	U
Fluoranthene	n/a	n/a		3.9		0.6	U	0.6	U	0.6	U	0.6	U
Fluorene	n/a	n/a		20		1.9	J U	1.9	J U	0.69	U	1.9	J U
Hexachlorobenzene	n/a	n/a	130	0.64	U	0.56	U	0.56	U	0.56	U	0.56	U
Hexachlorobutadiene	n/a		500	0.78	U	0.69	U	0.69	U	0.69	U	0.69	U
Hexachlorocyclopentadiene	n/a			5.6	U	5	U	5	U	5	U	5	U
Hexachloroethane	n/a		3000	1.5	U	1.3	U	1.3	U	1.3	U	1.3	U
Indeno[1,2,3-cd]pyrene	n/a	n/a		0.97	U	0.85	U	0.85	U	0.85	U	0.85	U
Isophorone	n/a			2.1	U	1.9	U	1.9	U	1.9	U	1.9	U
Naphthalene	n/a	n/a		0.67	U	22		25		15		17	
Nitrobenzene	n/a		2000	5.7	U	5	U	5	U	5	U	5	U
N-Nitrosodi-n-propylamine	n/a			0.81	U	0.71	U	0.71	U	0.71	U	0.71	U
N-Nitrosodiphenylamine	n/a			1.4	U	1.2	U	1.2	U	1.2	U	1.2	U
Pentachlorophenol	n/a	n/a	100000	9.6	^c U	8.5	U	8.5	U	8.5	U	8.5	U
Phenanthrene		n/a		17		1.6	U	1.6	U	1.6	U	1.6	U
Phenol	n/a	n/a		5.5	U	4.9	U	4.9	U	4.9	U	4.9	U
Pyrene	n/a	n/a		2.9		0.54	U	0.54	U	0.54	U	0.54	U

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

TABLE 3 - PFAS ANALYTES AND ISS MIX ANALYTICAL RESULTS												
Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	INV 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-3	MIX-ISS3-7-SPC	MIX-ISS3-5PC2.55	MIX-ISS3-7.5PC2.55	MIX-ISS3-5PC5				
				4/29/2024	5/28/2024	5/28/2024	5/28/2024	5/28/2024				
TOTAL PFAS ng/g - Draft 1633 extraction method												
Perfluorobutanoic acid (PFBA)	1200000			NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)	58			NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)	0.078			NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)	410000			NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)	2500			NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)	250000			NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)	16000			NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			NS	NS	NS	NS	NS				
TOTAL PFAS ng/g - methanol only extraction method												
Perfluorobutanoic acid (PFBA)	1200000			NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)	58			NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)	0.078			NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)	410000			NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)	2500			NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)	250000			NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)	16000			NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			NS	NS	NS	NS	NS				
SPLP PFAS ng/L												
Perfluorobutanoic acid (PFBA)				NS	NS	NS	NS	NS				
Perfluorohexanoic acid (PFHxA)				NS	NS	NS	NS	NS				
Perfluorooctanoic acid (PFOA)				NS	NS	NS	NS	NS				
Perfluorononanoic acid (PFNA)				NS	NS	NS	NS	NS				
Perfluorodecanoic acid (PFDA)				NS	NS	NS	NS	NS				
Perfluorobutanesulfonic acid (PFBS)				NS	NS	NS	NS	NS				
Perfluorohexanesulfonic acid (PFHxS)				NS	NS	NS	NS	NS				
Perfluorooctanesulfonic acid (PFOS)				NS	NS	NS	NS	NS				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				NS	NS	NS	NS	NS				
General Chemistry												
Percent Moisture (%)				15.6								
Notes:												
indicated sample was detected above the reporting limit.				0.001								
indicated sample was below the method detection limit.				U								
indicated sample exceeded regulatory criteria				0.001								
indicated analyte was not sampled.				NS								

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4	MIX-ISS4-7.5PC	MIX-ISS4-7.5PC-0.5C	MIX-ISS4-7.5PC-1.0C	MIX-ISS4-7.5PC-1.5C					
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024					
TOTAL METALS 6010D mg/kg													
Aluminum	1100000			910		NS		NS		NS			
Arsenic	3	16	n/a	1.6		NS		NS		NS			
Antimony	470			0.63	J U	NS		NS		NS			
Barium	220000	10000	n/a	13	J U	NS		NS		NS			
Beryllium	2300	2700		0.25	J U	NS		NS		NS			
Cadmium	100	60	n/a	0.046	U	NS		NS		NS			
Calcium				310	J U	NS		NS		NS			
Chromium			n/a	8		NS		NS		NS			
Cobalt	350			3.1	J U	NS		NS		NS			
Copper	47000	10000		10		NS		NS		NS			
Iron	820000			4900		NS		NS		NS			
Lead	800	3900	n/a	17		NS		NS		NS			
Magnesium				310	J U	NS		NS		NS			
Manganese	26000	10000		19		NS		NS		NS			
Nickel	17000	10000		2.5	J U	NS		NS		NS			
Potassium				310	J U	NS		NS		NS			
Selenium	5800	6800	n/a	0.29	U	NS		NS		NS			
Sodium				32	U	NS		NS		NS			
Thallium	12			33		NS		NS		NS			
Vanadium	5800			18		NS		NS		NS			
Zinc	350000	10000		10		NS		NS		NS			
Mercury	46	5.7	n/a	0.032	J U	NS		NS		NS			
Silver	5800	6800	n/a	0.065	U	NS		NS		NS			
SPLP METALS 6010D ug/L													
Aluminum	n/a			240		1100	U	1100	U	1100	U		
Arsenic	n/a	n/a	5000	8.3	U	83	U	83	U	83	U		
Antimony	n/a			6.2	U	62	U	62	U	62	U		
Barium	n/a	n/a	100000	27	U	2000	J U	2000	J U	2000	J U		
Beryllium	n/a	n/a		1.5	U	15	U	15	U	15	U		
Cadmium	n/a	n/a	1000	0.3	U	3	U	3	U	3	U		
Calcium				5000	J U	340000		330000		390000		400000	
Chromium			5000	3.1	U	31	U	31	U	31	U		
Cobalt	n/a			3.4	U	34	U	34	U	34	U		
Copper	n/a	n/a		2.2	U	250	J B U	250	J B U	250	J B U		
Iron	n/a			290		720	U	720	U	720	U		
Lead	n/a	n/a	5000	4.4	U	44	U	44	U	44	U		
Magnesium				5000	J U	6900	U	6900	U	6900	U		
Manganese	n/a	n/a		15	J U	24	U	24	U	24	U		
Nickel	n/a	n/a		3.5	U	35	U	35	U	35	U		
Potassium				2600	U	26000	U	26000	U	26000	U		
Selenium	n/a	n/a	1000	3.7	U	37	U	37	U	37	U		
Sodium				5000	J B U	8000	U	8000	U	50000	J U	50000	J U
Thallium	n/a			3	U	30	U	30	U	30	U		
Vanadium	n/a			5.3	U	53	U	53	U	53	U		
Zinc	n/a	n/a		42	U	420	U	420	U	420	U		
Mercury	n/a	n/a	200	0.13	I U	0.13	H I U	0.13	H I U	0.13	H I U		
Silver	n/a	n/a	5000	0.91	U	9.1	U	9.1	U	9.1	U		

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4		MIX-ISS4-7.5PC		MIX-ISS4-7.5PC-0.5C		MIX-ISS4-7.5PC-1.0C		MIX-ISS4-7.5PC-1.5C	
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024	6/10/2024				
TOTAL VOCs 8260 D ug/kg													
1,1,1-Trichloroethane	36000000	1000000		1.6	U	NS		NS		NS		NS	
1,1,2,2-Tetrachloroethane	2700			4.7	J U	NS		NS		NS		NS	
1,1,2-Trichloro-1,2,2-trifluoroethane	28000000			1.9	*- U	NS		NS		NS		NS	
1,1,2-Trichloroethane	5000			0.93	U	NS		NS		NS		NS	
1,1-Dichloroethane	16000	480000		1.5	U	NS		NS		NS		NS	
1,1-Dichloroethene	1000000	1000000	n/a	2.1	U	NS		NS		NS		NS	
1,2-Dibromo-3-Chloropropane	64			3	^c U	NS		NS		NS		NS	
1,2-Dichlorobenzene	9300000	1000000		1.6	U	NS		NS		NS		NS	
1,2-Dichloroethane	2000	60000	n/a	1.4	U	NS		NS		NS		NS	
1,2-Dichloropropane	11000			1.3	U	NS		NS		NS		NS	
1,2,4-Trichlorobenzene	110000			2.4	U	NS		NS		NS		NS	
1,3-Dichlorobenzene		560000		2.9	U	NS		NS		NS		NS	
1,4-Dichlorobenzene	11000	250000	n/a	1.4	U	NS		NS		NS		NS	
2-Butanone (MEK)	190000000	1000000	n/a	2.4	U	NS		NS		NS		NS	
2-Hexanone	1300000			1.5	^c U	NS		NS		NS		NS	
4-Methyl-2-pentanone (MIBK)	140000000			1.7	*1 ^c U	NS		NS		NS		NS	
Acetone	1100000000	1000000		3.7	*1 ^c U	NS		NS		NS		NS	
Benzene	5100	89000	n/a	1.3	U	NS		NS		NS		NS	
Bromoform	86000			2.4	U	NS		NS		NS		NS	
Bromomethane	30000			2.2	*1 U	NS		NS		NS		NS	
Carbon disulfide	3500000			3.8	U	NS		NS		NS		NS	
Carbon tetrachloride	2900	44000	n/a	1.9	U	NS		NS		NS		NS	
Chlorobenzene	1300000	1000000	n/a	1.2	U	NS		NS		NS		NS	
Chlorodibromomethane	39000			2.3	U	NS		NS		NS		NS	
Chloroform	1400	700000	n/a	3.2	U	NS		NS		NS		NS	
Chloromethane	460000			1.9	^c U	NS		NS		NS		NS	
Chloroethane	23000000			2.8	*+ ^c U	NS		NS		NS		NS	
cis-1,2-Dichloroethene	370000	1000000		1.4	U	NS		NS		NS		NS	
cis-1,3-Dichloropropene				2.1	U	NS		NS		NS		NS	
Dichlorobromomethane	1300			2.2	U	NS		NS		NS		NS	
Dichlorodifluoromethane	370000			2.3	^c U	NS		NS		NS		NS	
Ethylbenzene	25000	780000		6.6		NS		NS		NS		NS	
1,2-Dibromoethane	160			1.3	U	NS		NS		NS		NS	
Cyclohexane	27000000			2.3	U	NS		NS		NS		NS	
Isopropylbenzene	9900000			2.5	U	NS		NS		NS		NS	
Methyl acetate	1200000000			24	J U	NS		NS		NS		NS	
Methyl tert-butyl ether	210000	1000000		1.4	U	NS		NS		NS		NS	
Methylcyclohexane	410000			6.6		NS		NS		NS		NS	
Methylene Chloride	1000000	1000000		4.3	U	NS		NS		NS		NS	
Styrene	35000000			1.4	*+ ^c U	NS		NS		NS		NS	
Tetrachloroethene	100000	300000	n/a	1.9	^c U	NS		NS		NS		NS	
Toluene	47000000	1000000		1.4	U	NS		NS		NS		NS	
trans-1,2-Dichloroethene	300000	1000000		1.7	U	NS		NS		NS		NS	
trans-1,3-Dichloropropene				2.1	U	NS		NS		NS		NS	
Trichloroethene	6000	400000	n/a	1.5	U	NS		NS		NS		NS	
Trichlorofluoromethane	350000000			3.9	^c U	NS		NS		NS		NS	
Vinyl chloride	1700	27000	n/a	3.4	U	NS		NS		NS		NS	
Xylenes, Total	2500000	1000000		24		NS		NS		NS		NS	

NorthPoint - 4101 Arthur Kill Road - ISS Bench Scale Study

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4	MIX-ISS4-7.5PC		MIX-ISS4-7.5PC-0.5C		MIX-ISS4-7.5PC-1.0C		MIX-ISS4-7.5PC-1.5C		
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024					
SPLP VOCs 8260 D ug/L													
1,1,1-Trichloroethane	n/a	n/a		60	U	3	U	3	U	3	U	3	U
1,1,2,2-Tetrachloroethane	n/a			60	U	3	U	3	U	3	U	3	U
1,1,2-Trichloro-1,2,2-trifluoroethane	n/a			86	U	4.3	U	4.3	U	4.3	U	4.3	U
1,1,2-Trichloroethane	n/a			45	U	2.3	U	2.3	U	2.3	U	2.3	U
1,1-Dichloroethane	n/a	n/a		63	U	3.1	U	3.1	U	3.1	U	3.1	U
1,1-Dichloroethene	n/a	n/a	700	55	U	2.8	U	2.8	U	2.8	U	2.8	U
1,2-Dibromo-3-Chloropropane	n/a			89	^c U	4.4	U	4.4	U	4.4	U	4.4	U
1,2-Dichlorobenzene	n/a	n/a		36	U	1.8	U	1.8	U	1.8	U	1.8	U
1,2-Dichloroethane	n/a	n/a	500	57	U	2.9	U	2.9	U	2.9	U	2.9	U
1,2-Dichloropropane	n/a			66	U	3.3	U	3.3	U	3.3	U	3.3	U
1,2,4-Trichlorobenzene	n/a			77	^c U	3.9	U	3.9	U	3.9	U	3.9	U
1,3-Dichlorobenzene		n/a		50	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	n/a	n/a	7500	54	U	2.7	U	2.7	U	2.7	U	2.7	U
2-Butanone (MEK)	n/a	n/a	200000	260	U	13	U	13	U	13	U	13	U
2-Hexanone	n/a			330	U	16	^c U	16	^c U	16	^c U	16	^c U
4-Methyl-2-pentanone (MIBK)	n/a			310	U	15	U	15	U	15	U	15	U
Acetone	n/a	n/a		340	^c U	26		25	J U	25	J U	25	J U
Benzene	n/a	n/a	500	60	U	3	U	3	U	3	U	3	U
Bromoform	n/a			98	U	4.9	U	4.9	U	4.9	U	4.9	U
Bromomethane	n/a			89	^c U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Carbon disulfide	n/a			88	^c U	4.4	U	4.4	U	4.4	U	4.4	U
Carbon tetrachloride	n/a	n/a	500	88	U	4.4	^c U	4.4	^c U	4.4	^c U	4.4	^c U
Chlorobenzene	n/a	n/a	100000	50	U	2.5	U	2.5	U	2.5	U	2.5	U
Chlorodibromomethane	n/a			84	U	4.2	U	4.2	U	4.2	U	4.2	U
Chloroform	n/a	n/a	6000	60	U	3	U	3	U	3	U	3	U
Chloromethane	n/a			90	U	4.5	^c U	4.5	^c U	4.5	^c U	4.5	^c U
Chloroethane	n/a			90	^c U	4.5	U	4.5	U	4.5	U	4.5	U
cis-1,2-Dichloroethene	n/a	n/a		71	U	3.5	U	3.5	U	3.5	U	3.5	U
cis-1,3-Dichloropropene				59	U	3	U	3	U	3	U	3	U
Dichlorobromomethane	n/a			64	U	3.2	U	3.2	U	3.2	U	3.2	U
Dichlorodifluoromethane	n/a			83	U	4.2	U	4.2	U	4.2	U	4.2	U
Ethylbenzene	n/a	n/a		51	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	n/a			50	U	2.5	U	2.5	U	2.5	U	2.5	U
Cyclohexane	n/a			63	U	3.2	U	3.2	U	3.2	U	3.2	U
Isopropylbenzene	n/a			34	U	1.7	U	1.7	U	1.7	U	1.7	U
Methyl acetate	n/a			170	U	8.4	*+ ^c U	8.4	*+ ^c U	8.4	*+ ^c U	8.4	*+ ^c U
Methyl tert-butyl ether	n/a	n/a		59	U	3	U	3	U	3	U	3	U
Methylcyclohexane	n/a			61	U	3	U	3	U	3	U	3	U
Methylene Chloride	n/a	n/a		89	U	97		92		28		22	
Styrene	n/a			47	U	2.4	U	2.4	U	2.4	U	2.4	U
Tetrachloroethene	n/a	n/a	700	47	U	2.3	U	2.3	U	2.3	U	2.3	U
Toluene	n/a	n/a		46	U	2.3	U	2.3	U	2.3	U	2.3	U
trans-1,2-Dichloroethene	n/a	n/a		67	U	3.4	U	3.4	U	3.4	U	3.4	U
trans-1,3-Dichloropropene				58	U	2.9	U	2.9	U	2.9	U	2.9	U
Trichloroethene	n/a	n/a	500	69	U	3.4	U	3.4	U	3.4	U	3.4	U
Trichlorofluoromethane	n/a			87	U	4.4	U	4.4	U	4.4	U	4.4	U
Vinyl chloride	n/a	n/a	200	41	^c U	2	^c U	2	^c U	2	^c U	2	^c U
Xylenes, Total	n/a	n/a		89	U	4.5	U	4.5	U	4.5	U	4.5	U

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4	MIX-ISS4-7.5PC	MIX-ISS4-7.5PC-0.5C	MIX-ISS4-7.5PC-1.0C	MIX-ISS4-7.5PC-1.5C
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024
TOTAL SVOCs 8260 D ug/kg								
1,1'-Biphenyl	200000			480	U	NS	NS	NS
2,2'-oxybis[1-chloropropane]	47000000			96	^c U	NS	NS	NS
2,4,5-Trichlorophenol	82000000	n/a		450	U	NS	NS	NS
2,4,6-Trichlorophenol	210000	n/a		430	U	NS	NS	NS
2,4-Dichlorophenol	2500000			100	U	NS	NS	NS
2,4-Dimethylphenol	16000000			440	U	NS	NS	NS
2,4-Dinitrophenol	1600000			8100	U	NS	NS	NS
2,4-Dinitrotoluene	7400	n/a		780	U	NS	NS	NS
2,6-Dinitrotoluene	1500			510	U	NS	NS	NS
2-Chloronaphthalene	60000000			60	U	NS	NS	NS
2-Chlorophenol	5800000			480	U	NS	NS	NS
2-Methylnaphthalene	3000000			2000		NS	NS	NS
2-Methylphenol	41000000	1000000	n/a	370	U	NS	NS	NS
2-Nitroaniline	8000000			590	^c U	NS	NS	NS
2-Nitrophenol				480	U	NS	NS	NS
3,3'-Dichlorobenzidine	5100			1200	U	NS	NS	NS
3-Nitroaniline				330	U	NS	NS	NS
4,6-Dintro-2-methylphenol	66000			2200	U	NS	NS	NS
4-Bromophenyl phenyl ether				550	U	NS	NS	NS
4-Chloro-3-methylphenol	82000000			460	U	NS	NS	NS
4-Chloroaniline	11000			340	U	NS	NS	NS
4-Chlorophenyl phenyl ether				430	U	NS	NS	NS
Methylphenol, 3 & 4	16000000	1000000	n/a	380	U	NS	NS	NS
4-Nitroaniline	110000			480	U	NS	NS	NS
4-Nitrophenol				910	U	NS	NS	NS
Acenaphthene	45000000	1000000		2600		NS	NS	NS
Acenaphthylene		1000000		2900		NS	NS	NS
Acetophenone	120000000			460	U	NS	NS	NS
Anthracene	230000000	1000000		26000		NS	NS	NS
Atrazine	10000			570	U	NS	NS	NS
Benzaldehyde	820000			160	U	NS	NS	NS
Benzo[a]anthracene	21000	11000		3700		NS	NS	NS
Benzo[a]pyrene	2100	1100		3800		NS	NS	NS
Benzo[b]fluoranthene	21000	11000		3500		NS	NS	NS
Benzo[g,h,i]perylene		1000000		2900		NS	NS	NS
Benzo[k]fluoranthene	210000	110000		1500		NS	NS	NS
Bis(2-chloroethoxy)methane	25000000			480	U	NS	NS	NS
Bis(2-chloroethyl)ether	1000			80	U	NS	NS	NS
Bis(2-ethylhexyl) phthalate	160000			1400	U	NS	NS	NS
Butyl benzyl phthalate	1200000			890	U	NS	NS	NS
Caprolactam	400000000			850	U	NS	NS	NS
Carbazole				6500		NS	NS	NS
Chrysene	2100000	110000		4100		NS	NS	NS
Dibenz[a,h]anthracene	2100	1100		570		NS	NS	NS
Dibenzofuran	1200000	1000000		2100		NS	NS	NS
Diethyl phthalate	660000000			460	U	NS	NS	NS
Dimethyl phthalate				1400	U	NS	NS	NS
Di-n-butyl phthalate	82000000			2700	U	NS	NS	NS
Di-n-octyl phthalate	8200000			760	U	NS	NS	NS
Fluoranthene	30000000	1000000		8800		NS	NS	NS
Fluorene	30000000	1000000		5200		NS	NS	NS
Hexachlorobenzene	960	12000	n/a	93	U	NS	NS	NS
Hexachlorobutadiene	5300		n/a	76	U	NS	NS	NS
Hexachlorocyclopentadiene	7500			350	U	NS	NS	NS
Hexachloroethane	8000		n/a	460	U	NS	NS	NS
Indeno[1,2,3-cd]pyrene	21000	11000		1900		NS	NS	NS
Isophorone	2400000			490	U	NS	NS	NS
Naphthalene	8600	1000000		1300		NS	NS	NS
Nitrobenzene	22000		n/a	480	^c U	NS	NS	NS
N-Nitrosodi-n-propylamine	330			88	^c U	NS	NS	NS
N-Nitrosodiphenylamine	470000			430	U	NS	NS	NS
Pentachlorophenol	4000	55000	n/a	2100	U	NS	NS	NS
Phenanthrene		1000000		14000		NS	NS	NS
Phenol	250000000	1000000		390	U	NS	NS	NS
Pyrene	230000000	1000000		11000		NS	NS	NS

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TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	NY 375- 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4	MIX-ISS4-7.5PC	MIX-ISS4-7.5PC-0.5C	MIX-ISS4-7.5PC-1.0C	MIX-ISS4-7.5PC-1.5C					
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024					
SPLP SVOCs 8260 D ug/L													
1,1'-Biphenyl	n/a			1.4	U	1.5	U	1.5	U				
2,2'-oxybis[1-chloropropane]	n/a			0.58	U	0.6	U	0.63	U	0.6	U		
2,4,5-Trichlorophenol	n/a		400000	2.5	U	2.6	U	2.7	U	2.6	U		
2,4,6-Trichlorophenol	n/a		2000	2.2	U	2.3	U	2.4	U	2.3	U		
2,4-Dichlorophenol	n/a			0.51	U	0.53	U	0.55	U	0.53	U		
2,4-Dimethylphenol	n/a			5.9	U	6.1	U	6.4	U	6.1	U		
2,4-Dinitrophenol	n/a			33	U	34	U	35	U	34	U		
2,4-Dinitrotoluene	n/a		130	3.5	U	3.7	U	3.8	U	3.7	U		
2,6-Dinitrotoluene	n/a			1.7	U	1.8	U	1.9	U	1.8	U		
2-Chloronaphthalene	n/a			0.59	U	0.61	U	0.64	U	0.61	U		
2-Chlorophenol	n/a			2.3	U	2.3	U	2.4	U	2.3	U		
2-Methylnaphthalene	n/a			0.62	U	2	J U	2.1	J U	2.1	J U	0.65	U
2-Methylphenol	n/a	n/a	200000	5.6	U	5.8	U	6.1	U	6.1	U	5.8	U
2-Nitroaniline	n/a			5.5	U	5.7	U	6	U	6	U	5.7	U
2-Nitrophenol				1.9	U	2	U	2.1	U	2.1	U	2	U
3,3'-Dichlorobenzidine	n/a			5.8	U	6.1	U	6.3	U	6.3	U	6.1	U
3-Nitroaniline				4.4	U	4.6	U	4.8	U	4.8	U	4.6	U
4,6-Dinitro-2-methylphenol	n/a			15	U	15	U	16	U	16	U	15	U
4-Bromophenyl phenyl ether				3.2	U	3.3	U	3.5	U	3.5	U	3.3	U
4-Chloro-3-methylphenol	n/a			4.4	U	4.5	U	4.7	U	4.7	U	4.5	U
4-Chloroaniline	n/a			3.8	U	3.9	U	4.1	U	4.1	U	3.9	U
4-Chlorophenyl phenyl ether				2.2	U	2.3	U	2.4	U	2.4	U	2.3	U
Methylphenol, 3 & 4	n/a	n/a	200000	3.7	U	3.9	U	4	U	4	U	3.9	U
4-Nitroaniline	n/a			3.6	U	3.8	U	3.9	U	3.9	U	3.8	U
4-Nitrophenol				9.4	U	9.8	U	10	U	10	U	9.8	U
Acenaphthene	n/a	n/a		0.65	U	7		2.1	J U	2.1	J U	0.68	U
Acenaphthylene		n/a		0.65	U	0.68	U	0.71	U	0.71	U	0.68	U
Acetophenone	n/a			1.6	U	1.7	U	1.7	U	1.7	U	1.7	U
Anthracene	n/a	n/a		0.49	U	20		4.8		2.1	J U	2	J U
Atrazine	n/a			6.3	U	6.6	U	6.9	U	6.9	U	6.6	U
Benzaldehyde	n/a			5.4	U	5.6	U	5.8	U	5.8	U	5.6	U
Benzo[a]anthracene	n/a	n/a		0.75	U	0.78	U	0.82	U	0.82	U	0.78	U
Benzo[a]pyrene	n/a	n/a		0.53	U	0.55	U	0.58	U	0.58	U	0.55	U
Benzo[b]fluoranthene	n/a	n/a		0.97	U	1	U	1.1	U	1.1	U	1	U
Benzo[g,h,i]perylene		n/a		0.69	U	0.72	U	0.75	U	0.75	U	2	J U
Benzo[k]fluoranthene	n/a	n/a		0.88	U	0.92	U	0.96	U	0.96	U	0.92	U
Bis(2-chloroethoxy)methane	n/a			1.5	U	1.6	U	1.7	U	1.7	U	1.6	U
Bis(2-chloroethyl)ether	n/a			0.4	U	0.42	U	0.43	U	0.43	U	0.42	U
Bis(2-ethylhexyl) phthalate	n/a			62	U	65	U	68	U	68	U	65	U
Butyl benzyl phthalate	n/a			9.6	U	10	U	10	U	10	U	10	U
Caprolactam	n/a			14	U	15	U	15	U	15	U	15	U
Carbazole				0.51	U	50		8		2.1	J U	0.53	U
Chrysene	n/a	n/a		0.81	U	0.84	U	0.88	U	0.88	U	0.84	U
Dibenz[a,h]anthracene	n/a	n/a		0.72	U	0.75	U	0.78	U	0.78	U	0.75	U
Dibenzofuran	n/a	n/a		1.9	U	10	J U	2.1	U	2.1	U	2	U
Diethyl phthalate	n/a			5.7	U	5.9	U	6.2	U	6.2	U	5.9	U
Dimethyl phthalate				2	U	2.1	U	2.2	U	2.2	U	2.1	U
Di-n-butyl phthalate	n/a			49	U	51	U	53	U	53	U	51	U
Di-n-octyl phthalate	n/a			6.9	U	7.1	U	7.4	U	7.4	U	7.1	U
Fluoranthene	n/a	n/a		0.6	U	2.7		2.1	J U	0.65	U	0.63	U
Fluorene	n/a	n/a		0.69	U	10		2.2		0.75	U	0.72	U
Hexachlorobenzene	n/a	n/a	130	0.56	U	0.58	U	0.61	U	0.61	U	0.58	U
Hexachlorobutadiene	n/a		500	0.69	U	0.72	U	0.75	U	0.75	U	0.72	U
Hexachlorocyclopentadiene	n/a			5	U	5.2	U	5.4	U	5.4	U	5.2	U
Hexachloroethane	n/a		3000	1.3	U	1.4	U	1.4	U	1.4	U	1.4	U
Indeno[1,2,3-cd]pyrene	n/a	n/a		0.85	U	0.89	U	0.92	U	0.92	U	0.89	U
Isophorone	n/a			1.9	U	2	U	2	U	2	U	2	U
Naphthalene	n/a	n/a		0.59	U	2	J U	2.1	J U	2.1	J U	0.61	U
Nitrobenzene	n/a		2000	5	U	5.2	U	5.4	U	5.4	U	5.2	U
N-Nitrosodi-n-propylamine	n/a			0.71	U	0.74	U	0.77	U	0.77	U	0.74	U
N-Nitrosodiphenylamine	n/a			1.2	U	1.2	U	1.3	U	1.3	U	1.2	U
Pentachlorophenol	n/a	n/a	100000	8.5	^c U	8.8	U	9.2	U	9.2	U	8.8	U
Phenanthrene		n/a		1.6	U	16		3.5		1.7	U	1.6	U
Phenol	n/a	n/a		4.9	U	5.1	U	5.3	U	5.3	U	5.1	U
Pyrene	n/a	n/a		0.54	U	2.3		2.1	J U	0.59	U	0.56	U

TABLE 3 - PHASE I BASELINE AND ISS MIX ANALYTICAL RESULTS

TABLE 3 - PHASE 1 BASELINE AND ISS MIX ANALYTICAL RESULTS										
Analyte	USEPA RSLs THQ 1.0_Indust Soil_May2024	HW 375 6.8b_Rstrd Soils_Ind_Web 28Feb2023	USEPA TCLP Limits	COMP-4	MIX-ISS4-7.5PC	MIX-ISS4-7.5PC-0.5C	MIX-ISS4-7.5PC-1.0C	MIX-ISS4-7.5PC-1.5C		
				4/29/2024	6/11/2024	6/10/2024	6/10/2024	6/10/2024		
TOTAL PFAS ng/g - Draft 1633 extraction method										
Perfluorobutanoic acid (PFBA)	1200000			0.087	U	NS	NS	NS	NS	
Perfluorooctanesulfonic acid (PFOS)	58			0.33		NS	NS	NS	NS	
Perfluorooctanoic acid (PFOA)	0.078			1.2		NS	NS	NS	NS	
Perfluorohexanoic acid (PFHxA)	410000			0.097	J I	NS	NS	NS	NS	
Perfluorononanoic acid (PFNA)	2500			24		NS	NS	NS	NS	
Perfluorodecanoic acid (PFDA)				0.21		NS	NS	NS	NS	
Perfluorobutanesulfonic acid (PFBS)	250000			0.19	J I	NS	NS	NS	NS	
Perfluorohexanesulfonic acid (PFHxS)	16000			0.08	J I I	NS	NS	NS	NS	
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			0.044	B I U	NS	NS	NS	NS	
TOTAL PFAS ng/g - methanol only extraction method										
Perfluorobutanoic acid (PFBA)	1200000			0.086	FL * - U	NS	NS	NS	NS	
Perfluorooctanesulfonic acid (PFOS)	58			0.044	FL * - U	NS	NS	NS	NS	
Perfluorooctanoic acid (PFOA)	0.078			0.044	FL * + U	NS	NS	NS	NS	
Perfluorohexanoic acid (PFHxA)	410000			0.051	FL * - U	NS	NS	NS	NS	
Perfluorononanoic acid (PFNA)	2500			17	* -	NS	NS	NS	NS	
Perfluorodecanoic acid (PFDA)				0.043	FL	NS	NS	NS	NS	
Perfluorobutanesulfonic acid (PFBS)	250000			0.043	FL I* - U	NS	NS	NS	NS	
Perfluorohexanesulfonic acid (PFHxS)	16000			0.043	F2 FH I *	NS	NS	NS	NS	
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3500			0.044	I FL	NS	NS	NS	NS	
SPLP PFAS ng/L										
Perfluorobutanoic acid (PFBA)				7.1	J B	3.7	J H U	3.8	J H U	
Perfluorohexanoic acid (PFHxA)				4.1		2.3	H	1.9	J H U	3.8
Perfluorooctanoic acid (PFOA)				69		17	H	2.1	H	57
Perfluorononanoic acid (PFNA)				1100	E	450	H	190	H	720
Perfluorodecanoic acid (PFDA)				7.9		1.9	J H U	1.9	J H U	1.9
Perfluorobutanesulfonic acid (PFBS)				0.33	I U	0.47	H U	1.9	J H U	0.49
Perfluorohexanesulfonic acid (PFHxS)				1.2	J I	1.9	J H U	0.47	H U	2
Perfluorooctanesulfonic acid (PFOS)				9.7		5.4	H	2.1	H	2.2
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)				2.4	J I	210	H	160	H	39
General Chemistry										
Percent Moisture (%)				13.5						
Notes:										
indicated sample was detected above the reporting limit.				0.001						
indicated sample was below the method detection limit.				U						
indicated sample exceeded regulatory criteria				0.001						
indicated analyte was not sampled.				NS						

ATTACHMENTS

ATTACHMENT 1
COMPOSITE GEOTECHNICAL REPORTS

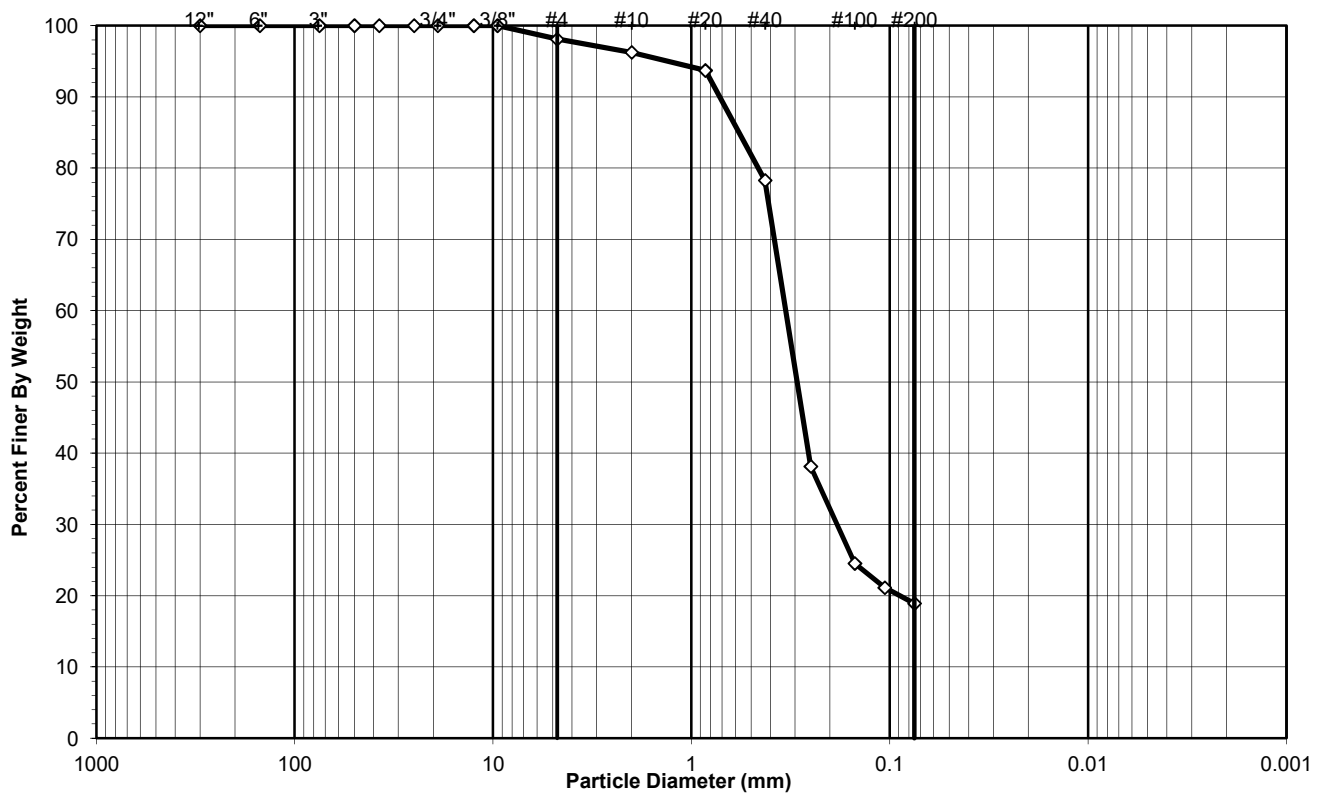
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-002

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 2
 Soil Color: Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



Sieve Size	Percentage (%)	
Greater than #4	Gravel	1.90
#4 to #200	Sand	79.19
Finer than #200	Silt & Clay	18.91

USCS Symbol:
 sm, ASSUMED

D50 = 0.29

USCS Classification:
 SILTY SAND

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24
 page 1 of 2 DCN: CT-S73T, DATE 2/25/22, REV. 1

WASH SIEVE ANALYSIS

ASTM D6913-17



Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-002

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 2
 Soil Color: Brown

Moisture Content of Passing 3/4" Material				Moisture Content of Retained 3/4" Material			
Tare No.:	1480	Tare No.:	NA	Tare No.:	1480	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	549.85	Weight of Tare & Wet Sample (g):	NA	Wt. of Tare & Wet Sample (g):	549.85	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	496.39	Weight of Tare & Dry Sample (g):	NA	Wt. of Tare & Dry Sample (g):	496.39	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	147.81	Weight of Tare (g):	NA	Weight of Tare (g):	147.81	Weight of Tare (g):	NA
Weight of Water (g):	53.46	Weight of Water (g):	NA	Weight of Water (g):	53.46	Weight of Water (g):	NA
Weight of Dry Soil (g):	348.58	Weight of Dry Soil (g):	NA	Weight of Dry Soil (g):	348.58	Weight of Dry Soil (g):	NA
Moisture Content (%):	15.3	Moisture Content (%):	0.0	Moisture Content (%):	0.0	Moisture Content (%):	0.0
Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	348.58	Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	348.58
Tare No. (Sub-Specimen)	1480	Wet Weight of +3/4" Sample (g):	0.00	Tare No. (Sub-Specimen)	1480	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	549.85	Dry Weight of + 3/4" Sample (g):	0.00	Wt. of Tare & Wet Sub-Specimen (g):	549.85	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	147.81	Dry Weight of - 3/4" Sample (g):	348.58	Weight of Tare (g):	147.81	Dry Weight of - 3/4" Sample (g):	348.58
Sub-Specimen Wet Weight (g):	402.04	Dry Weight -3/4" +3/8" Sample (g):	0.00	Sub-Specimen Wet Weight (g):	402.04	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	348.58	Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	348.58
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA	Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA	Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA			Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)	Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	Accumulated Percent Finer (%)
12"	300	0.00	0.00	0.00	100.00	100
6"	150	0.00	0.00	0.00	100.00	100
3"	75	0.00	0.00	0.00	100.00	100
2"	50	0.00	(*)	0.00	100.00	100
1 1/2"	37.5	0.00	0.00	0.00	100.00	100
1"	25	0.00	0.00	0.00	100.00	100
3/4"	19	0.00	0.00	0.00	100.00	100
1/2"	12.5	0.00	(**)	0.00	100.00	100
3/8"	9.5	0.00	0.00	0.00	100.00	100
#4	4.75	6.63	1.90	1.90	98.10	98
#10	2	6.44	1.85	3.75	96.25	96
#20	0.85	8.86	(**)	6.29	93.71	94
#40	0.425	53.78	15.43	21.72	78.28	78
#60	0.25	139.91	40.14	61.86	38.14	38
#100	0.15	47.45	13.61	75.47	24.53	25
#140	0.106	11.85	3.40	78.87	21.13	21
#200	0.075	7.74	2.22	81.09	18.91	19
Pan	-	65.92	18.91	100.00	-	-

Notes : (*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample
 (**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

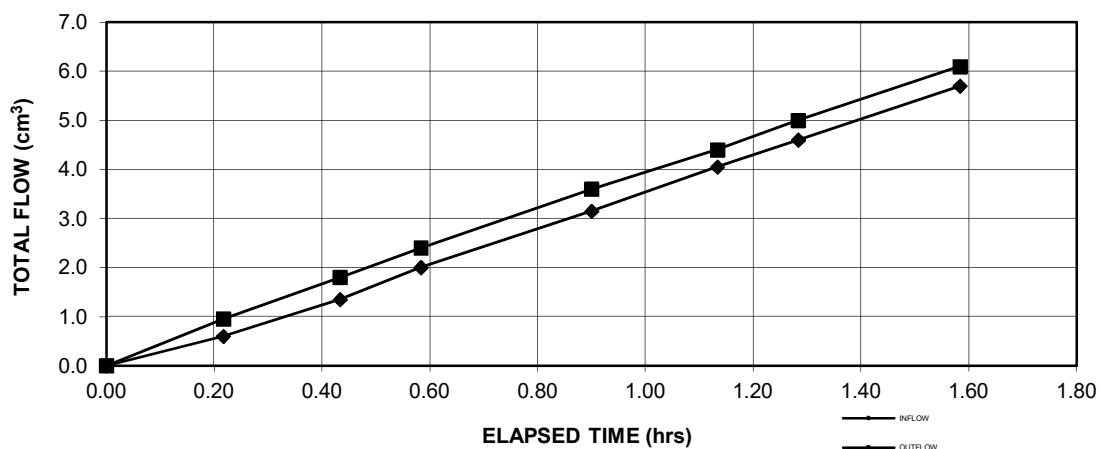


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-002
Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 2
Avg. Effective Consol. Pressure (psi): 6.25

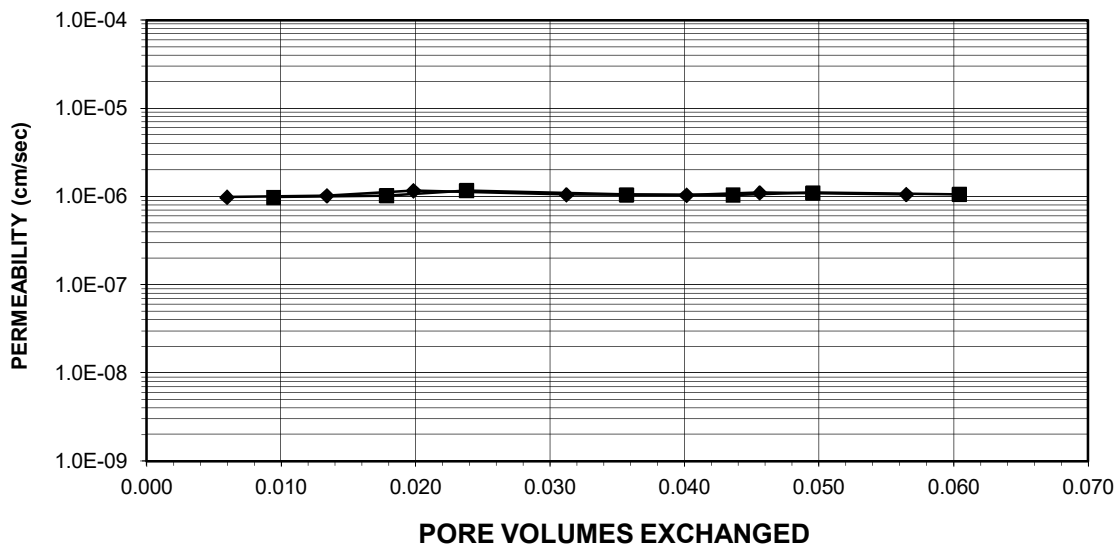
AVERAGE PERMEABILITY = $1.1\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.1\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-002

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 2
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Remolded

Visual Description: Brown Clayey Sand

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	3517	1458.5
Weight of Tare & Wet Sample (g)	233.62	867.57
Weight of Tare & Dry Sample (g)	203.10	772.74
Weight of Tare (g)	8.06	82.37
Weight of Water (g)	30.52	94.83
Weight of Dry Sample (g)	195.04	690.37
Moisture Content (%)	15.6	13.7

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	1714.91	NA
Weight of Tube (g)	917.30	NA
Weight of Wet Sample (g)	797.61	784.42
Length 1 (in)	3.490	3.423
Length 2 (in)	3.490	3.335
Length 3 (in)	3.490	3.295
Top Diameter (in)	2.870	2.883
Middle Diameter (in)	2.870	2.884
Bottom Diameter (in)	2.870	2.857
Average Length (in)	3.49	3.35
Average Area (in ²)	6.47	6.49
Sample Volume (cm ³)	369.98	356.40
Unit Wet Weight (g/cm ³)	2.16	2.20
Unit Wet Weight (pcf)	134.6	137.4
Unit Dry Weight (pcf)	116.4	120.8
Unit Dry Weight (g/cm ³)	1.86	1.94
Void Ratio, e	0.45	0.40
Porosity, n	0.31	0.28
Pore Volume (cm ³)	114.5	101.0
Total Weight of Sample After Test (g)		785.93

Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-002

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 2
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	67.5
Bottom Cap (psi)	70.0
Cell (psi)	75.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	20.65

Final Sample Dimensions

Sample Length (cm), L	8.51
Sample Diameter (cm)	7.30
Sample Area (cm ²), A	41.87
Inflow Burette Area (cm ²), a-in	0.963
Outflow Burette Area (cm ²), a-out	0.957
B Parameter (%)	95

AVERAGE PERMEABILITY = 1.1E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.1E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/13/24	11	44	0.000	0.0	0.0	200.2	0	20.6	NA
5/13/24	11	57	0.217	0.6	0.9	198.6	0	20.6	9.8E-07
5/13/24	12	10	0.433	1.4	1.8	197.0	0	20.6	1.0E-06
5/13/24	12	19	0.583	2.0	2.4	195.7	0	20.6	1.2E-06
5/13/24	12	38	0.900	3.2	3.6	193.3	0	20.6	1.0E-06
5/13/24	12	52	1.133	4.1	4.4	191.5	0	20.7	1.0E-06
5/13/24	13	1	1.283	4.6	5.0	190.3	0	20.7	1.1E-06
5/13/24	13	19	1.583	5.7	6.1	188.1	1	20.7	1.1E-06

Tested By: WT

Date: 5/10/24

Checked By: JLK

Date: 5/16/24

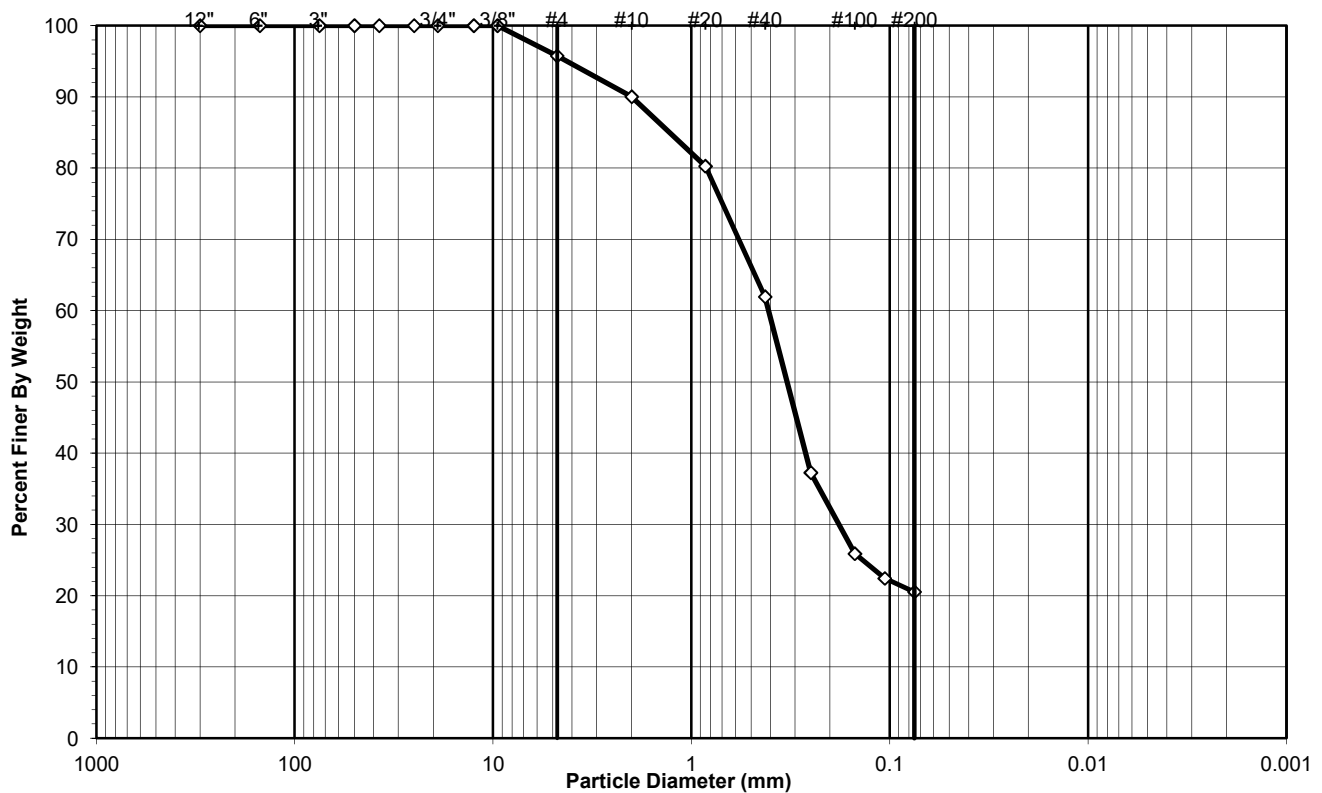
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-003

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 3
 Soil Color: Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



Sieve Size		Percentage (%)
Greater than #4	Gravel	4.26
#4 to #200	Sand	75.21
Finer than #200	Silt & Clay	20.54

USCS Symbol:
 sm, ASSUMED

D50 = 0.33

USCS Classification:
 SILTY SAND

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24
 page 1 of 2 DCN: CT-S73T, DATE 2/25/22, REV. 1

WASH SIEVE ANALYSIS

ASTM D6913-17



Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-003

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 3
 Soil Color: Brown

Moisture Content of Passing 3/4" Material				Moisture Content of Retained 3/4" Material			
Tare No.:	1448	Tare No.:	NA	Tare No.:	1448	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	496.12	Weight of Tare & Wet Sample (g):	NA	Wt. of Tare & Wet Sample (g):	496.12	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	453.58	Weight of Tare & Dry Sample (g):	NA	Wt. of Tare & Dry Sample (g):	453.58	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	137.06	Weight of Tare (g):	NA	Weight of Tare (g):	137.06	Weight of Tare (g):	NA
Weight of Water (g):	42.54	Weight of Water (g):	NA	Weight of Water (g):	42.54	Weight of Water (g):	NA
Weight of Dry Soil (g):	316.52	Weight of Dry Soil (g):	NA	Weight of Dry Soil (g):	316.52	Weight of Dry Soil (g):	NA
Moisture Content (%):	13.4	Moisture Content (%):	0.0	Moisture Content (%):	0.0	Moisture Content (%):	0.0
Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	316.52	Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	316.52
Tare No. (Sub-Specimen)	1448	Wet Weight of +3/4" Sample (g):	0.00	Tare No. (Sub-Specimen)	1448	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	496.12	Dry Weight of + 3/4" Sample (g):	0.00	Wt. of Tare & Wet Sub-Specimen (g):	496.12	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	137.06	Dry Weight of - 3/4" Sample (g):	316.52	Weight of Tare (g):	137.06	Dry Weight of - 3/4" Sample (g):	316.52
Sub-Specimen Wet Weight (g):	359.06	Dry Weight -3/4" +3/8" Sample (g):	0.00	Sub-Specimen Wet Weight (g):	359.06	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	316.52	Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	316.52
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA	Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA	Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA			Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)	Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	Accumulated Percent Finer (%)
12"	300	0.00	0.00	0.00	100.00	100
6"	150	0.00	0.00	0.00	100.00	100
3"	75	0.00	0.00	0.00	100.00	100
2"	50	0.00	(*)	0.00	100.00	100
1 1/2"	37.5	0.00	0.00	0.00	100.00	100
1"	25	0.00	0.00	0.00	100.00	100
3/4"	19	0.00	0.00	0.00	100.00	100
1/2"	12.5	0.00	(**)	0.00	100.00	100
3/8"	9.5	0.00	0.00	0.00	100.00	100
#4	4.75	13.47	4.26	4.26	95.74	96
#10	2	18.10	5.72	9.97	90.03	90
#20	0.85	30.85	(**)	19.72	80.28	80
#40	0.425	58.00	18.32	38.04	61.96	62
#60	0.25	78.14	24.69	62.73	37.27	37
#100	0.15	35.98	11.37	74.10	25.90	26
#140	0.106	10.98	3.47	77.57	22.43	22
#200	0.075	6.00	1.90	79.46	20.54	21
Pan	-	65.00	20.54	100.00	-	-

Notes : (*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample
 (**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

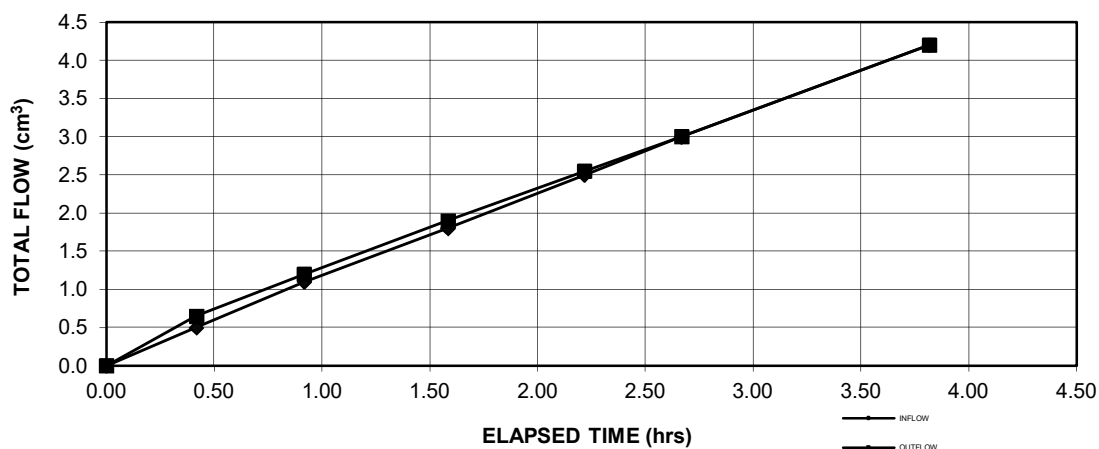


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	SP
Project No.:	2024-369-001	Sample No.:	Comp 3
Lab ID No.:	2024-369-001-003	Avg. Effective Consol. Pressure (psi):	6.25

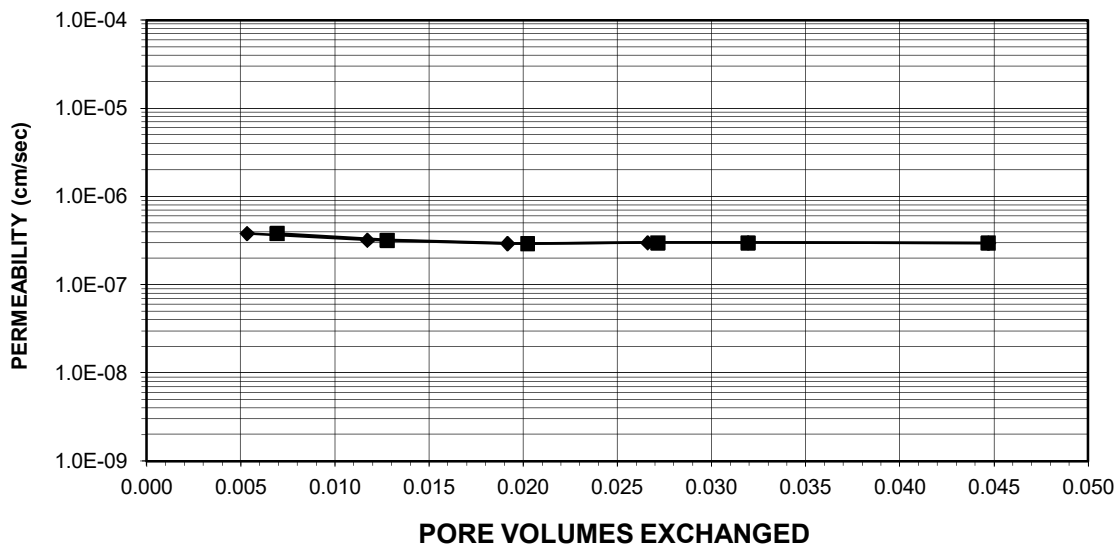
AVERAGE PERMEABILITY = $3.0\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $3.0\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-003

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 3
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Remolded

Visual Description: Brown Clayey Sand

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	3092	1723
Weight of Tare & Wet Sample (g)	132.80	883.63
Weight of Tare & Dry Sample (g)	118.21	792.63
Weight of Tare (g)	8.18	82.63
Weight of Water (g)	14.59	91.00
Weight of Dry Sample (g)	110.03	710.00
Moisture Content (%)	13.3	12.8

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	1727.66	NA
Weight of Tube (g)	917.30	NA
Weight of Wet Sample (g)	810.36	807.19
Length 1 (in)	3.490	3.325
Length 2 (in)	3.490	3.325
Length 3 (in)	3.490	3.343
Top Diameter (in)	2.870	2.911
Middle Diameter (in)	2.870	2.895
Bottom Diameter (in)	2.870	2.875
Average Length (in)	3.49	3.33
Average Area (in ²)	6.47	6.58
Sample Volume (cm ³)	369.98	358.97
Unit Wet Weight (g/cm ³)	2.19	2.25
Unit Wet Weight (pcf)	136.7	140.4
Unit Dry Weight (pcf)	120.7	124.4
Unit Dry Weight (g/cm ³)	1.93	1.99
Void Ratio, e	0.40	0.35
Porosity, n	0.28	0.26
Pore Volume (cm ³)	105.0	94.0
Total Weight of Sample After Test (g)		801.24

Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-003

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 3
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	67.5
Bottom Cap (psi)	70.0
Cell (psi)	75.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	20.77

Final Sample Dimensions

Sample Length (cm), L	8.46
Sample Diameter (cm)	7.35
Sample Area (cm ²), A	42.43
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 3.0E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 3.0E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/13/24	11	44	0.000	0.0	0.0	196.8	0	20.6	NA
5/13/24	12	9	0.417	0.5	0.6	195.6	0	20.6	3.8E-07
5/13/24	12	39	0.917	1.1	1.2	194.4	0	20.6	3.2E-07
5/13/24	13	19	1.583	1.8	1.9	192.9	0	20.7	2.9E-07
5/13/24	13	57	2.217	2.5	2.6	191.5	0	20.7	3.0E-07
5/13/24	14	24	2.667	3.0	3.0	190.6	0	20.7	3.0E-07
5/13/24	15	33	3.817	4.2	4.2	188.1	1	20.8	3.0E-07

Tested By: WT

Date: 5/10/24

Checked By: JLK

Date: 5/16/24

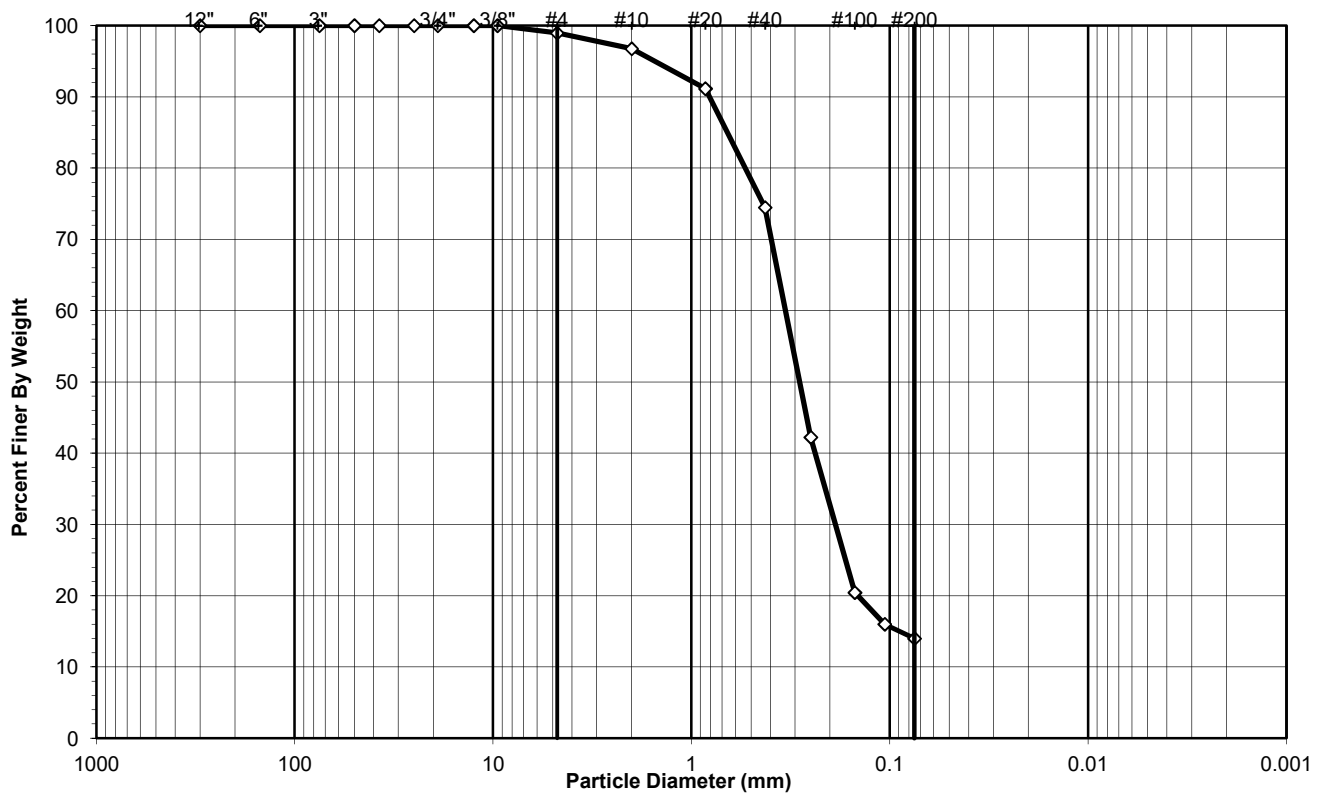
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-004

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 4
 Soil Color: Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



Sieve Size	Percentage (%)
Greater than #4	1.04
#4 to #200	84.96
Finer than #200	14.00
	Gravel
	Sand
	Silt & Clay

USCS Symbol:
 sm, ASSUMED

D50 = 0.28

USCS Classification:
 SILTY SAND

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24
 page 1 of 2 DCN: CT-S73T, DATE 2/25/22, REV. 1

WASH SIEVE ANALYSIS

ASTM D6913-17



Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-001
 Lab ID: 2024-369-001-004

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: Comp 4
 Soil Color: Brown

Moisture Content of Passing 3/4" Material				Moisture Content of Retained 3/4" Material			
Tare No.:	1444	Tare No.:	NA	Tare No.:	1444	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	533.50	Weight of Tare & Wet Sample (g):	NA	Wt. of Tare & Wet Sample (g):	533.50	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	484.23	Weight of Tare & Dry Sample (g):	NA	Wt. of Tare & Dry Sample (g):	484.23	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	144.36	Weight of Tare (g):	NA	Weight of Tare (g):	144.36	Weight of Tare (g):	NA
Weight of Water (g):	49.27	Weight of Water (g):	NA	Weight of Water (g):	49.27	Weight of Water (g):	NA
Weight of Dry Soil (g):	339.87	Weight of Dry Soil (g):	NA	Weight of Dry Soil (g):	339.87	Weight of Dry Soil (g):	NA
Moisture Content (%):	14.5	Moisture Content (%):	0.0	Moisture Content (%):	0.0	Moisture Content (%):	0.0
Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	339.87	Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	339.87
Tare No. (Sub-Specimen)	1444	Wet Weight of +3/4" Sample (g):	0.00	Tare No. (Sub-Specimen)	1444	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	533.50	Dry Weight of + 3/4" Sample (g):	0.00	Wt. of Tare & Wet Sub-Specimen (g):	533.50	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	144.36	Dry Weight of - 3/4" Sample (g):	339.87	Weight of Tare (g):	144.36	Dry Weight of - 3/4" Sample (g):	339.87
Sub-Specimen Wet Weight (g):	389.14	Dry Weight -3/4" +3/8" Sample (g):	0.00	Sub-Specimen Wet Weight (g):	389.14	Dry Weight -3/4" +3/8" Sample (g):	0.00
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	339.87	Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	339.87
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA	Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA	Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA			Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)	Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	Accumulated Percent Finer (%)
12"	300	0.00	0.00	0.00	100.00	100
6"	150	0.00	0.00	0.00	100.00	100
3"	75	0.00	0.00	0.00	100.00	100
2"	50	0.00	(*)	0.00	100.00	100
1 1/2"	37.5	0.00	0.00	0.00	100.00	100
1"	25	0.00	0.00	0.00	100.00	100
3/4"	19	0.00	0.00	0.00	100.00	100
1/2"	12.5	0.00	(**)	0.00	100.00	100
3/8"	9.5	0.00	0.00	0.00	100.00	100
#4	4.75	3.53	1.04	1.04	98.96	99
#10	2	7.50	2.21	3.25	96.75	97
#20	0.85	19.03	(**)	8.84	91.16	91
#40	0.425	56.68	16.68	25.52	74.48	74
#60	0.25	109.64	32.26	57.78	42.22	42
#100	0.15	74.04	21.78	79.57	20.43	20
#140	0.106	15.07	4.43	84.00	16.00	16
#200	0.075	6.80	2.00	86.00	14.00	14
Pan	-	47.58	14.00	100.00	-	-

Notes : (*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample
 (**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen

Tested By DF Date 5/10/24 Checked By KC Date 5/10/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

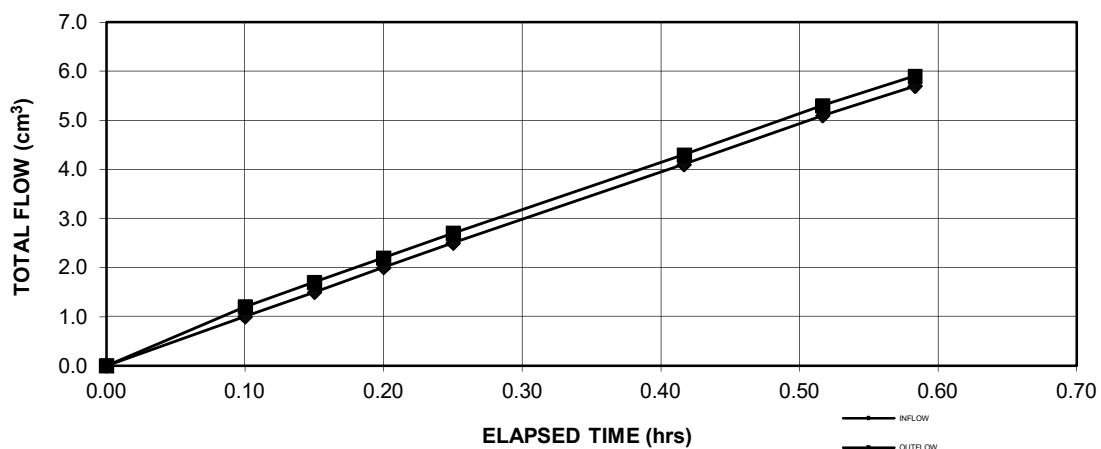


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-004
Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 4
Avg. Effective Consol. Pressure (psi): 6.25

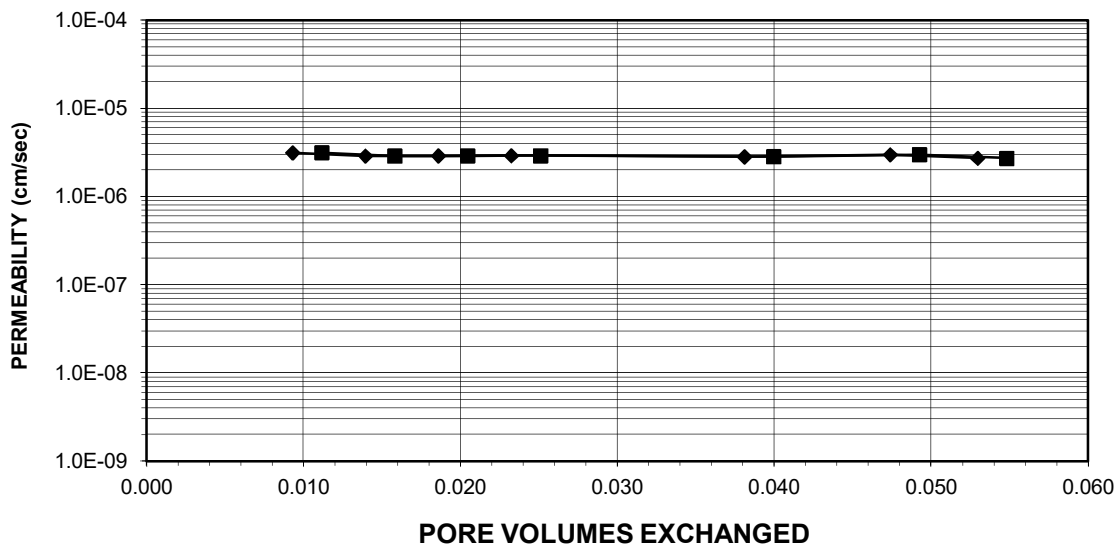
AVERAGE PERMEABILITY = $2.9\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $2.9\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-004

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 4
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Remolded

Visual Description: Brown Clayey Sand

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	3121	904
Weight of Tare & Wet Sample (g)	166.77	894.99
Weight of Tare & Dry Sample (g)	145.91	792.04
Weight of Tare (g)	8.03	109.46
Weight of Water (g)	20.86	102.95
Weight of Dry Sample (g)	137.88	682.58
Moisture Content (%)	15.1	15.1

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	1703.52	NA
Weight of Tube (g)	917.30	NA
Weight of Wet Sample (g)	786.22	785.90
Length 1 (in)	3.490	3.434
Length 2 (in)	3.490	3.414
Length 3 (in)	3.490	3.401
Top Diameter (in)	2.870	2.864
Middle Diameter (in)	2.870	2.866
Bottom Diameter (in)	2.870	2.861
Average Length (in)	3.49	3.42
Average Area (in ²)	6.47	6.44
Sample Volume (cm ³)	369.98	360.58
Unit Wet Weight (g/cm ³)	2.13	2.18
Unit Wet Weight (pcf)	132.6	136.1
Unit Dry Weight (pcf)	115.2	118.2
Unit Dry Weight (g/cm ³)	1.85	1.89
Void Ratio, e	0.46	0.43
Porosity, n	0.32	0.30
Pore Volume (cm ³)	117.1	107.6
Total Weight of Sample After Test (g)		786.13

Tested By: WT Date: 5/10/24 Checked By: JLK Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-004

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: Comp 4
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	67.5
Bottom Cap (psi)	70.0
Cell (psi)	75.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	20.25

Final Sample Dimensions

Sample Length (cm), L	8.68
Sample Diameter (cm)	7.27
Sample Area (cm ²), A	41.55
Inflow Burette Area (cm ²), a-in	0.960
Outflow Burette Area (cm ²), a-out	0.922
B Parameter (%)	96

AVERAGE PERMEABILITY = 2.9E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 2.9E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/13/24	11	44	0.000	0.0	0.0	200.4	0	20.6	NA
5/13/24	11	50	0.100	1.0	1.2	198.0	0	20.6	3.1E-06
5/13/24	11	53	0.150	1.5	1.7	197.0	0	20.6	2.9E-06
5/13/24	11	56	0.200	2.0	2.2	195.9	0	20.6	2.9E-06
5/13/24	11	59	0.250	2.5	2.7	194.8	0	20.6	2.9E-06
5/13/24	12	9	0.417	4.1	4.3	191.5	0	20.6	2.8E-06
5/13/24	12	15	0.517	5.1	5.3	189.3	0	20.6	3.0E-06
5/13/24	12	19	0.583	5.7	5.9	188.1	1	20.6	2.7E-06

Tested By: WT

Date: 5/10/24

Checked By: JLK

Date: 5/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

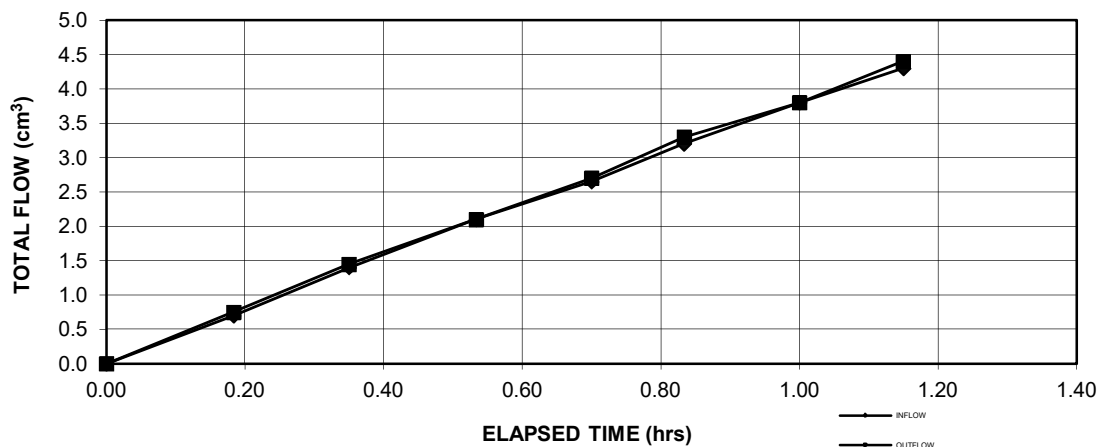


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-001	Sample No.:	2-7.5-PC
Lab ID No.:	2024-369-001-005	Avg. Effective Consol. Pressure (psi):	6.25

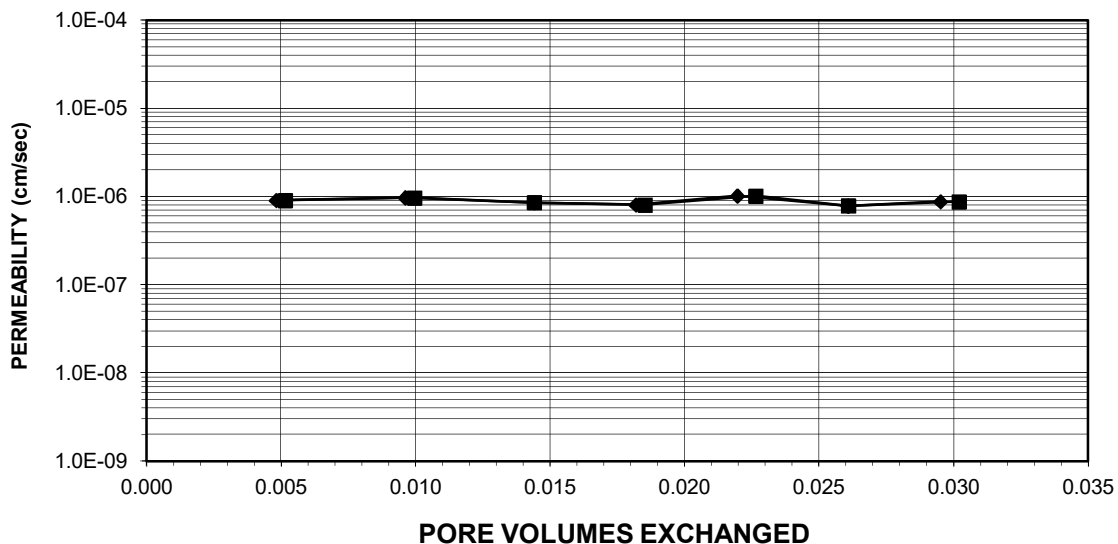
AVERAGE PERMEABILITY = $8.7\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $8.7\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-005

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-7.5-PC
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	1131A	880
Weight of Tare & Wet Sample (g)	518.22	796.39
Weight of Tare & Dry Sample (g)	432.50	654.33
Weight of Tare (g)	83.72	108.44
Weight of Water (g)	85.72	142.06
Weight of Dry Sample (g)	348.78	545.89
Moisture Content (%)	24.6	26.0

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	679.72	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	679.72	687.61
Length 1 (in)	3.033	3.024
Length 2 (in)	2.987	2.989
Length 3 (in)	3.003	2.999
Top Diameter (in)	3.013	3.007
Middle Diameter (in)	3.000	2.997
Bottom Diameter (in)	2.991	2.994
Average Length (in)	3.01	3.00
Average Area (in ²)	7.07	7.07
Sample Volume (cm ³)	348.70	347.81
Unit Wet Weight (g/cm ³)	1.95	1.98
Unit Wet Weight (pcf)	121.7	123.4
Unit Dry Weight (pcf)	97.7	97.9
Unit Dry Weight (g/cm ³)	1.56	1.57
Void Ratio, e	0.73	0.72
Porosity, n	0.42	0.42
Pore Volume (cm ³)	146.6	145.7
Total Weight of Sample After Test (g)		688.59

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-005

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-7.5-PC
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.03

Final Sample Dimensions

Sample Length (cm), L	7.63
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.58
Inflow Burette Area (cm ²), a-in	0.860
Outflow Burette Area (cm ²), a-out	0.888
B Parameter (%)	97

AVERAGE PERMEABILITY = 8.7E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 8.7E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
5/10/24	7	44	0.000	0.0	0.0	203.2	0	20.2	NA
5/10/24	7	55	0.183	0.7	0.8	201.5	0	20.2	9.0E-07
5/10/24	8	5	0.350	1.4	1.5	199.9	0	20.2	9.7E-07
5/10/24	8	16	0.533	2.1	2.1	198.4	0	20.2	8.6E-07
5/10/24	8	26	0.700	2.7	2.7	197.0	0	20.3	8.0E-07
5/10/24	8	34	0.833	3.2	3.3	195.7	0	20.3	1.0E-06
5/10/24	8	44	1.000	3.8	3.8	194.5	0	20.3	7.8E-07
5/10/24	8	53	1.150	4.3	4.4	193.2	1	20.3	8.7E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

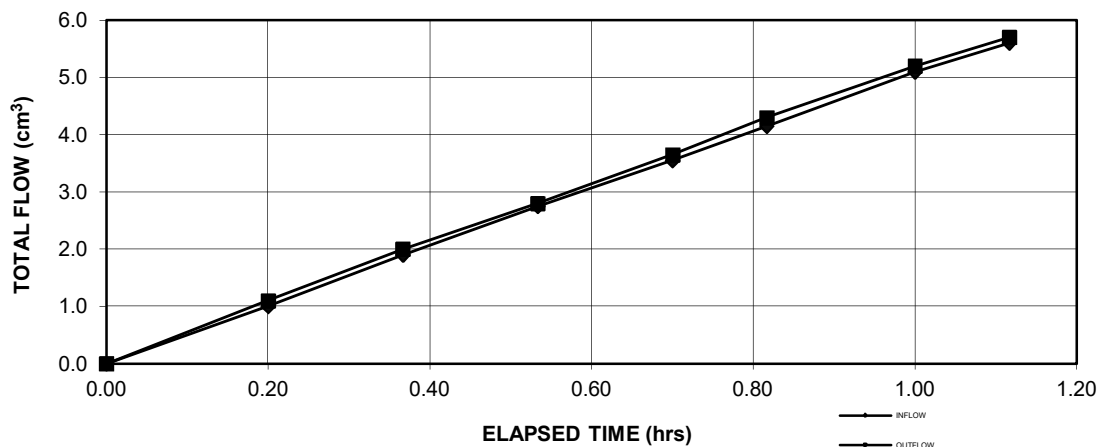


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-006
Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-7.5-2:1
Avg. Effective Consol. Pressure (psi): 6.25

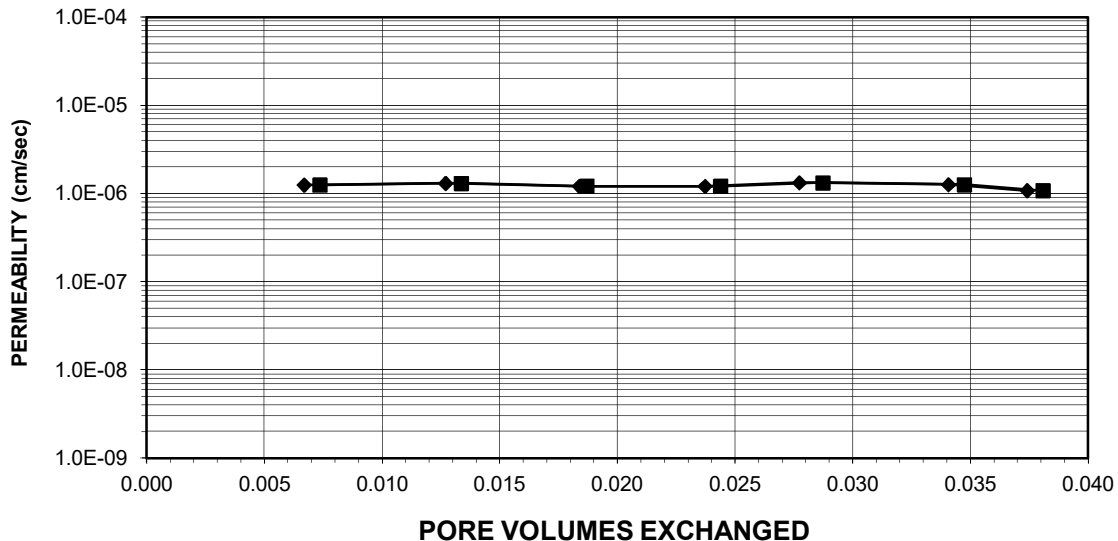
AVERAGE PERMEABILITY = $1.2\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.2\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-006

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-7.5-2:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	610	555
Weight of Tare & Wet Sample (g)	527.80	783.29
Weight of Tare & Dry Sample (g)	440.66	641.31
Weight of Tare (g)	82.73	81.31
Weight of Water (g)	87.14	141.98
Weight of Dry Sample (g)	357.93	560.00
Moisture Content (%)	24.3	25.4

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	694.92	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	694.92	700.55
Length 1 (in)	3.066	3.085
Length 2 (in)	3.081	3.092
Length 3 (in)	3.096	3.051
Top Diameter (in)	3.012	3.008
Middle Diameter (in)	3.003	3.001
Bottom Diameter (in)	2.993	2.996
Average Length (in)	3.08	3.08
Average Area (in ²)	7.08	7.08
Sample Volume (cm ³)	357.52	356.70
Unit Wet Weight (g/cm ³)	1.94	1.96
Unit Wet Weight (pcf)	121.3	122.6
Unit Dry Weight (pcf)	97.6	97.8
Unit Dry Weight (g/cm ³)	1.56	1.57
Void Ratio, e	0.73	0.72
Porosity, n	0.42	0.42
Pore Volume (cm ³)	150.5	149.7
Total Weight of Sample After Test (g)		702.57

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-006

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-7.5-2:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.50

Final Sample Dimensions

Sample Length (cm), L	7.81
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.65
Inflow Burette Area (cm ²), a-in	0.861
Outflow Burette Area (cm ²), a-out	0.967
B Parameter (%)	95

AVERAGE PERMEABILITY = 1.2E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.2E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
5/10/24	7	44	0.000	0.0	0.0	198.7	0	20.2	NA
5/10/24	7	56	0.200	1.0	1.1	196.4	0	20.2	1.3E-06
5/10/24	8	6	0.367	1.9	2.0	194.4	0	20.2	1.3E-06
5/10/24	8	16	0.533	2.8	2.8	192.6	0	20.2	1.2E-06
5/10/24	8	26	0.700	3.6	3.7	190.8	0	20.3	1.2E-06
5/10/24	8	33	0.817	4.2	4.3	189.4	0	20.3	1.3E-06
5/10/24	8	44	1.000	5.1	5.2	187.4	0	20.3	1.3E-06
5/10/24	8	51	1.117	5.6	5.7	186.3	1	20.3	1.1E-06

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

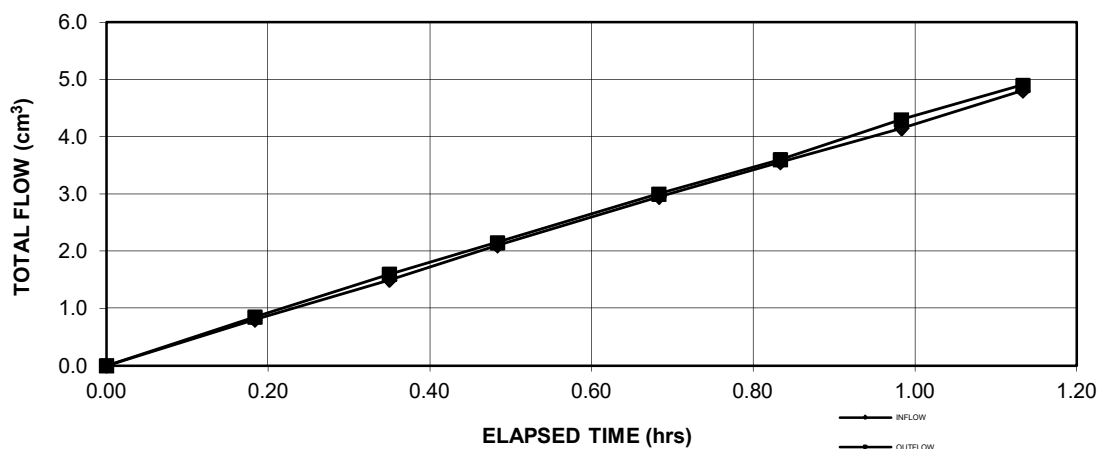


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-007
Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-3:1
Avg. Effective Consol. Pressure (psi): 6.25

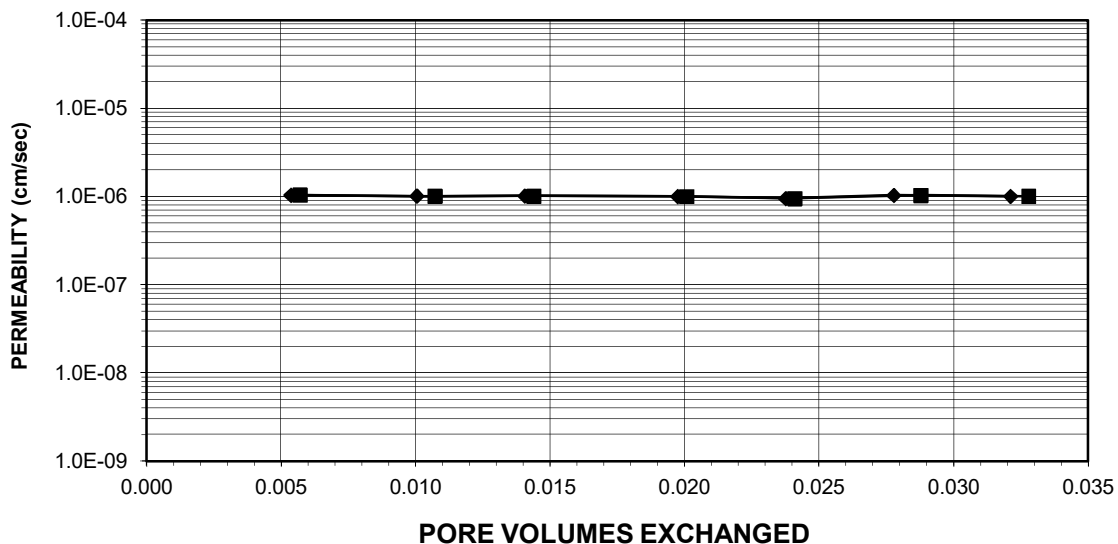
AVERAGE PERMEABILITY = $1.0\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.0\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-007

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-3:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	562	591
Weight of Tare & Wet Sample (g)	529.50	777.64
Weight of Tare & Dry Sample (g)	439.98	633.94
Weight of Tare (g)	84.01	87.08
Weight of Water (g)	89.52	143.70
Weight of Dry Sample (g)	355.97	546.86
Moisture Content (%)	25.1	26.3

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	682.76	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	682.76	688.92
Length 1 (in)	3.040	3.030
Length 2 (in)	3.032	3.026
Length 3 (in)	3.037	3.038
Top Diameter (in)	3.014	3.008
Middle Diameter (in)	3.002	3.001
Bottom Diameter (in)	2.993	2.996
Average Length (in)	3.04	3.03
Average Area (in ²)	7.08	7.08
Sample Volume (cm ³)	352.41	351.52
Unit Wet Weight (g/cm ³)	1.94	1.96
Unit Wet Weight (pcf)	120.9	122.3
Unit Dry Weight (pcf)	96.6	96.9
Unit Dry Weight (g/cm ³)	1.55	1.55
Void Ratio, e	0.74	0.74
Porosity, n	0.43	0.43
Pore Volume (cm ³)	150.4	149.5
Total Weight of Sample After Test (g)		690.81

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-007

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-3:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.83

Final Sample Dimensions

Sample Length (cm), L	7.70
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.65
Inflow Burette Area (cm ²), a-in	0.866
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	96

AVERAGE PERMEABILITY = 1.0E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.0E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
5/10/24	7	44	0.000	0.0	0.0	202.9	0	20.2	NA
5/10/24	7	55	0.183	0.8	0.9	201.0	0	20.2	1.0E-06
5/10/24	8	5	0.350	1.5	1.6	199.5	0	20.2	1.0E-06
5/10/24	8	13	0.483	2.1	2.2	198.2	0	20.2	1.0E-06
5/10/24	8	25	0.683	3.0	3.0	196.3	0	20.3	1.0E-06
5/10/24	8	34	0.833	3.6	3.6	195.0	0	20.3	9.5E-07
5/10/24	8	43	0.983	4.2	4.3	193.6	0	20.3	1.0E-06
5/10/24	8	52	1.133	4.8	4.9	192.2	1	20.3	1.0E-06

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

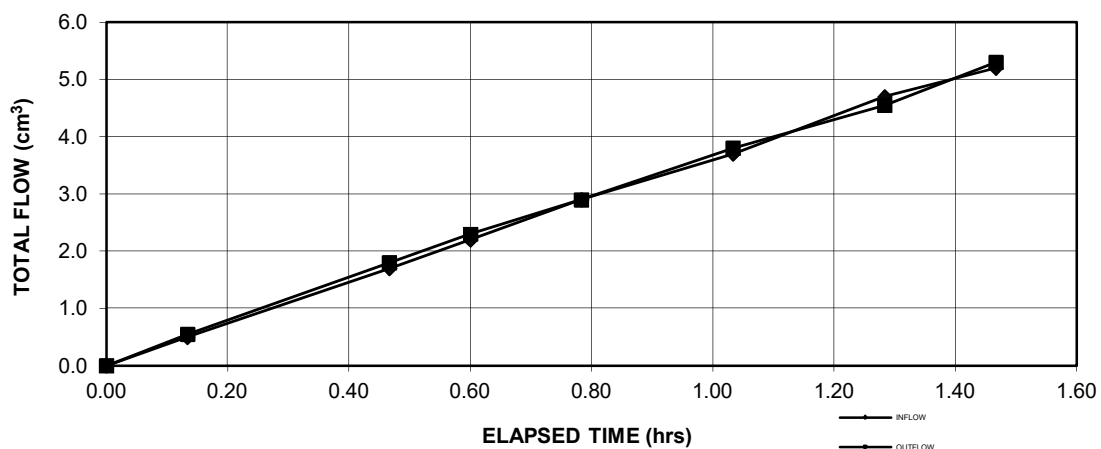


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-008
Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-1:1
Avg. Effective Consol. Pressure (psi): 6.25

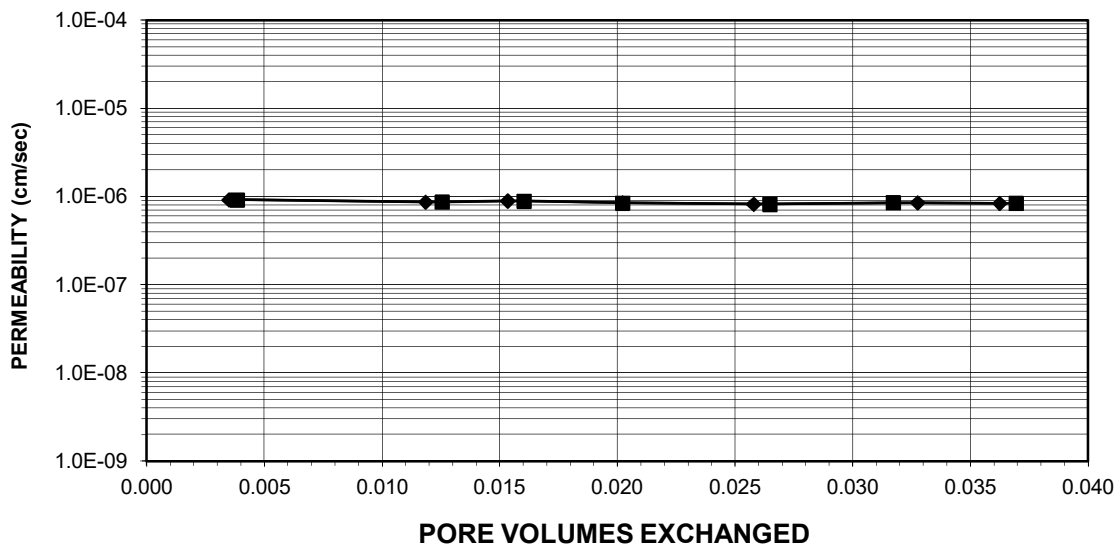
AVERAGE PERMEABILITY = $8.4\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $8.4\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-008

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-1:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	912	573
Weight of Tare & Wet Sample (g)	550.79	777.50
Weight of Tare & Dry Sample (g)	467.98	640.04
Weight of Tare (g)	110.06	81.92
Weight of Water (g)	82.81	137.46
Weight of Dry Sample (g)	357.92	558.12
Moisture Content (%)	23.1	24.6

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	688.10	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	688.10	696.44
Length 1 (in)	3.004	3.021
Length 2 (in)	3.020	3.016
Length 3 (in)	3.015	3.000
Top Diameter (in)	3.012	3.007
Middle Diameter (in)	3.001	3.013
Bottom Diameter (in)	2.992	3.000
Average Length (in)	3.01	3.01
Average Area (in ²)	7.08	7.10
Sample Volume (cm ³)	349.39	350.48
Unit Wet Weight (g/cm ³)	1.97	1.99
Unit Wet Weight (pcf)	122.9	124.0
Unit Dry Weight (pcf)	99.8	99.5
Unit Dry Weight (g/cm ³)	1.60	1.59
Void Ratio, e	0.69	0.69
Porosity, n	0.41	0.41
Pore Volume (cm ³)	142.4	143.5
Total Weight of Sample After Test (g)		697.80

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-008

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 2-10-1:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	77.5
Bottom Cap (psi)	80.0
Cell (psi)	85.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.97

Final Sample Dimensions

Sample Length (cm), L	7.65
Sample Diameter (cm)	7.64
Sample Area (cm ²), A	45.81
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 8.4E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 8.4E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/9/24	13	45	0.000	0.0	0.0	194.7	0	20.7	NA
5/9/24	13	53	0.133	0.5	0.6	193.6	0	20.8	9.2E-07
5/9/24	14	13	0.467	1.7	1.8	191.1	0	20.8	8.6E-07
5/9/24	14	21	0.600	2.2	2.3	190.0	0	20.8	8.9E-07
5/9/24	14	32	0.783	2.9	2.9	188.7	0	20.8	8.5E-07
5/9/24	14	47	1.033	3.7	3.8	186.9	0	20.8	8.2E-07
5/9/24	15	2	1.283	4.7	4.6	185.1	0	20.8	8.5E-07
5/9/24	15	13	1.467	5.2	5.3	183.8	1	20.8	8.4E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

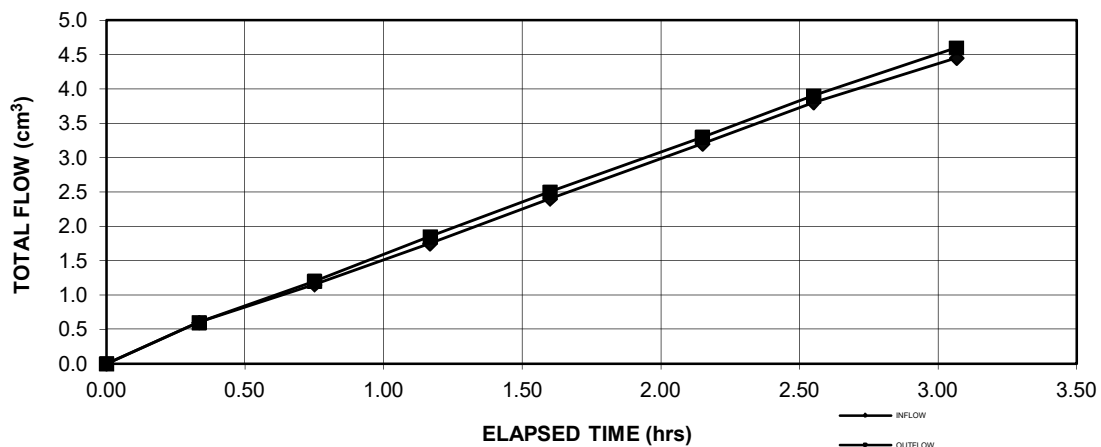


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-009
Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-7.5-PC
Avg. Effective Consol. Pressure (psi): 6.25

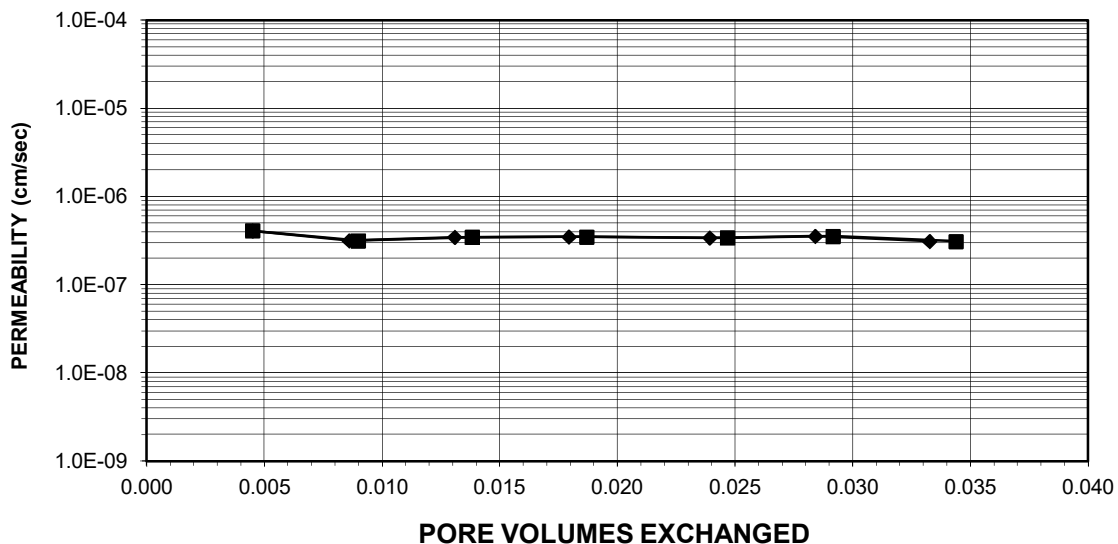
AVERAGE PERMEABILITY = $3.4\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $3.4\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-009

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-7.5-PC
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	890	569
Weight of Tare & Wet Sample (g)	566.83	790.43
Weight of Tare & Dry Sample (g)	489.06	661.04
Weight of Tare (g)	109.60	82.70
Weight of Water (g)	77.77	129.39
Weight of Dry Sample (g)	379.46	578.34
Moisture Content (%)	20.5	22.4

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	701.43	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	701.43	712.36
Length 1 (in)	3.038	3.019
Length 2 (in)	3.025	2.991
Length 3 (in)	3.001	3.027
Top Diameter (in)	3.014	3.008
Middle Diameter (in)	3.003	3.000
Bottom Diameter (in)	2.995	2.998
Average Length (in)	3.02	3.01
Average Area (in ²)	7.09	7.08
Sample Volume (cm ³)	350.90	349.39
Unit Wet Weight (g/cm ³)	2.00	2.04
Unit Wet Weight (pcf)	124.8	127.3
Unit Dry Weight (pcf)	103.6	104.0
Unit Dry Weight (g/cm ³)	1.66	1.67
Void Ratio, e	0.63	0.62
Porosity, n	0.39	0.38
Pore Volume (cm ³)	135.3	133.8
Total Weight of Sample After Test (g)		710.01

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-009

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-7.5-PC
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.97

Final Sample Dimensions

Sample Length (cm), L	7.65
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.66
Inflow Burette Area (cm ²), a-in	0.852
Outflow Burette Area (cm ²), a-out	0.862
B Parameter (%)	95

AVERAGE PERMEABILITY = 3.4E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 3.4E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
5/10/24	7	44	0.000	0.0	0.0	203.7	0	20.2	NA
5/10/24	8	4	0.333	0.6	0.6	202.3	0	20.2	4.1E-07
5/10/24	8	29	0.750	1.2	1.2	201.0	0	20.3	3.2E-07
5/10/24	8	54	1.167	1.8	1.9	199.5	0	20.3	3.5E-07
5/10/24	9	20	1.600	2.4	2.5	198.0	0	20.3	3.5E-07
5/10/24	9	53	2.150	3.2	3.3	196.1	0	20.4	3.4E-07
5/10/24	10	17	2.550	3.8	3.9	194.7	0	20.4	3.5E-07
5/10/24	10	48	3.067	4.5	4.6	193.2	1	20.5	3.1E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

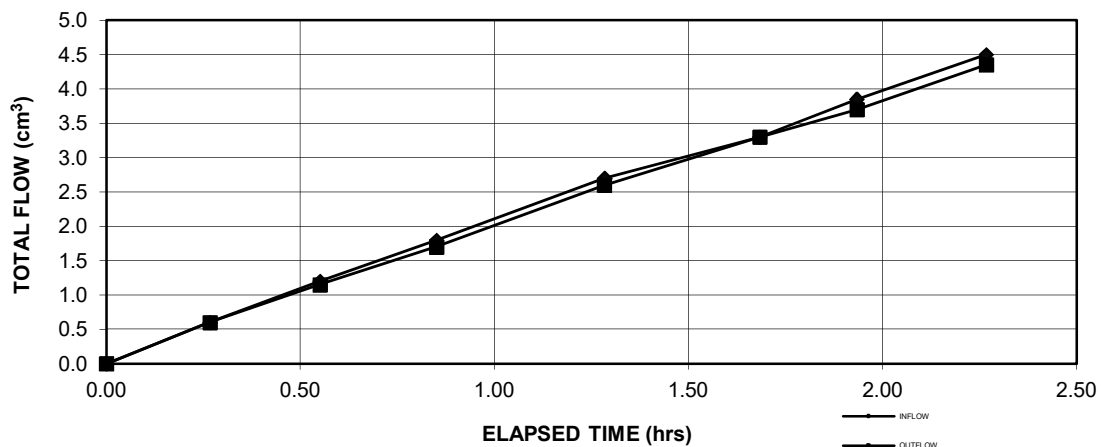


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-001	Sample No.:	3-7.5-2:1
Lab ID No.:	2024-369-001-010	Avg. Effective Consol. Pressure (psi):	6.25

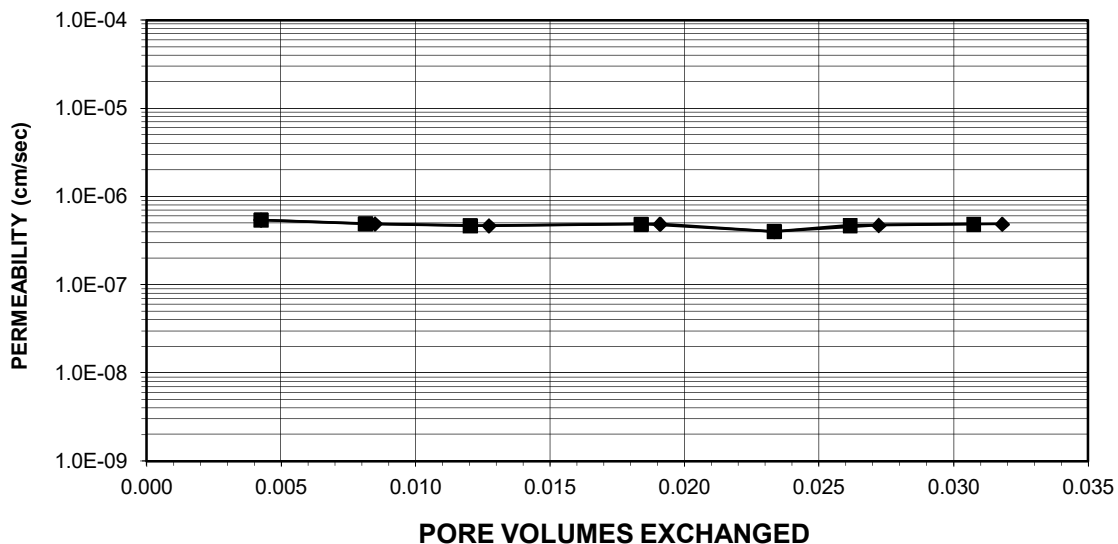
AVERAGE PERMEABILITY = 4.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.6E-09 m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-010

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-7.5-2:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	909	1723
Weight of Tare & Wet Sample (g)	566.29	804.50
Weight of Tare & Dry Sample (g)	486.88	669.72
Weight of Tare (g)	108.81	82.65
Weight of Water (g)	79.41	134.78
Weight of Dry Sample (g)	378.07	587.07
Moisture Content (%)	21.0	23.0

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	713.45	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	713.45	724.97
Length 1 (in)	3.113	3.076
Length 2 (in)	3.088	3.121
Length 3 (in)	3.065	3.095
Top Diameter (in)	3.016	3.013
Middle Diameter (in)	3.003	3.003
Bottom Diameter (in)	2.993	2.998
Average Length (in)	3.09	3.10
Average Area (in ²)	7.09	7.09
Sample Volume (cm ³)	358.73	359.89
Unit Wet Weight (g/cm ³)	1.99	2.01
Unit Wet Weight (pcf)	124.1	125.7
Unit Dry Weight (pcf)	102.6	102.3
Unit Dry Weight (g/cm ³)	1.64	1.64
Void Ratio, e	0.64	0.65
Porosity, n	0.39	0.39
Pore Volume (cm ³)	140.4	141.5
Total Weight of Sample After Test (g)		723.25

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-010

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-7.5-2:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.34

Final Sample Dimensions

Sample Length (cm), L	7.87
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.75
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962

AVERAGE PERMEABILITY = 4.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.6E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/10/24	7	38	0.000	0.0	0.0	196.8	0	20.2	NA
5/10/24	7	54	0.267	0.6	0.6	195.5	0	20.2	5.4E-07
5/10/24	8	11	0.550	1.2	1.2	194.3	0	20.2	4.9E-07
5/10/24	8	29	0.850	1.8	1.7	193.1	0	20.3	4.7E-07
5/10/24	8	55	1.283	2.7	2.6	191.3	0	22.3	4.9E-07
5/10/24	9	19	1.683	3.3	3.3	189.9	0	20.3	4.0E-07
5/10/24	9	34	1.933	3.9	3.7	189.0	0	20.4	4.7E-07
5/10/24	9	54	2.267	4.5	4.4	187.6	1	20.4	4.9E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

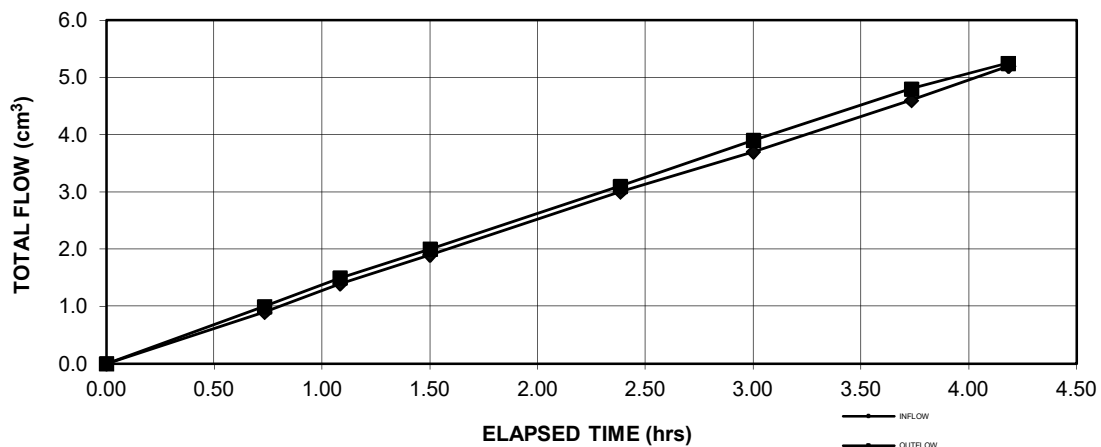


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-001	Sample No.:	3-10-3:1
Lab ID No.:	2024-369-001-011	Avg. Effective Consol. Pressure (psi):	6.25

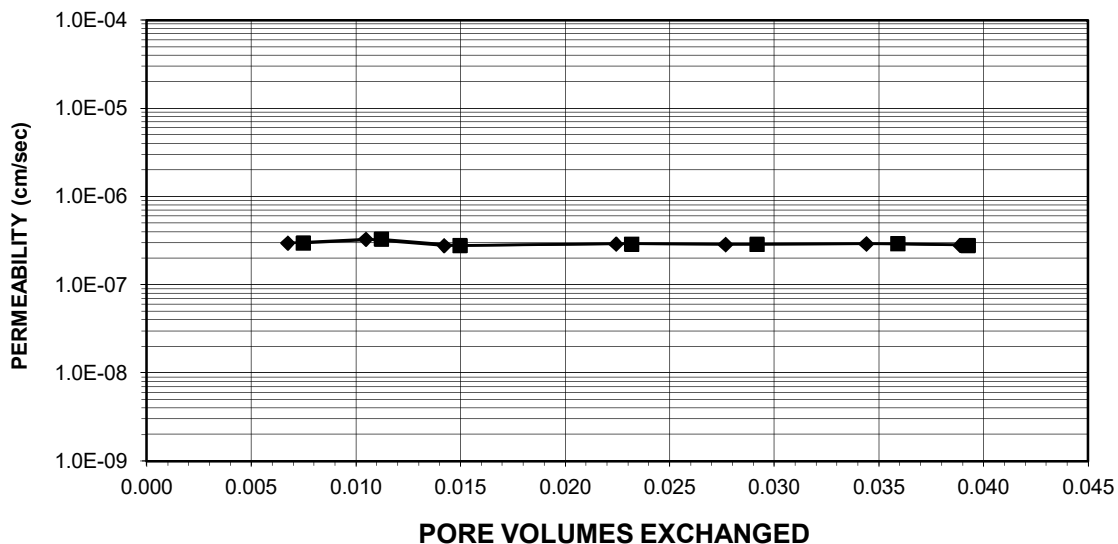
AVERAGE PERMEABILITY = 2.9E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 2.9E-09 m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-011

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-10-3:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	1713	907
Weight of Tare & Wet Sample (g)	534.85	817.18
Weight of Tare & Dry Sample (g)	464.19	681.38
Weight of Tare (g)	82.46	110.05
Weight of Water (g)	70.66	135.80
Weight of Dry Sample (g)	381.73	571.33
Moisture Content (%)	18.5	23.8

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	698.08	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	698.08	729.06
Length 1 (in)	3.026	3.023
Length 2 (in)	3.030	3.017
Length 3 (in)	3.033	3.042
Top Diameter (in)	3.018	3.012
Middle Diameter (in)	3.001	3.004
Bottom Diameter (in)	2.995	3.000
Average Length (in)	3.03	3.03
Average Area (in ²)	7.09	7.09
Sample Volume (cm ³)	352.03	351.91
Unit Wet Weight (g/cm ³)	1.98	2.07
Unit Wet Weight (pcf)	123.8	129.3
Unit Dry Weight (pcf)	104.4	104.5
Unit Dry Weight (g/cm ³)	1.67	1.67
Void Ratio, e	0.61	0.61
Porosity, n	0.38	0.38
Pore Volume (cm ³)	133.9	133.7
Total Weight of Sample After Test (g)		707.95

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-011

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-10-3:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	97.5
Bottom Cap (psi)	100.0
Cell (psi)	105.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.86

Final Sample Dimensions

Sample Length (cm), L	7.69
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.77
Inflow Burette Area (cm ²), a-in	0.879
Outflow Burette Area (cm ²), a-out	0.896
B Parameter (%)	95

AVERAGE PERMEABILITY = 2.9E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 2.9E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/10/24	8	39	0.000	0.0	0.0	203.3	0	20.3	NA
5/10/24	9	23	0.733	0.9	1.0	201.1	0	20.3	3.0E-07
5/10/24	9	44	1.083	1.4	1.5	200.0	0	20.4	3.3E-07
5/10/24	10	9	1.500	1.9	2.0	198.9	0	20.4	2.8E-07
5/10/24	11	2	2.383	3.0	3.1	196.4	0	20.6	2.9E-07
5/10/24	11	39	3.000	3.7	3.9	194.7	0	20.6	2.9E-07
5/10/24	12	23	3.733	4.6	4.8	192.6	0	20.7	2.9E-07
5/10/24	12	50	4.183	5.2	5.3	191.5	1	20.7	2.8E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

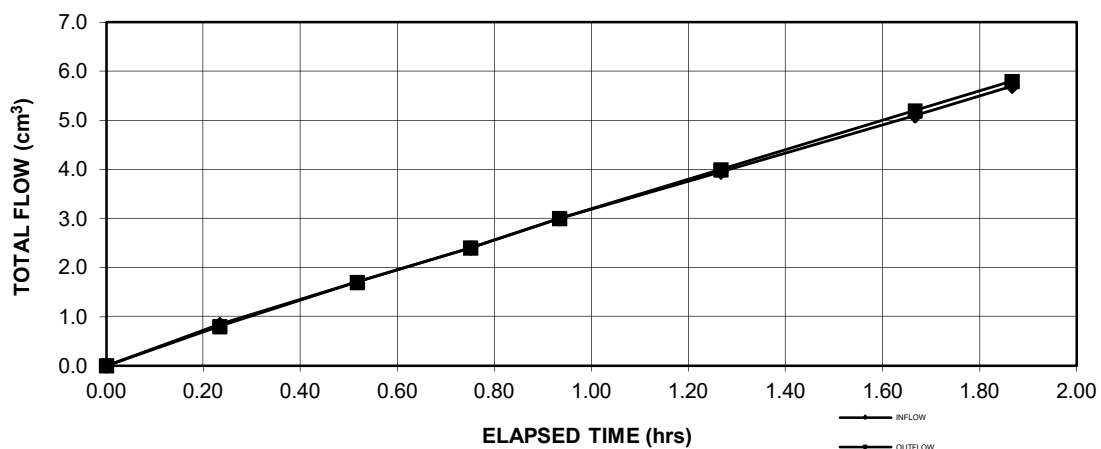


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-001	Sample No.:	3-10-1:1
Lab ID No.:	2024-369-001-012	Avg. Effective Consol. Pressure (psi):	6.25

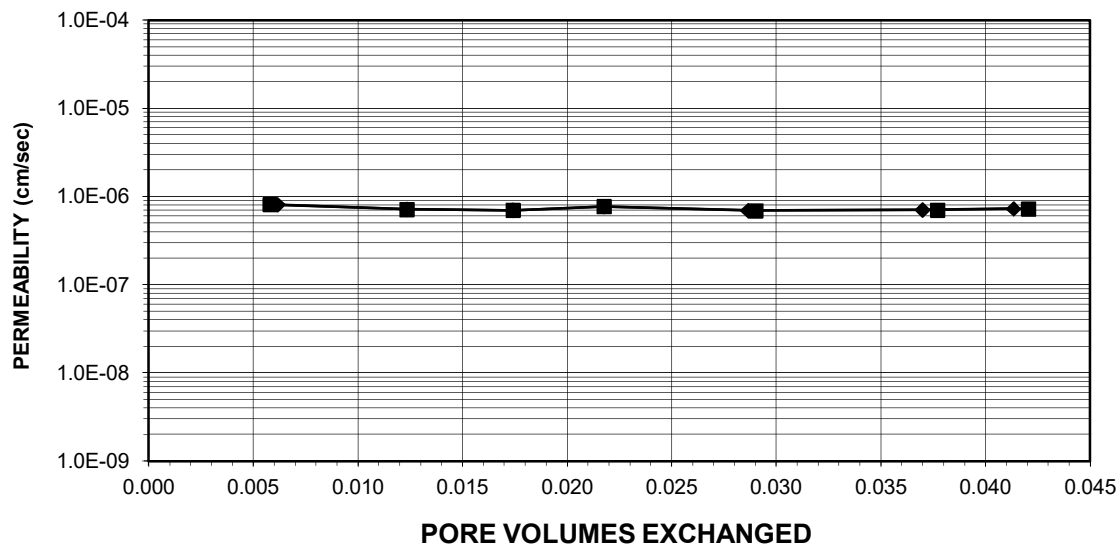
AVERAGE PERMEABILITY = $7.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $7.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-012

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-10-1:1
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	560	883
Weight of Tare & Wet Sample (g)	547.98	793.59
Weight of Tare & Dry Sample (g)	463.31	662.11
Weight of Tare (g)	81.90	109.78
Weight of Water (g)	84.67	131.48
Weight of Dry Sample (g)	381.41	552.33
Moisture Content (%)	22.2	23.8

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	678.58	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	678.58	687.49
Length 1 (in)	2.994	2.945
Length 2 (in)	2.932	2.979
Length 3 (in)	2.966	2.939
Top Diameter (in)	3.011	3.011
Middle Diameter (in)	3.002	3.010
Bottom Diameter (in)	2.991	2.997
Average Length (in)	2.96	2.95
Average Area (in ²)	7.07	7.10
Sample Volume (cm ³)	343.64	343.58
Unit Wet Weight (g/cm ³)	1.97	2.00
Unit Wet Weight (pcf)	123.3	124.9
Unit Dry Weight (pcf)	100.9	100.9
Unit Dry Weight (g/cm ³)	1.62	1.62
Void Ratio, e	0.67	0.67
Porosity, n	0.40	0.40
Pore Volume (cm ³)	138.0	137.9
Total Weight of Sample After Test (g)		687.84

Tested By: WT Date: 5/8/24 Checked By: JLK Date: 5/13/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-001
Lab ID No.: 2024-369-001-012

Boring No.: 5/1/24
Depth (ft): 7 Day, Soilcrete
Sample No.: 3-10-1:1
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.42

Final Sample Dimensions

Sample Length (cm), L	7.50
Sample Diameter (cm)	7.64
Sample Area (cm ²), A	45.79
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 7.2E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 7.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
5/10/24	7	39	0.000	0.0	0.0	196.8	0	20.2	NA
5/10/24	7	53	0.233	0.9	0.8	195.1	0	20.2	8.1E-07
5/10/24	8	10	0.517	1.7	1.7	193.2	0	20.2	7.2E-07
5/10/24	8	24	0.750	2.4	2.4	191.8	0	20.3	7.0E-07
5/10/24	8	35	0.933	3.0	3.0	190.6	0	20.3	7.7E-07
5/10/24	8	55	1.267	4.0	4.0	188.5	0	20.3	6.9E-07
5/10/24	9	19	1.667	5.1	5.2	186.1	0	20.3	7.0E-07
5/10/24	9	31	1.867	5.7	5.8	184.9	1	20.4	7.2E-07

Tested By: WT

Date: 5/8/24

Checked By: JLK

Date: 5/13/24

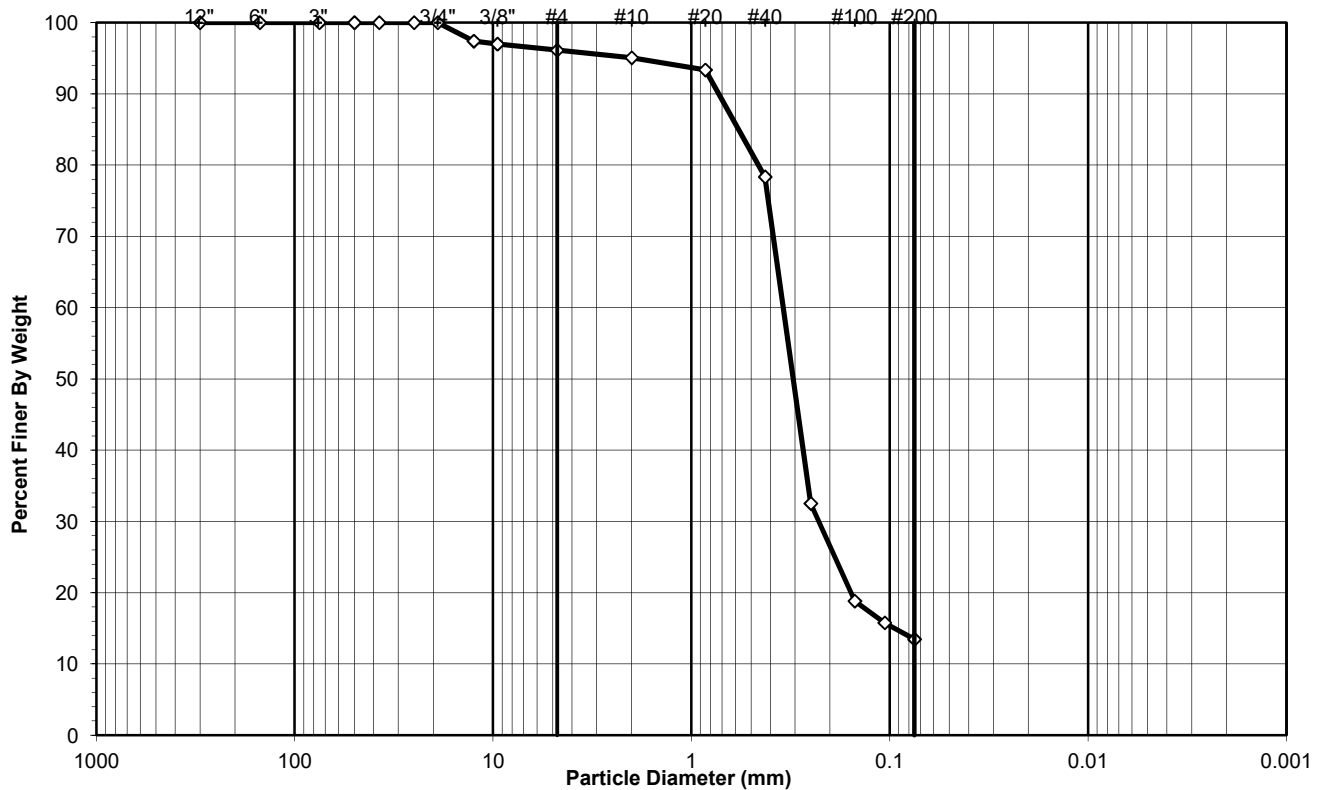
SIEVE AND HYDROMETER ANALYSIS

ASTM D6913 / D7928

Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-003
 Lab ID: 2024-369-003-001

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: ISS 2 12-20'
 Soil Color: Brown

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



Sieve Size	Percentage (%)	
Greater than #4	Gravel	3.87
#4 to #200	Sand	82.66
Finer than #200	Silt & Clay	13.47

USCS Symbol:
 sm, ASSUMED

D50 = 0.31

USCS Classification:
 SILTY SAND

Tested By DF Date 6/4/24 Checked By KC Date 6/4/24
 page 1 of 2 DCN: CT-S73T, DATE 2/25/22, REV. 1

WASH SIEVE ANALYSIS

ASTM D6913-17



Client: ENTACT, LLC
 Client Reference: Fmr. Kinder Morgan E9285
 Project No.: 2024-369-003
 Lab ID: 2024-369-003-001

Boring No.: 5/1/24
 Depth (ft): SP
 Sample No.: ISS 2 12-20'
 Soil Color: Brown

Moisture Content of Passing 3/4" Material				Moisture Content of Retained 3/4" Material			
Tare No.:	1502	Tare No.:	NA	Tare No.:	1502	Tare No.:	NA
Wt. of Tare & Wet Sample (g):	864.89	Weight of Tare & Wet Sample (g):	NA	Wt. of Tare & Wet Sample (g):	864.89	Weight of Tare & Wet Sample (g):	NA
Wt. of Tare & Dry Sample (g):	756.88	Weight of Tare & Dry Sample (g):	NA	Wt. of Tare & Dry Sample (g):	756.88	Weight of Tare & Dry Sample (g):	NA
Weight of Tare (g):	145.97	Weight of Tare (g):	NA	Weight of Tare (g):	145.97	Weight of Tare (g):	NA
Weight of Water (g):	108.01	Weight of Water (g):	NA	Weight of Water (g):	108.01	Weight of Water (g):	NA
Weight of Dry Soil (g):	610.91	Weight of Dry Soil (g):	NA	Weight of Dry Soil (g):	610.91	Weight of Dry Soil (g):	NA
Moisture Content (%):	17.7	Moisture Content (%):	0.0	Moisture Content (%):	0.0	Moisture Content (%):	0.0
Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	610.91	Dry Weight of Sample (g):	NA	Total Dry Weight of Sample (g):	610.91
Tare No. (Sub-Specimen)	1502	Wet Weight of +3/4" Sample (g):	0.00	Tare No. (Sub-Specimen)	1502	Wet Weight of +3/4" Sample (g):	0.00
Wt. of Tare & Wet Sub-Specimen (g):	864.89	Dry Weight of + 3/4" Sample (g):	0.00	Wt. of Tare & Wet Sub-Specimen (g):	864.89	Dry Weight of + 3/4" Sample (g):	0.00
Weight of Tare (g):	145.97	Dry Weight of - 3/4" Sample (g):	610.91	Weight of Tare (g):	145.97	Dry Weight of - 3/4" Sample (g):	610.91
Sub-Specimen Wet Weight (g):	718.92	Dry Weight -3/4" +3/8" Sample (g):	18.36	Sub-Specimen Wet Weight (g):	718.92	Dry Weight -3/4" +3/8" Sample (g):	18.36
Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	592.55	Tare No. (-3/8" Sub-Specimen):	NA	Dry Weight of -3/8" Sample (g):	592.55
Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA	Wt. of Tare & Wet -3/8" Sub-Specimen (g):	NA	J - Factor (% Finer than 3/4"):	NA
Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA	Weight of Tare (g):	NA	J - Factor (% Finer than 3/8"):	NA
Sub-Specimen -3/8" Wet Weight (g):	NA			Sub-Specimen -3/8" Wet Weight (g):	NA		

Sieve Size	Sieve Opening (mm)	Weight of Soil Retained (g)	Percent Retained (%)	Accumulated Percent Retained (%)	Percent Finer (%)	Accumulated Percent Finer (%)
12"	300	0.00	0.00	0.00	100.00	100
6"	150	0.00	0.00	0.00	100.00	100
3"	75	0.00	0.00	0.00	100.00	100
2"	50	0.00	(*) 0.00	0.00	100.00	100
1 1/2"	37.5	0.00	0.00	0.00	100.00	100
1"	25	0.00	0.00	0.00	100.00	100
3/4"	19	0.00	0.00	0.00	100.00	100
1/2"	12.5	15.86	(**) 2.60	2.60	97.40	97
3/8"	9.5	2.50	0.41	3.01	96.99	97
#4	4.75	5.30	0.87	3.87	96.13	96
#10	2	6.46	1.06	4.93	95.07	95
#20	0.85	10.43	(**) 1.71	6.64	93.36	93
#40	0.425	91.66	15.00	21.64	78.36	78
#60	0.25	280.03	45.84	67.48	32.52	33
#100	0.15	83.65	13.69	81.17	18.83	19
#140	0.106	18.61	3.05	84.22	15.78	16
#200	0.075	14.15	2.32	86.53	13.47	13
Pan	-	82.26	13.47	100.00	-	-

Notes : (*) The + 3/4" sieve analysis is based on the Total Dry Weight of the Sample
 (**) The - 3/4" and - 3/8" sieve analysis is based on the Weight of the Dry Specimen

Tested By DF Date 6/4/24 Checked By KC Date 6/4/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

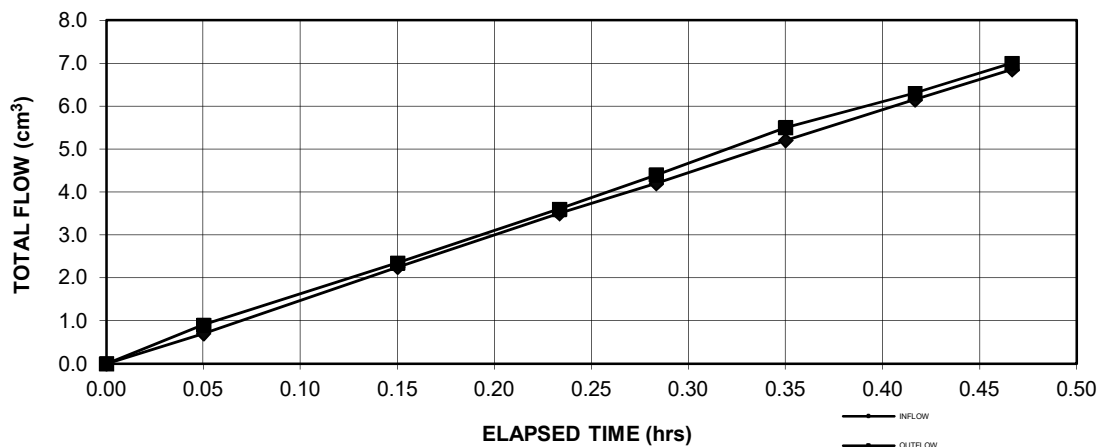


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-003
Lab ID No.: 2024-369-003-001
Boring No.: 5/1/24
Depth (ft): SP
Sample No.: ISS 2 12-20'
Avg. Effective Consol. Pressure (psi): 6.25

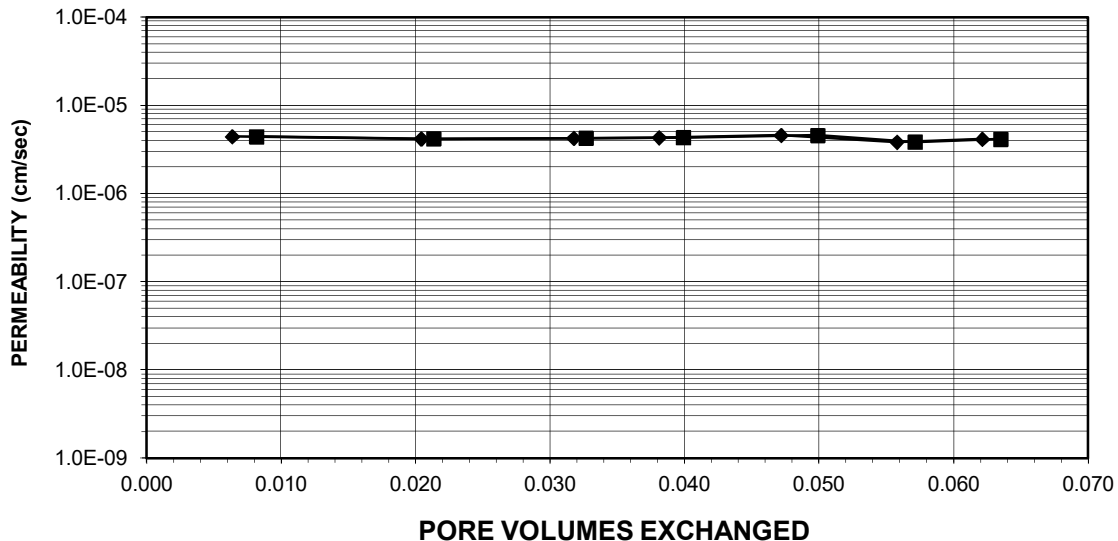
AVERAGE PERMEABILITY = $4.2\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $4.2\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/30/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-003
Lab ID No.: 2024-369-003-001

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: ISS 2 12-20'
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Remolded

Visual Description: Brown Sand & Rocks

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	3055	875
Weight of Tare & Wet Sample (g)	179.17	869.23
Weight of Tare & Dry Sample (g)	152.62	760.73
Weight of Tare (g)	6.88	109.98
Weight of Water (g)	26.55	108.50
Weight of Dry Sample (g)	145.74	650.75
Moisture Content (%)	18.2	16.7

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	1689.86	NA
Weight of Tube (g)	917.30	NA
Weight of Wet Sample (g)	772.56	762.47
Length 1 (in)	3.490	3.321
Length 2 (in)	3.490	3.357
Length 3 (in)	3.490	3.359
Top Diameter (in)	2.870	2.850
Middle Diameter (in)	2.870	2.876
Bottom Diameter (in)	2.870	2.855
Average Length (in)	3.49	3.35
Average Area (in ²)	6.47	6.43
Sample Volume (cm ³)	369.98	352.30
Unit Wet Weight (g/cm ³)	2.09	2.16
Unit Wet Weight (pcf)	130.3	135.1
Unit Dry Weight (pcf)	110.3	115.8
Unit Dry Weight (g/cm ³)	1.77	1.86
Void Ratio, e	0.53	0.46
Porosity, n	0.35	0.31
Pore Volume (cm ³)	127.9	110.3
Total Weight of Sample After Test (g)		764.09

Tested By: WT Date: 5/30/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-003
Lab ID No.: 2024-369-003-001

Boring No.: 5/1/24
Depth (ft): SP
Sample No.: ISS 2 12-20'
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	67.5
Bottom Cap (psi)	70.0
Cell (psi)	75.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	20.68

Final Sample Dimensions

Sample Length (cm), L	8.50
Sample Diameter (cm)	7.27
Sample Area (cm ²), A	41.46
Inflow Burette Area (cm ²), a-in	0.945
Outflow Burette Area (cm ²), a-out	0.915
B Parameter (%)	96

AVERAGE PERMEABILITY = 4.2E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.2E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/31/24	12	56	0.000	0.0	0.0	201.0	0	20.6	NA
5/31/24	12	59	0.050	0.7	0.9	199.3	0	20.6	4.4E-06
5/31/24	13	5	0.150	2.3	2.4	196.1	0	20.6	4.2E-06
5/31/24	13	10	0.233	3.5	3.6	193.5	0	20.6	4.2E-06
5/31/24	13	13	0.283	4.2	4.4	191.9	0	20.6	4.3E-06
5/31/24	13	17	0.350	5.2	5.5	189.6	0	20.6	4.6E-06
5/31/24	13	21	0.417	6.2	6.3	187.8	0	20.6	3.8E-06
5/31/24	13	24	0.467	6.9	7.0	186.3	1	20.6	4.1E-06

Tested By: WT

Date: 5/30/24

Checked By: JLK

Date: 6/3/24

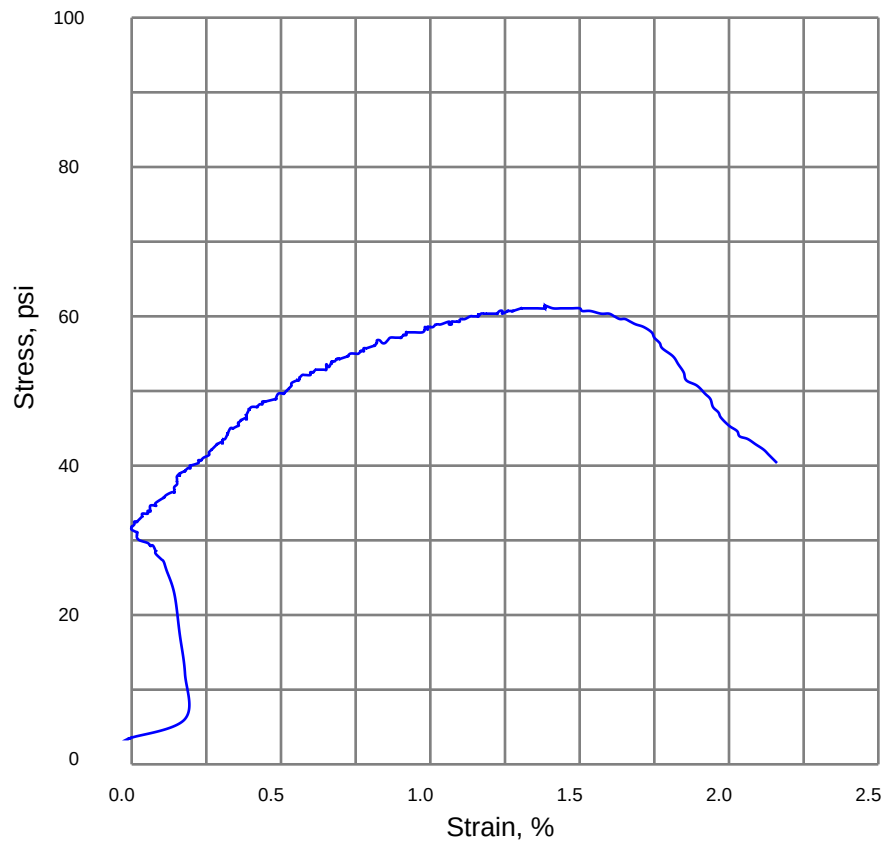
ATTACHMENT 2 ISS MIX UCS REPORTS

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-7.5-PC 7Day1	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	61.27	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.38	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.2
		Max. Load lbf:	192.5
		at Displacement, in:	0.0554

Soil Type: 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

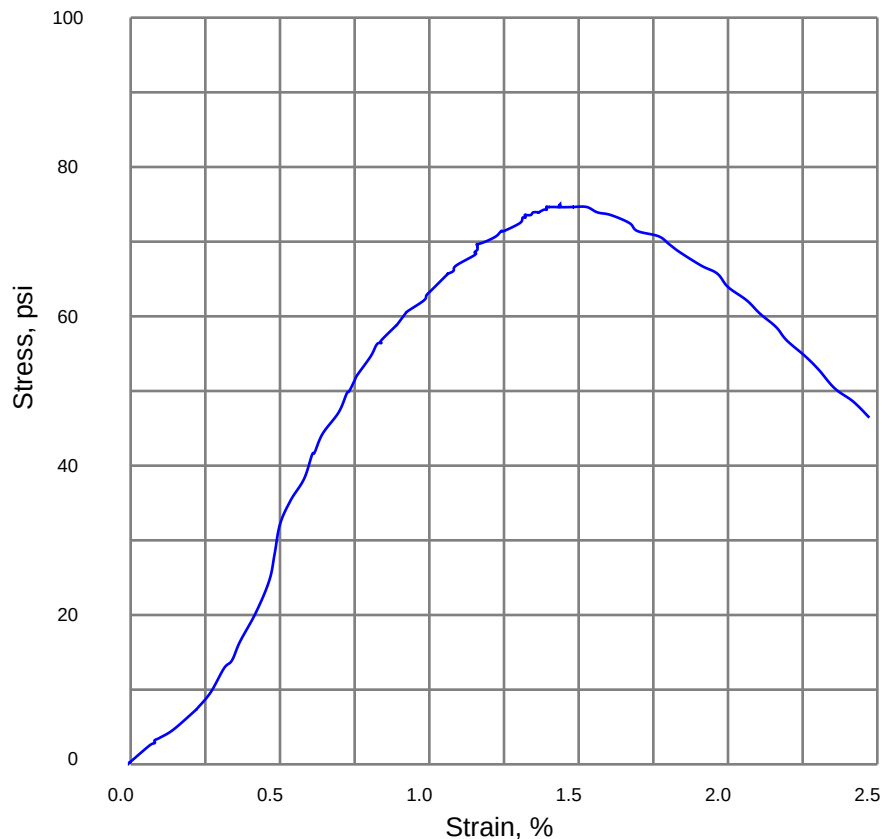
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-7.5-PC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	74.83	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.44	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.8
		Max. Load lbf:	235.1
		at Displacement, in:	0.0577

Soil Type: 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

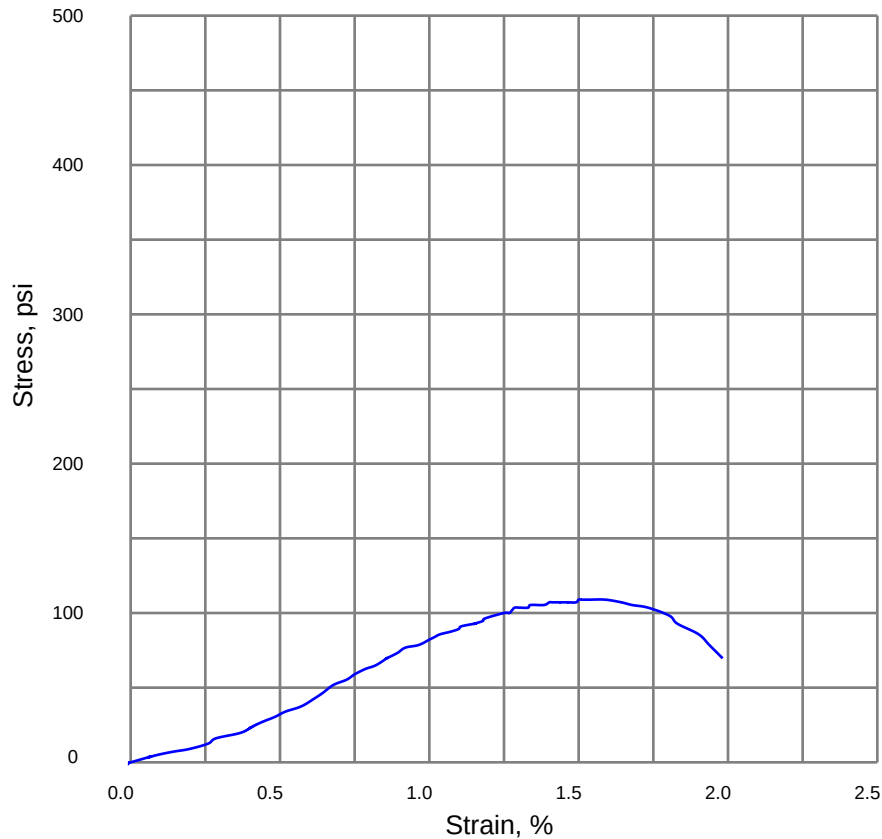
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	7-7.5PC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	108.48	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.51	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.9
		Max. Load lbf:	340.8
		at Displacement, in:	0.0605

Soil Type: 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

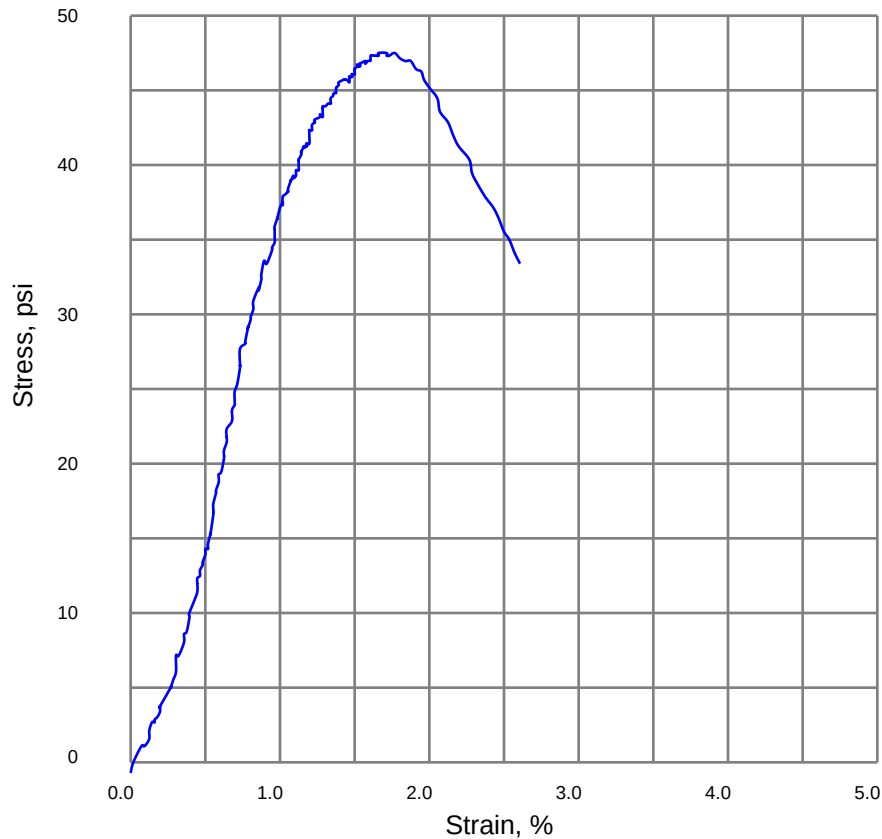
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-7.5-2PC1Slag 7Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	47.52	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.77	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.4
		Max. Load lbf:	149.3
		at Displacement, in:	0.0709

Soil Type: 7.5% 2:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

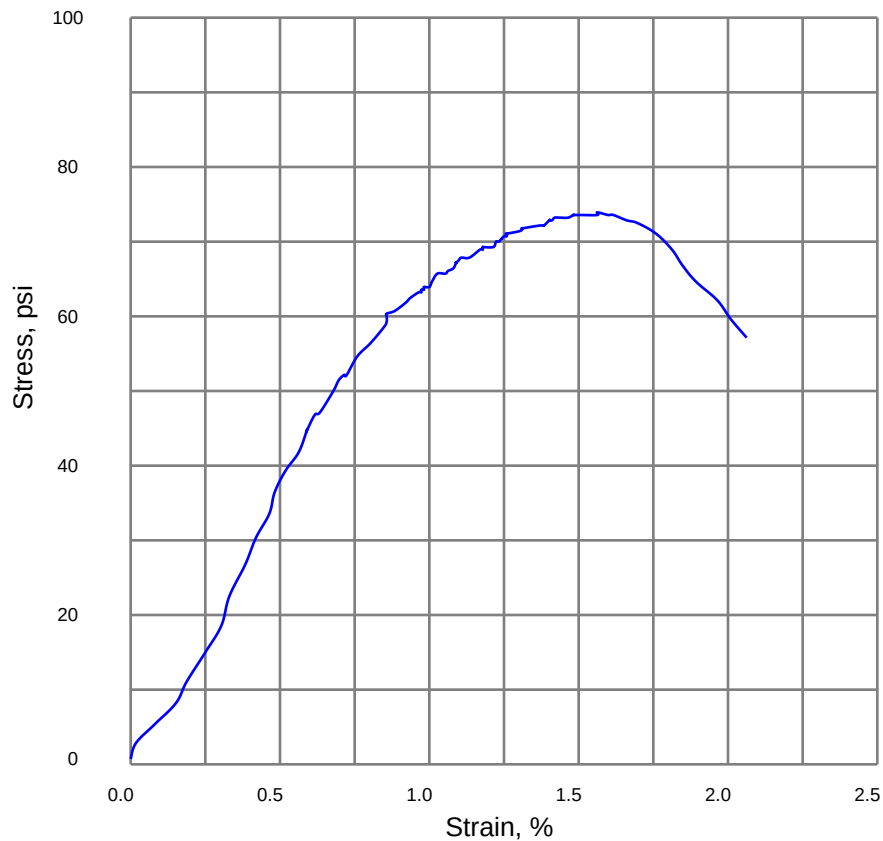
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-7.5-2PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	73.78	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.56	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.7
		Max. Load lbf:	231.8
		at Displacement, in:	0.0624

Soil Type: 7.5%2PC:1Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

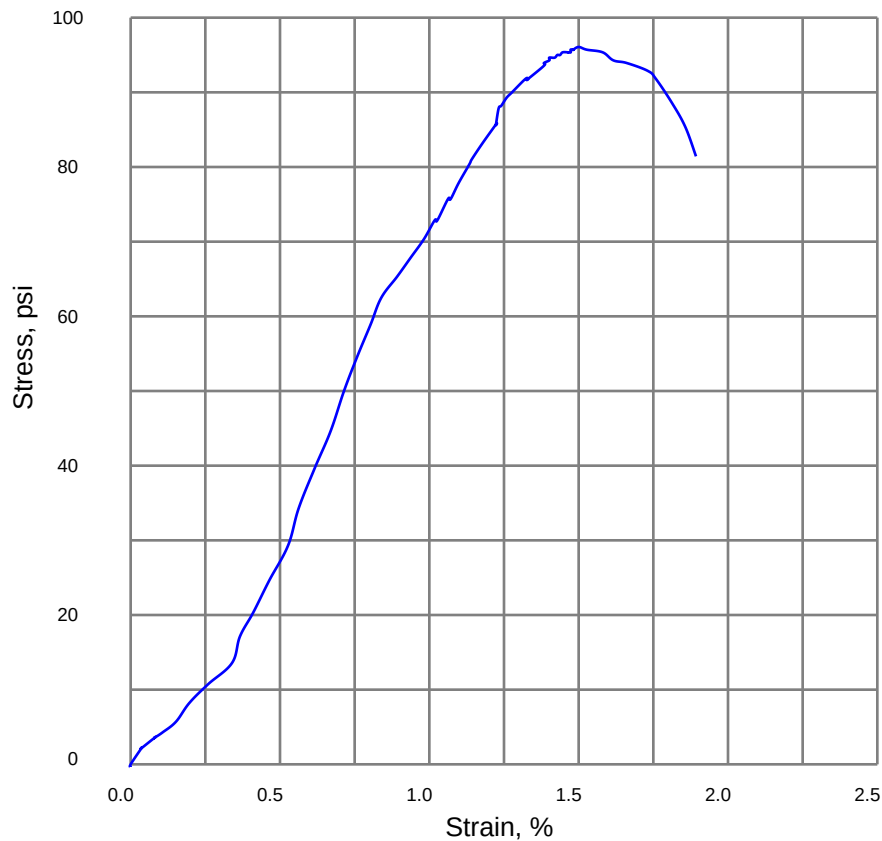
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS2-7.5-2PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	95.91	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.50	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.9
		Max. Load lbf:	301.3
		at Displacement, in:	0.0598

Soil Type: 5%PC 2.5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

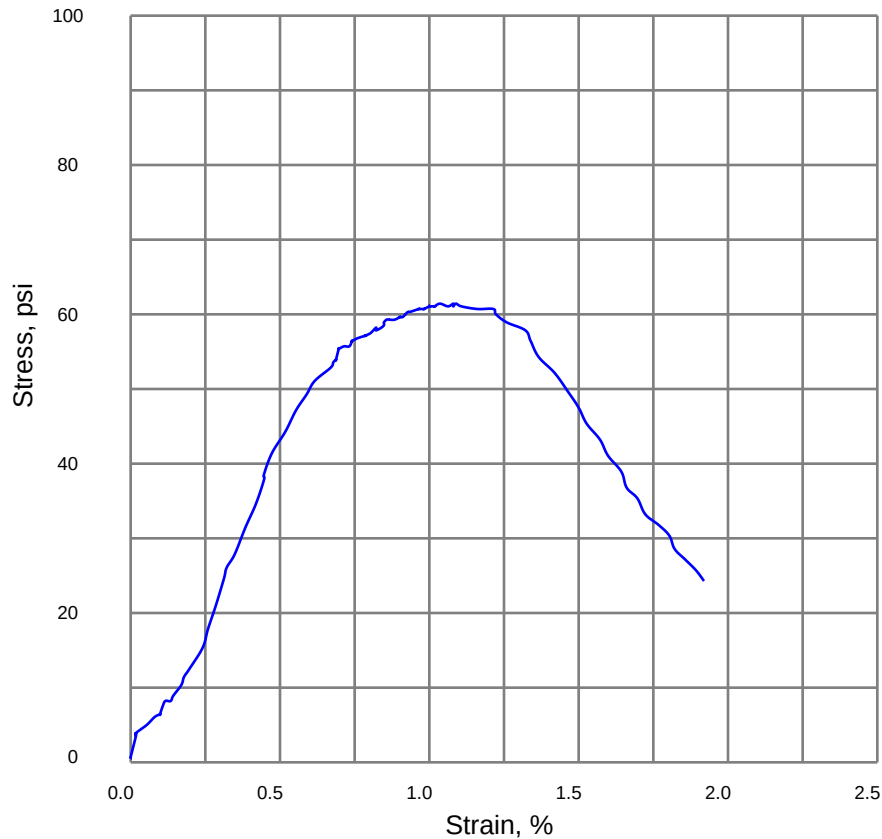
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-10-3PC1Slag 7Day1	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	61.37	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.09	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.6
		Max. Load lbf:	192.8
		at Displacement, in:	0.0435

Soil Type: 10% 3:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

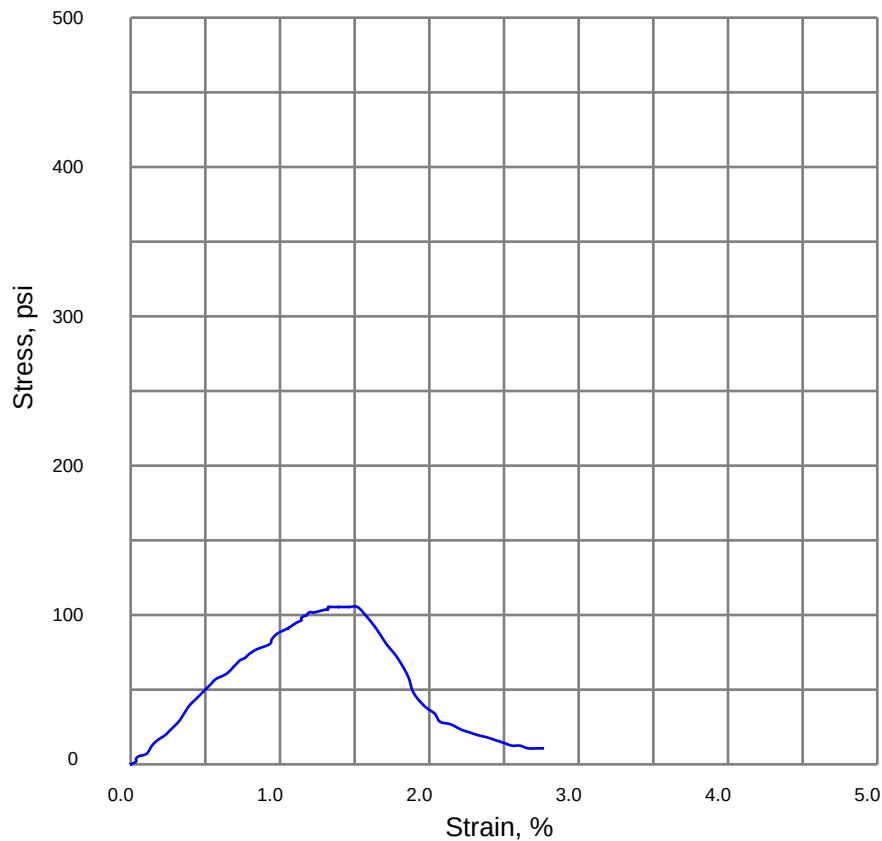
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-710-3PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	106.09	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.46	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.2
		Max. Load lbf:	333.3
		at Displacement, in:	0.0586

Soil Type: 10% 3PC:1Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

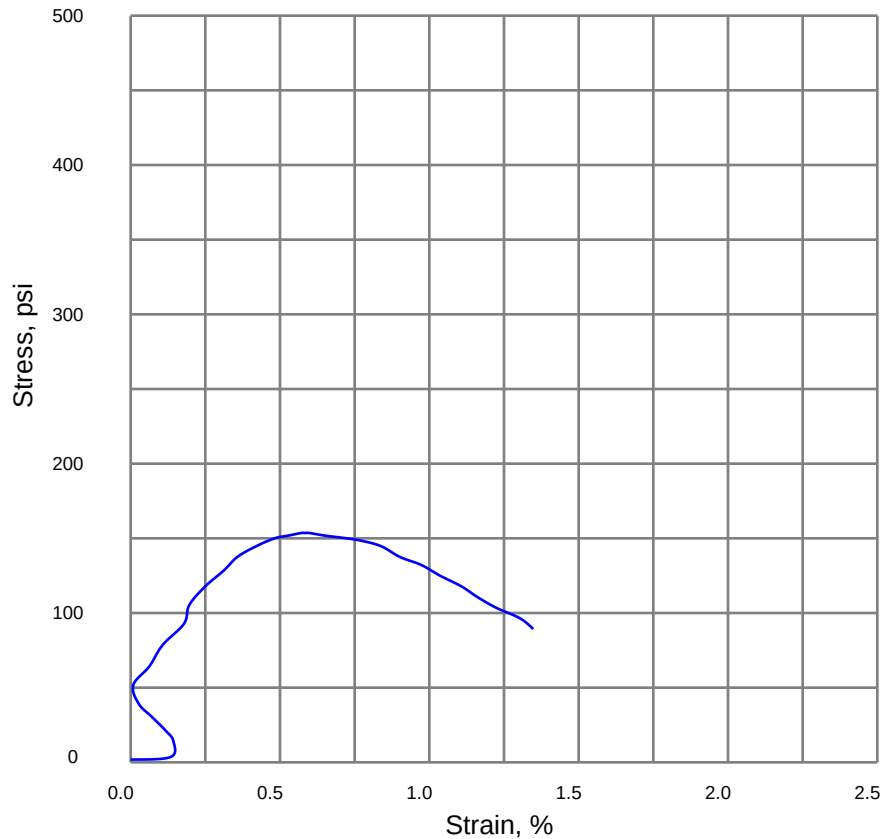
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS2-10-3PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	153.33	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.59	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.3
		Max. Load lbf:	481.7
		at Displacement, in:	0.0237

Soil Type: 7.5%PC 2.5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

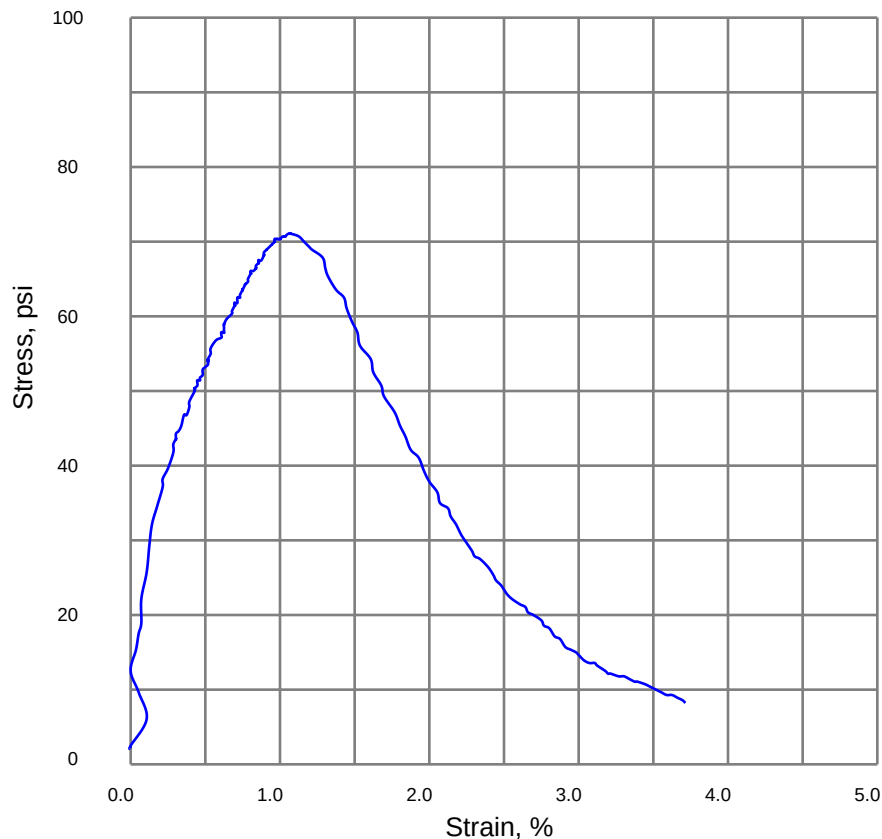
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-10-1PC1Slag 7Day1	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	71.05	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.06	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.6
		Max. Load lbf:	223.2
		at Displacement, in:	0.0423

Soil Type: 10% 1:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

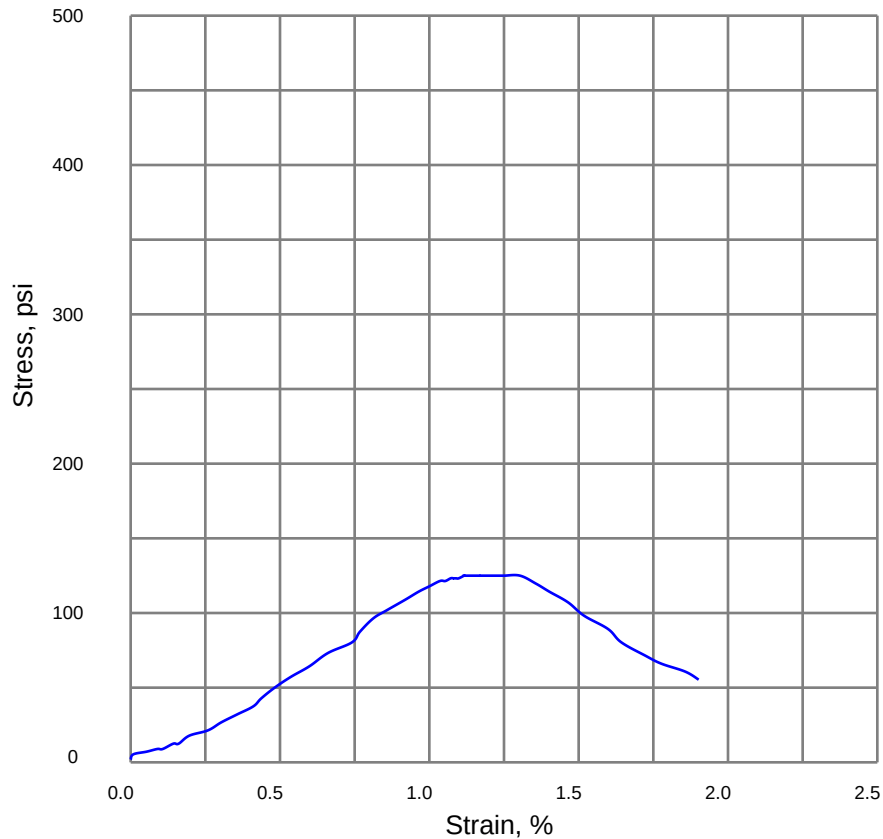
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	2-710-1PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	125.67	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.22	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.1
		Max. Load lbf:	394.8
		at Displacement, in:	0.0486

Soil Type: 10% 1PC:1Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

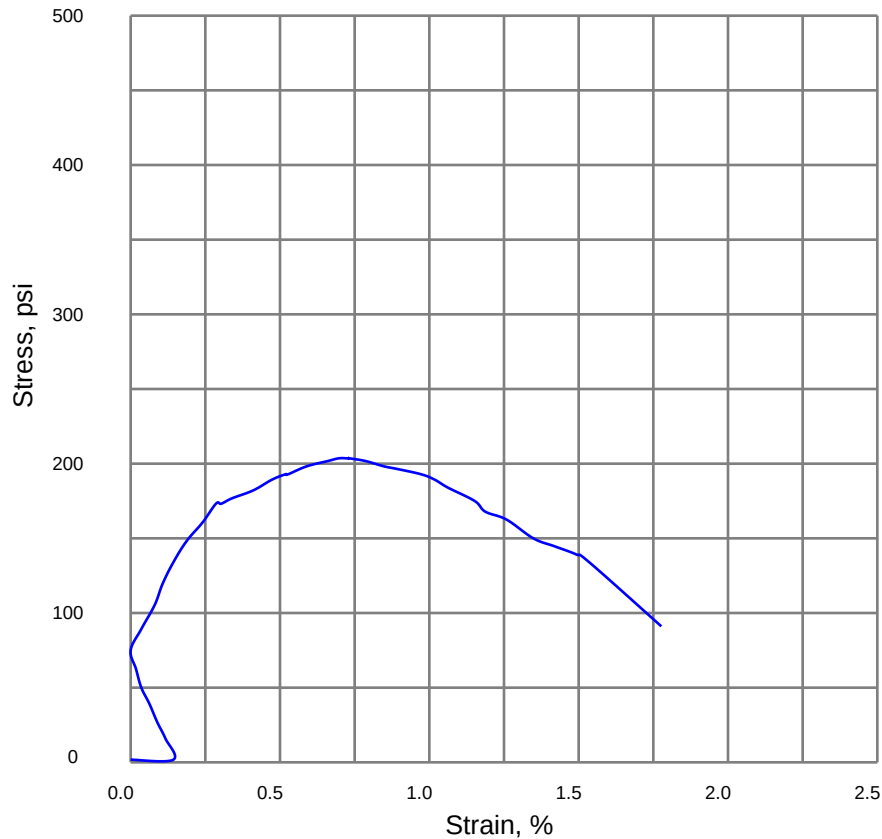
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS2-10-1PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	3.9
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	203.88	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.73	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.3
		Max. Load lbf:	640.5
		at Displacement, in:	0.0286

Soil Type: 5%PC 5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

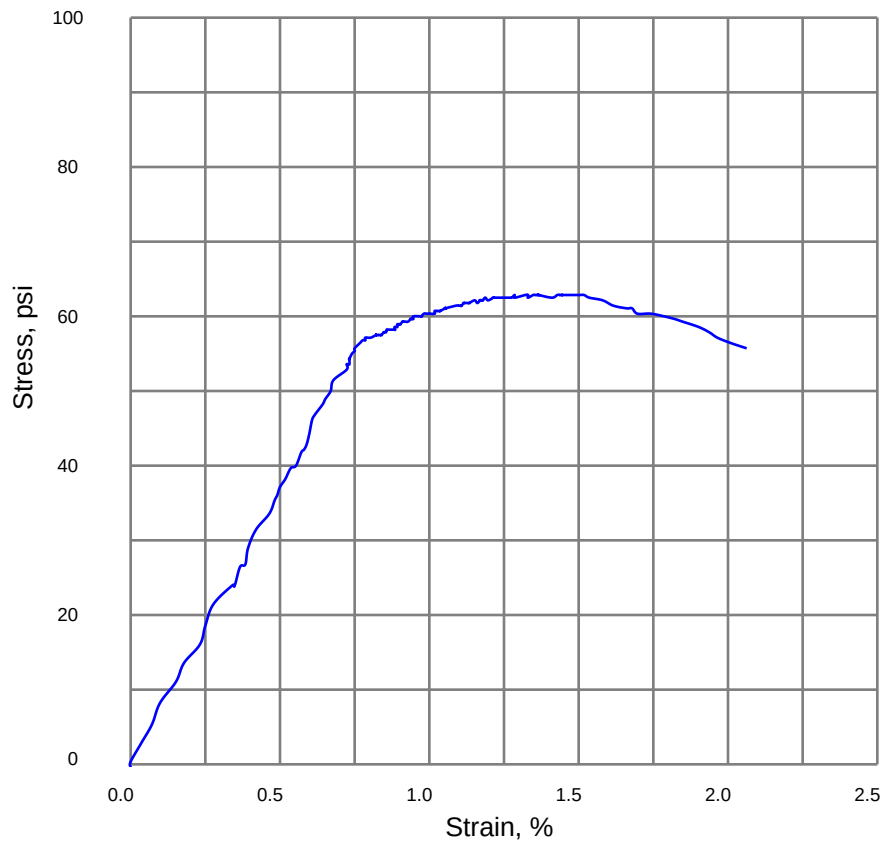
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-7.5-PC 7day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	3.9
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	62.99	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.44	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.4
		Max. Load lbf:	197.9
		at Displacement, in:	0.0563

Soil Type: 7.5% PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

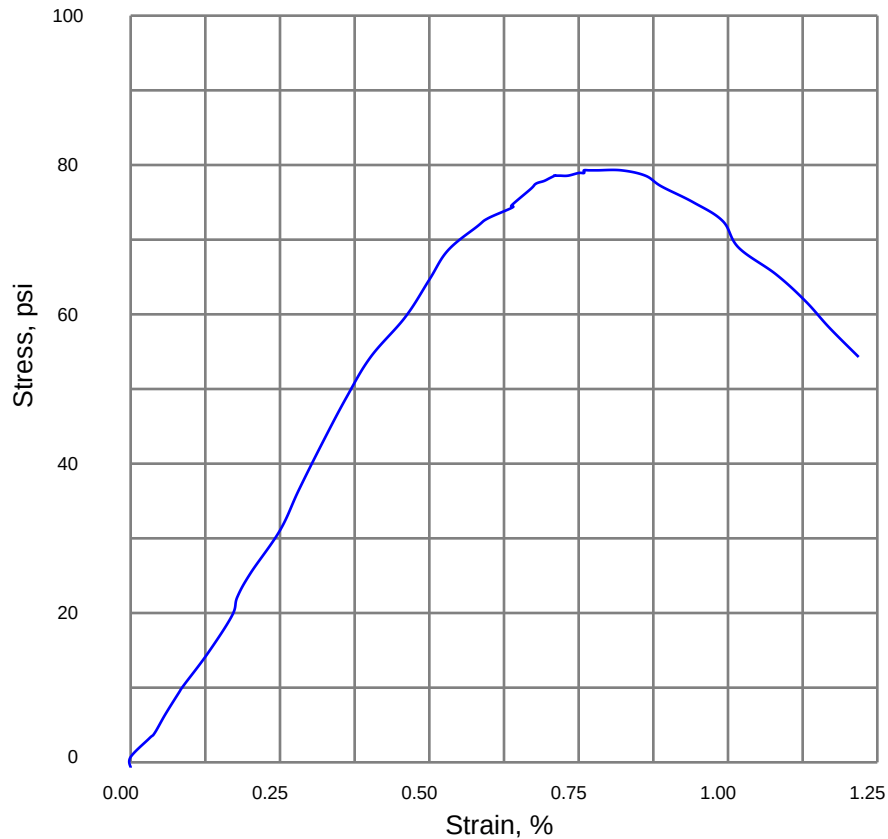
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-7.5PC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	79.42	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.78	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.8
		Max. Load lbf:	249.5
		at Displacement, in:	0.0313

Soil Type: 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

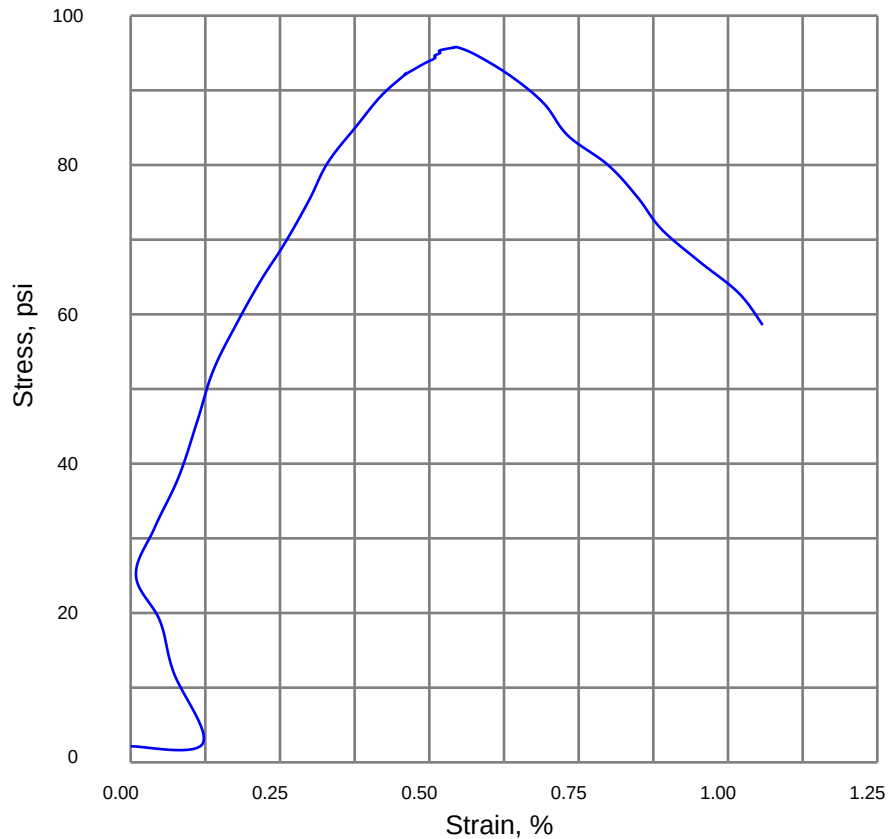
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS3-7.5PC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	95.68	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.54	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.9
		Max. Load lbf:	300.6
		at Displacement, in:	0.0217

Soil Type: 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

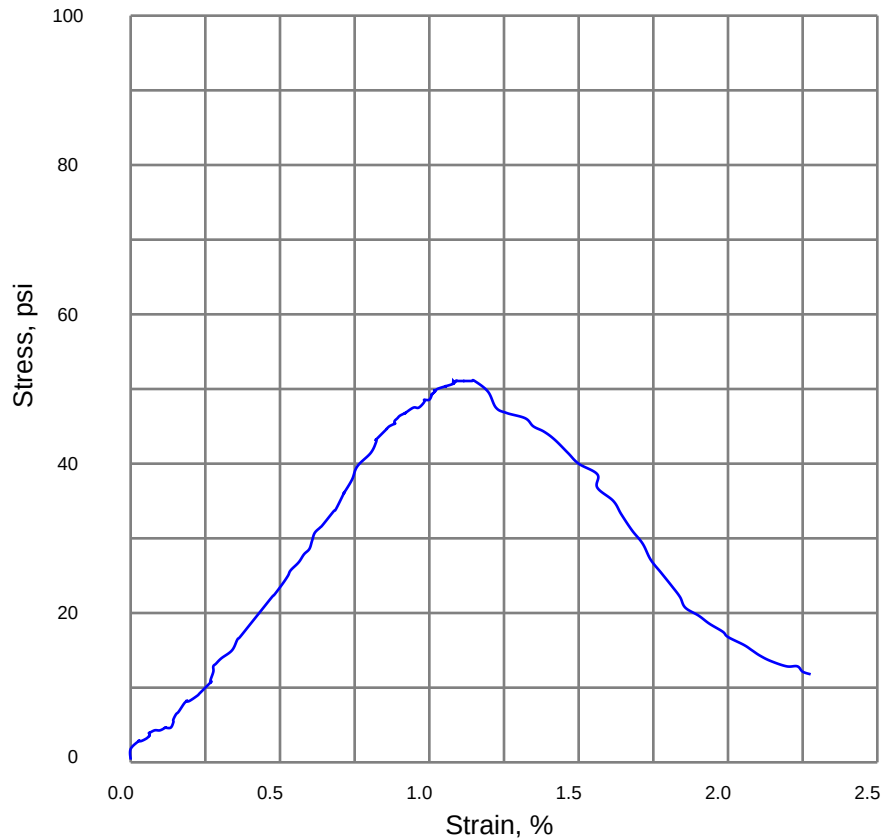
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-7.5-2PC1Slag 7day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	51.22	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.14	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.5
		Max. Load lbf:	160.9
		at Displacement, in:	0.0455

Soil Type: 7.5% 2:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

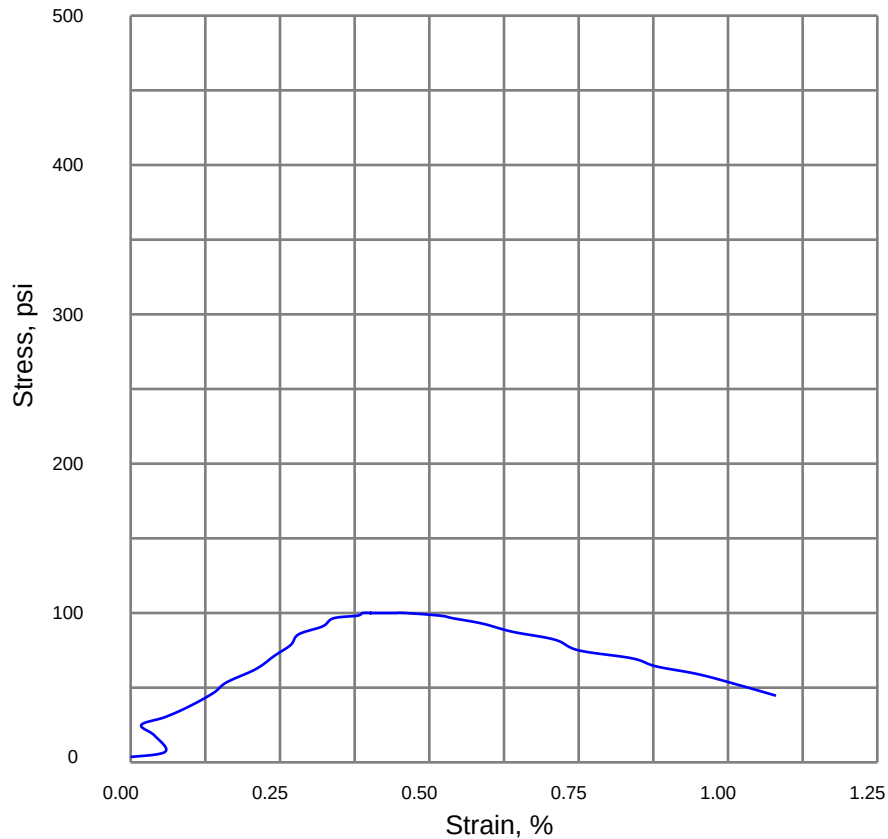
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-7.5-2PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	100.75	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.42	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.0
		Max. Load lbf:	316.5
		at Displacement, in:	0.0168

Soil Type: 7.5% 2PC:1Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

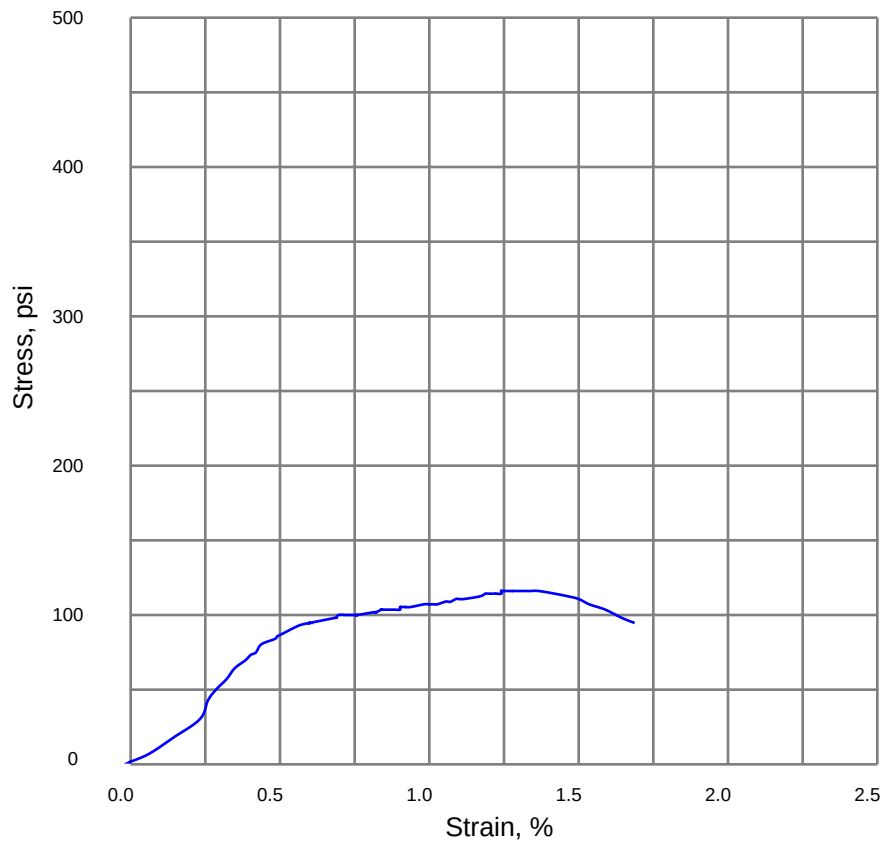
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS3-7.5-2PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	116.69	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.33	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.6
		Max. Load lbf:	366.6
		at Displacement, in:	0.0531

Soil Type: 5%PC 2.5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

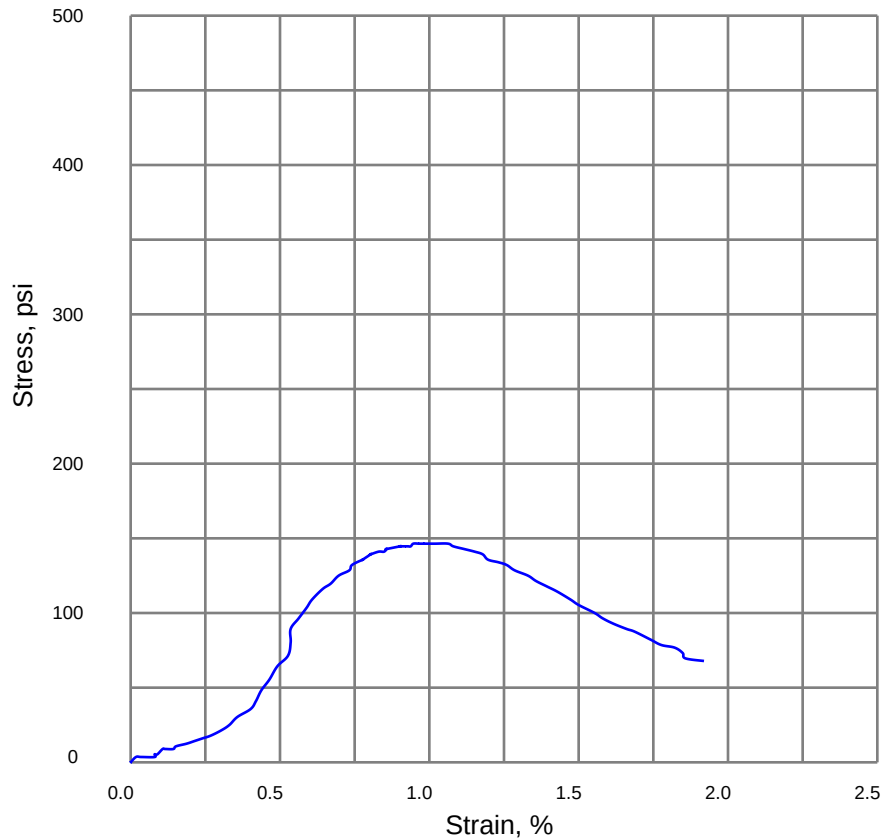
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-10-3PC1Slag 7day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	146.45	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.98	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.7
		Max. Load lbf:	460.1
		at Displacement, in:	0.0390

Soil Type: 10% 3:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

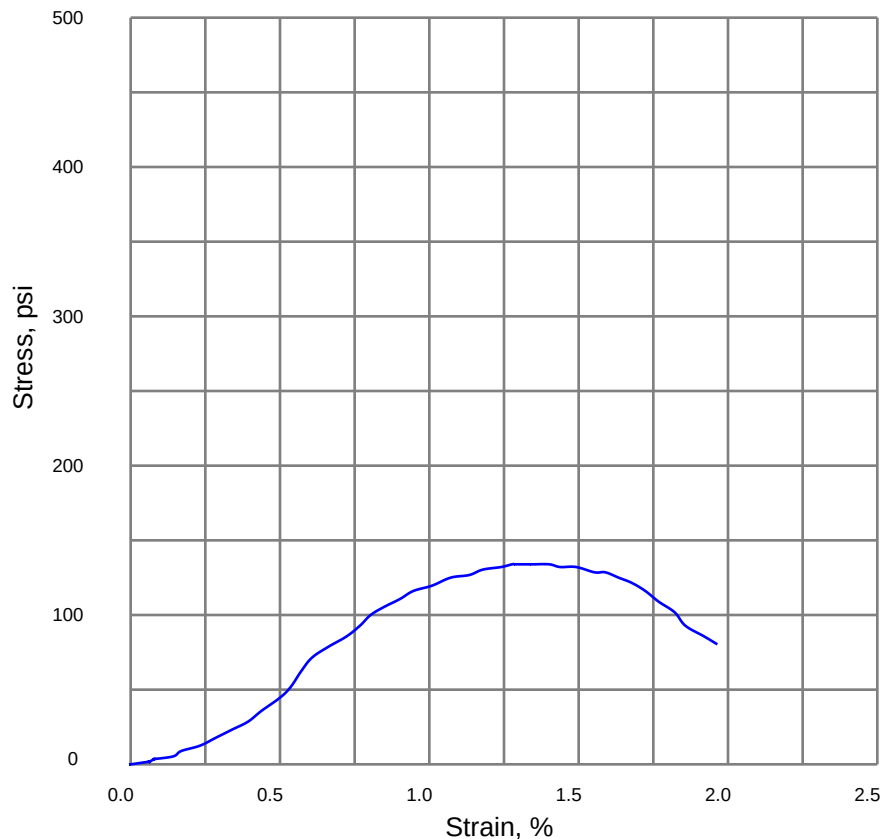
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-10-3PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	134.04	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.35	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.2
		Max. Load lbf:	421.1
		at Displacement, in:	0.0540

Soil Type: 10% 3PC:1Slag



Equipment: KW HM-398/6572 Readout

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2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

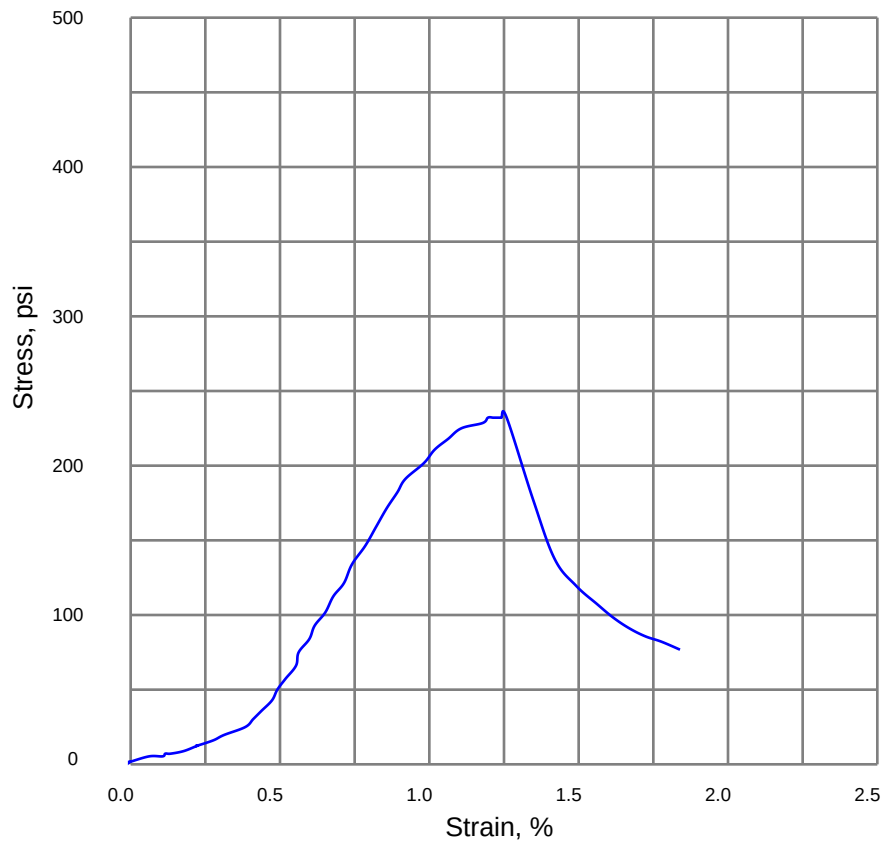
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS3-10-3PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	232.33	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.24	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.2
		Max. Load lbf:	729.9
		at Displacement, in:	0.0495

Soil Type: 7.5%PC 2.5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

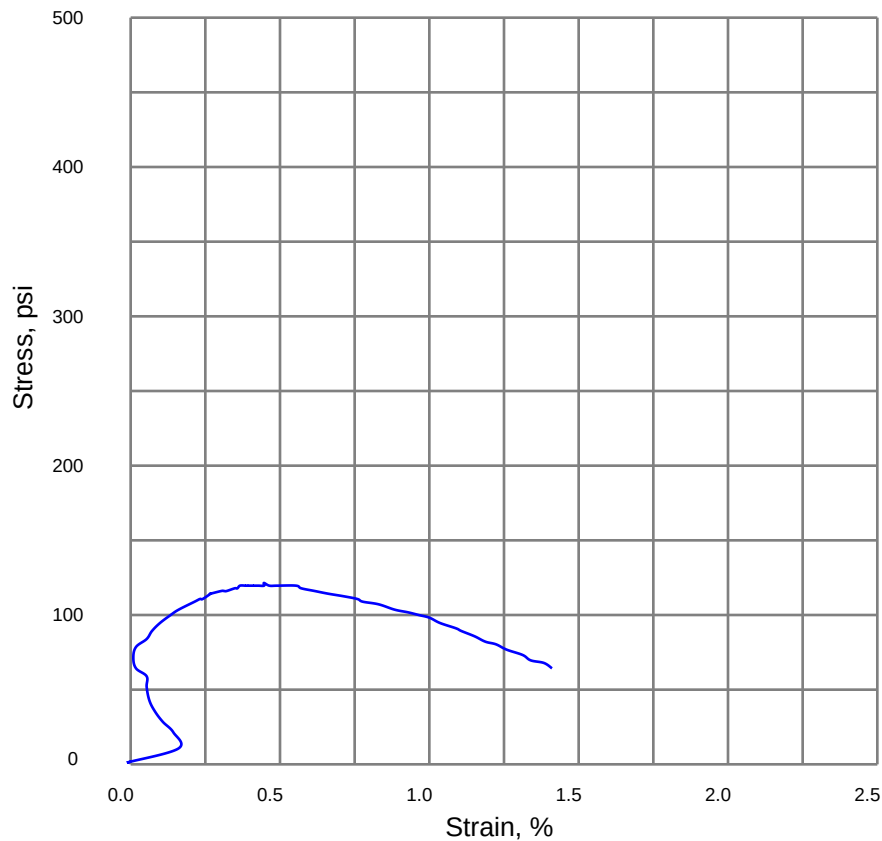
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-10-1PC1Slag 7day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	3.75
Date Tested:	5/8/2024	Sample Moisture, %:	
Stress @ Failure, psi:	120.54	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.45	Height/Diameter Ratio:	1.9
		Strain Rate, %/min:	0.7
		Max. Load lbf:	378.7
		at Displacement, in:	0.0168

Soil Type: 10% 1:1 PC:Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

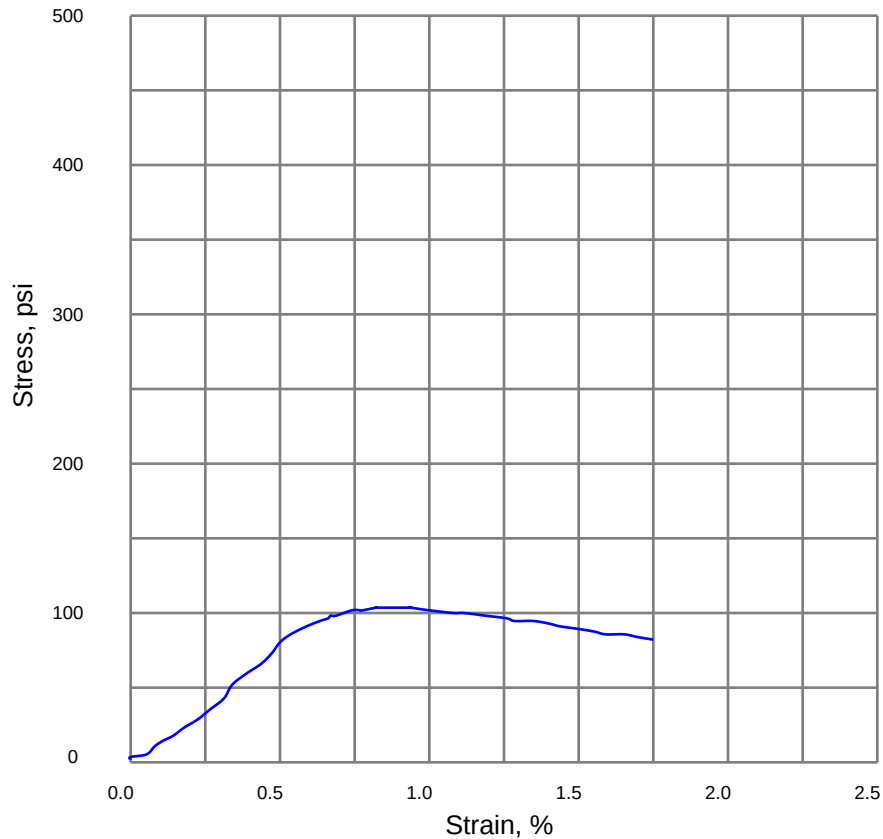
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	3-10-1PC1Slag 14Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/15/2024	Sample Moisture, %:	
Stress @ Failure, psi:	103.20	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.87	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.1
		Max. Load lbf:	324.2
		at Displacement, in:	0.0348

Soil Type: 10% 1PC:1Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

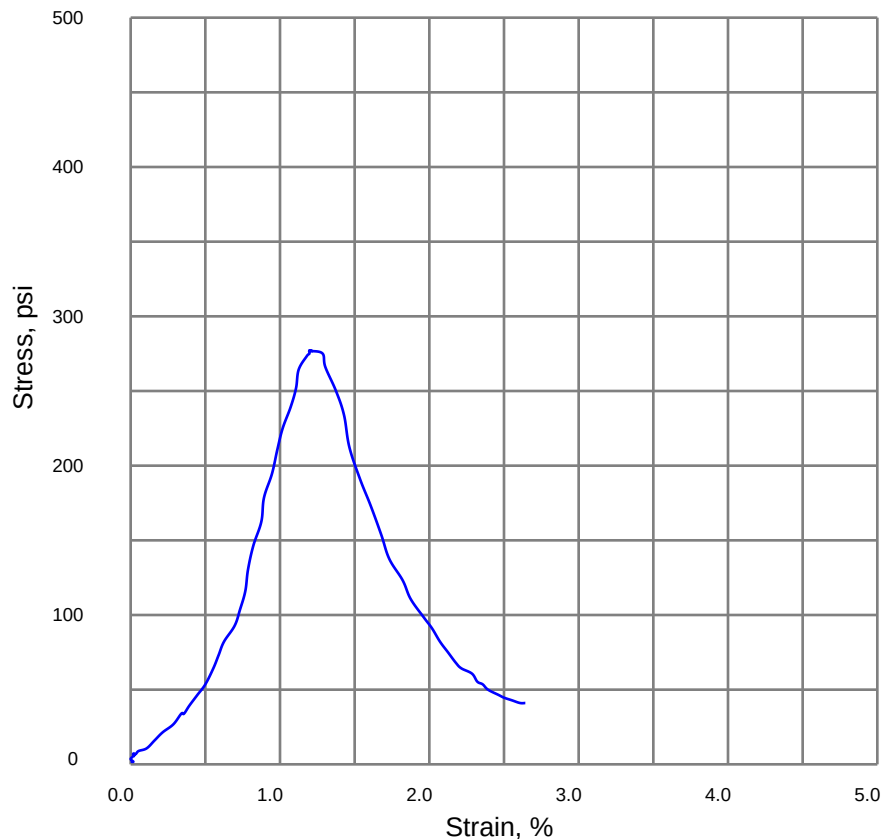
Client: NorthPoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	ISS3-10-1PC1Slag 28Day	Sample Diameter, in:	2
Boring Depth, ft:	050124	Sample Height, in:	4
Date Tested:	5/28/2024	Sample Moisture, %:	
Stress @ Failure, psi:	277.50	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.22	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.2
		Max. Load lbf:	871.8
		at Displacement, in:	0.0489

Soil Type: 5%PC 5%Slag



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: Fmr Kinder Morgan Terminal ISS

Project ID: E9285

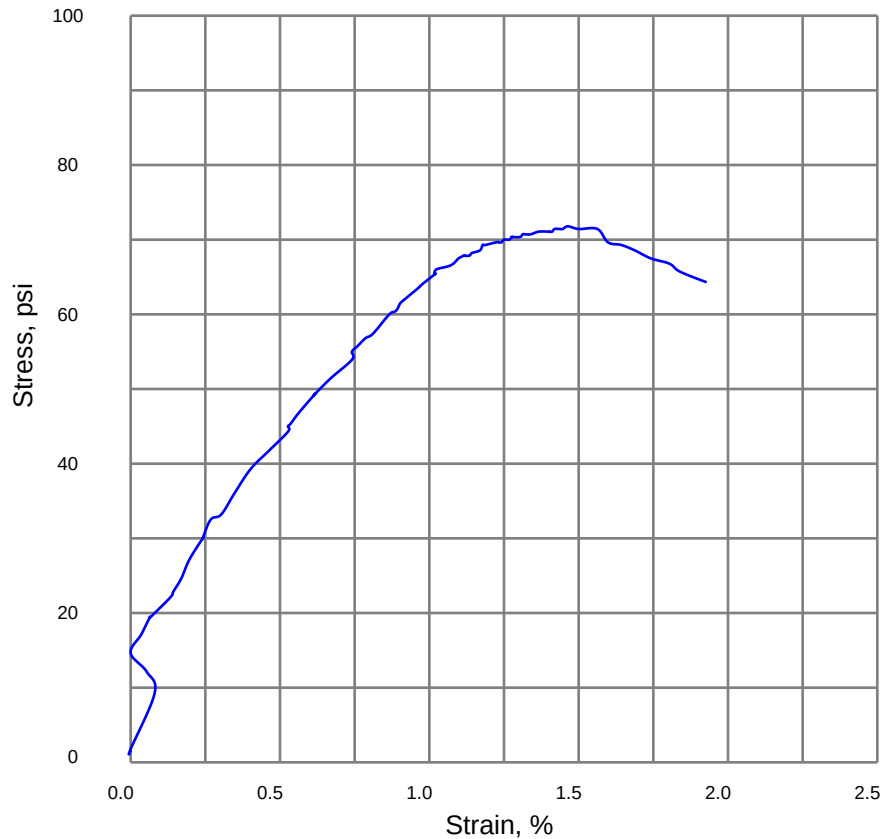
Client: North Point

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC 8Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/19/2024	Sample Moisture, %:	
Stress @ Failure, psi:	71.72	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.46	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.7
		Max. Load lbf:	225.3
		at Displacement, in:	0.0584

Soil Type: ISS4 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

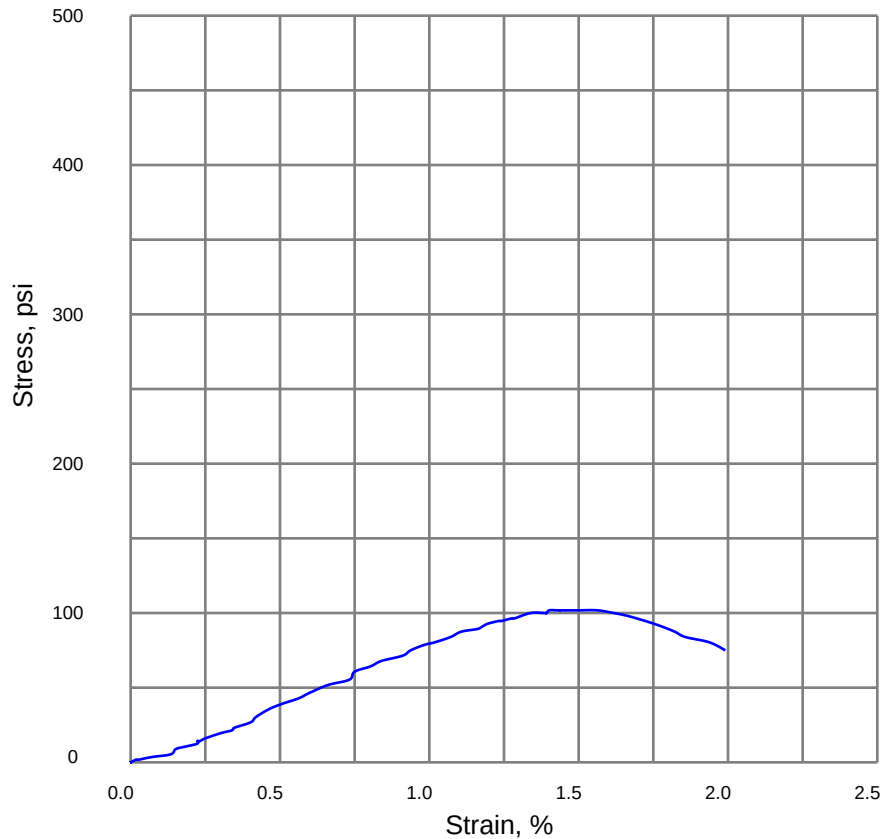
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix- ISS4-7.5PC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/25/2024	Sample Moisture, %:	
Stress @ Failure, psi:	101.92	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.48	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.0
		Max. Load lbf:	320.2
		at Displacement, in:	0.0593

Soil Type: 7.5% PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101Arthur Kill Rd Benchscale

Project ID: E9285

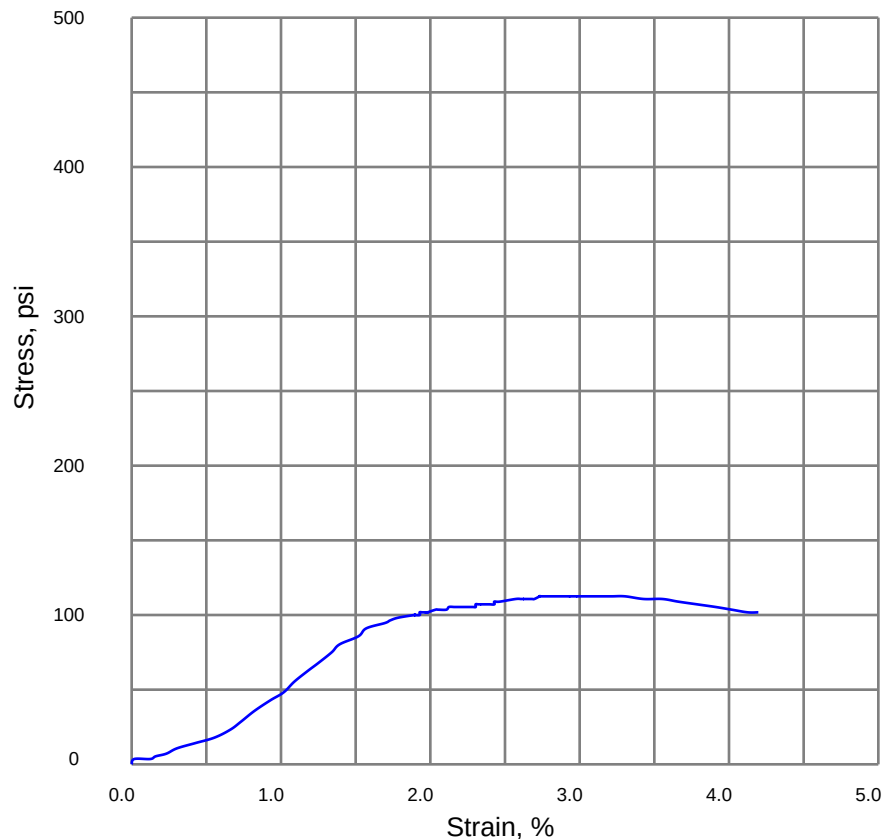
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	061224	Sample Height, in:	2
Date Tested:	7/10/2024	Sample Moisture, %:	
Stress @ Failure, psi:	113.32	Sample Dry Density, pcf:	
Strain @ Failure, %:	3.03	Height/Diameter Ratio:	1.0
		Strain Rate, %/min:	1.5
		Max. Load lbf:	356.0
		at Displacement, in:	0.0606

Soil Type: ISS4 7.5%PC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

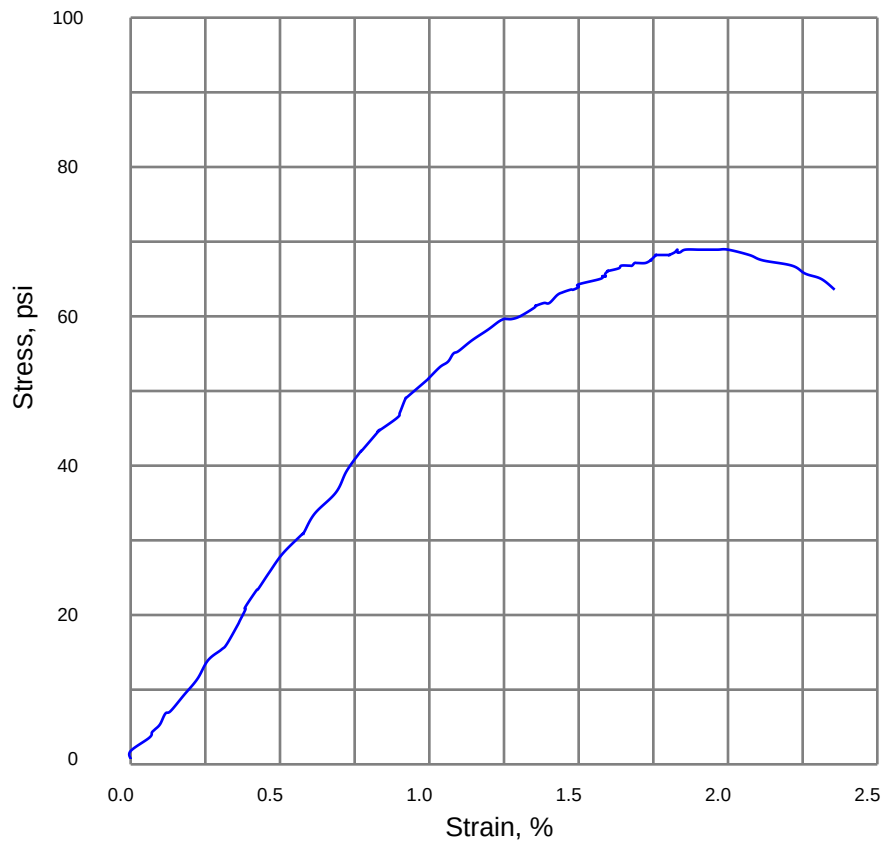
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC0.5GAC 8Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/19/2024	Sample Moisture, %:	
Stress @ Failure, psi:	68.98	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.91	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.7
		Max. Load lbf:	216.7
		at Displacement, in:	0.0765

Soil Type: ISS4 7.5%PC 0.5%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

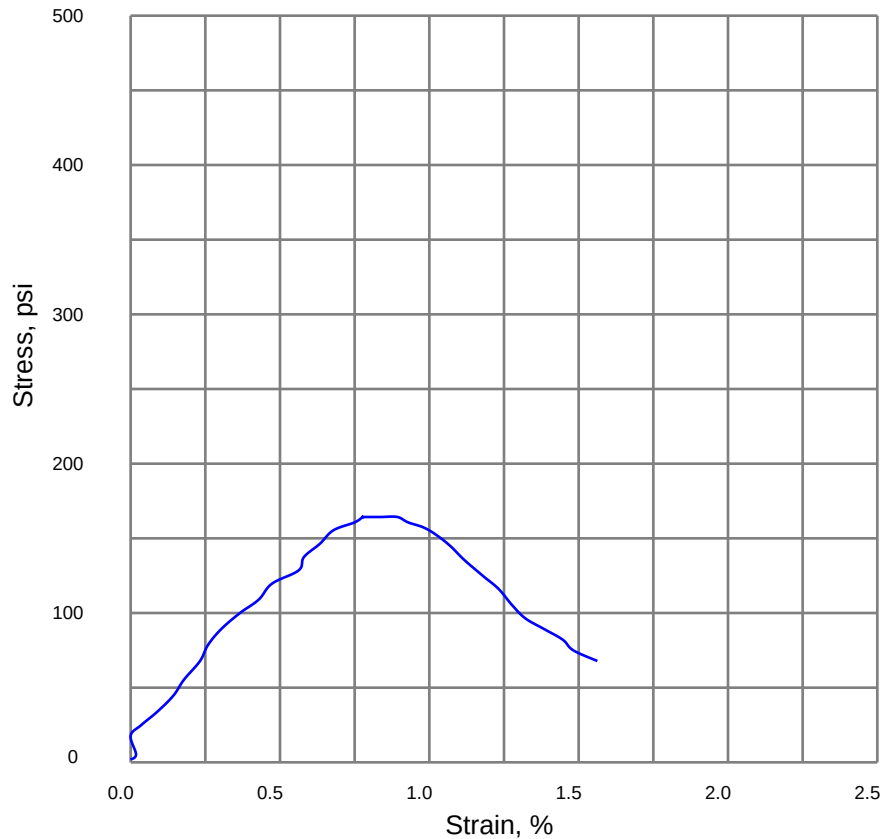
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix- ISS4-7.5PC0.5GAC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	061024	Sample Height, in:	4
Date Tested:	6/24/2024	Sample Moisture, %:	
Stress @ Failure, psi:	165.17	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.80	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.3
		Max. Load lbf:	518.9
		at Displacement, in:	0.0318

Soil Type: 7.5% PC 0.5%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101Arthur Kill Rd Benchscale

Project ID: E9285

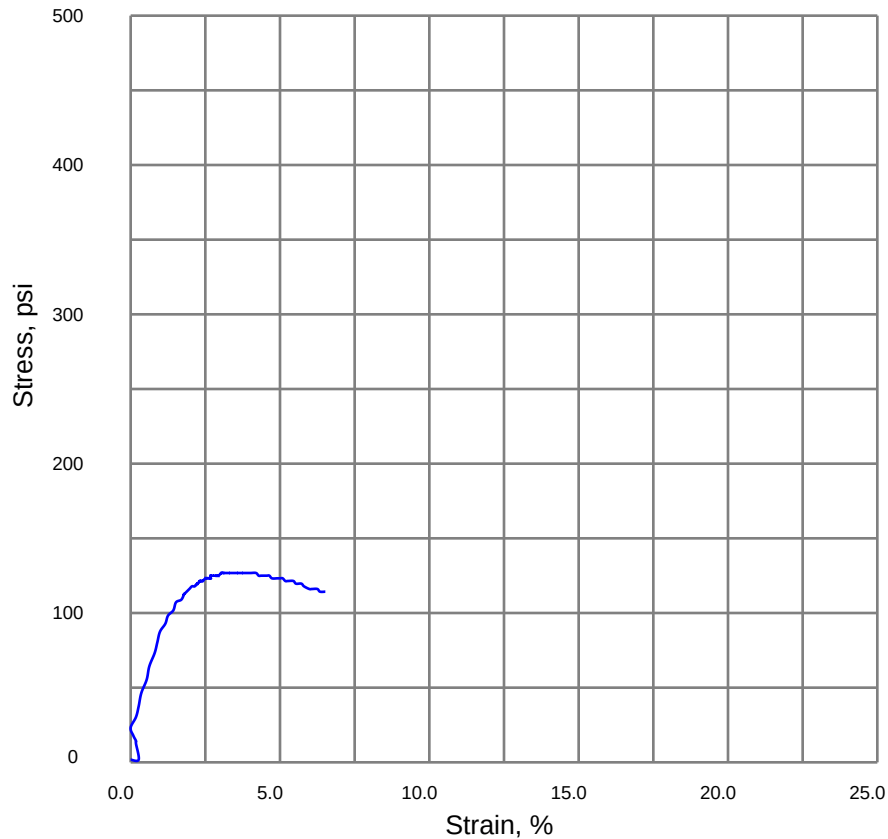
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC0.5GAC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	061024	Sample Height, in:	1.6
Date Tested:	7/10/2024	Sample Moisture, %:	
Stress @ Failure, psi:	126.94	Sample Dry Density, pcf:	
Strain @ Failure, %:	3.54	Height/Diameter Ratio:	0.8
		Strain Rate, %/min:	2.3
		Max. Load lbf:	398.8
		at Displacement, in:	0.0567

Soil Type: ISS4 7.5%PC0.5GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

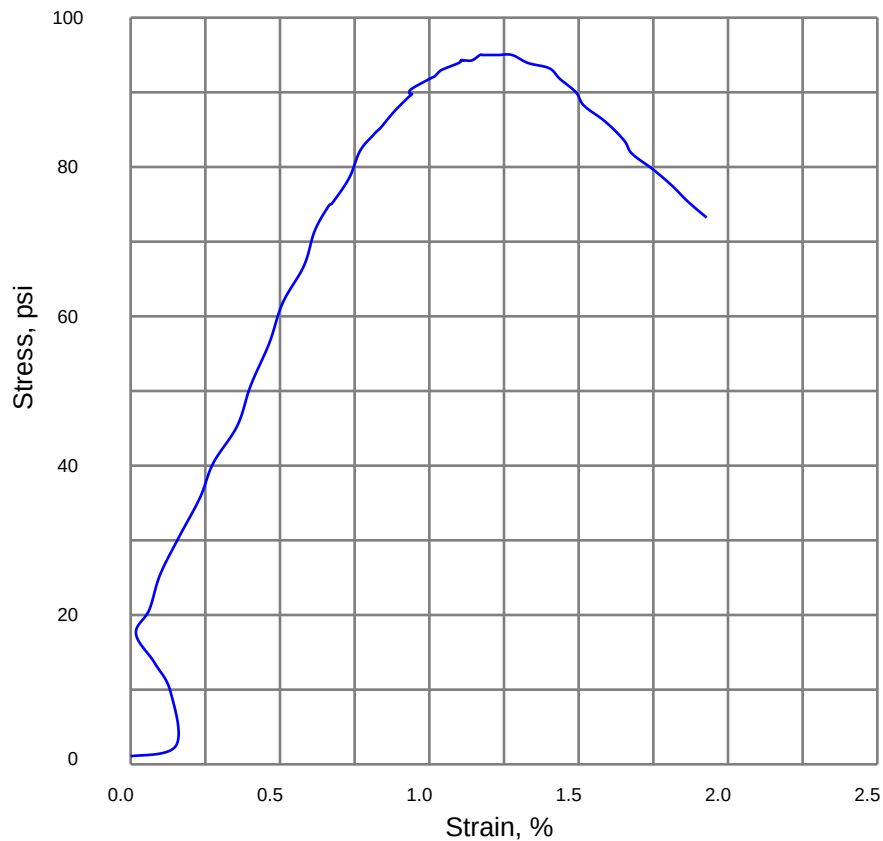
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC1GAC 8Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/19/2024	Sample Moisture, %:	
Stress @ Failure, psi:	95.11	Sample Dry Density, pcf:	`
Strain @ Failure, %:	1.19	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.1
		Max. Load lbf:	298.8
		at Displacement, in:	0.0475

Soil Type: ISS4 7.5%PC1%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd

Project ID: E9285

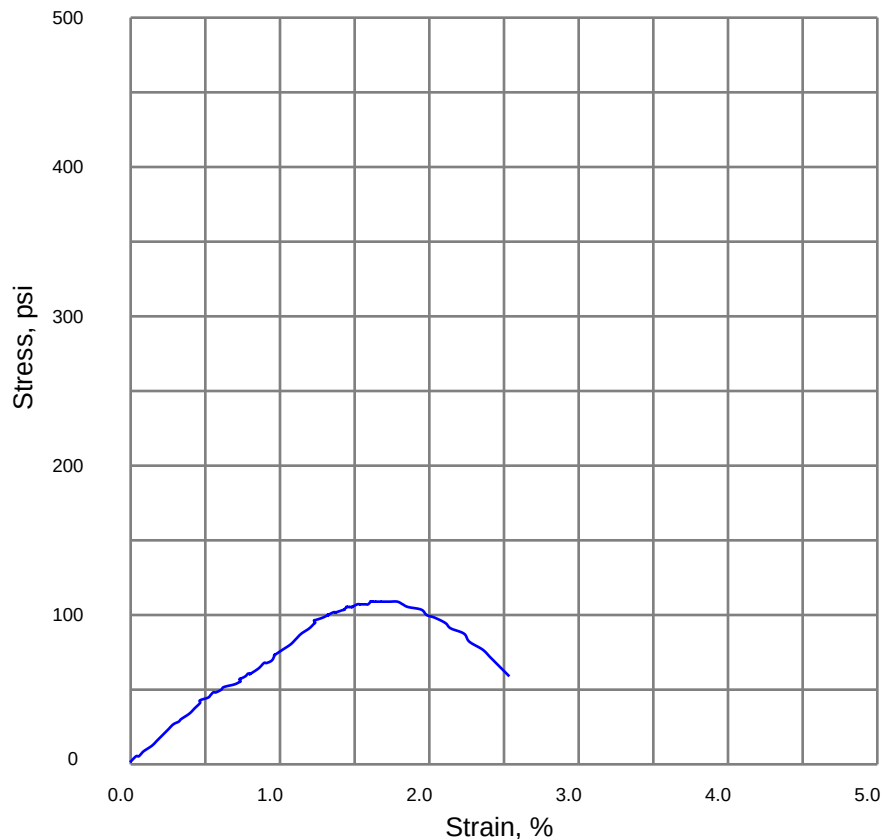
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix- ISS4-7.5PC1GAC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/25/2024	Sample Moisture, %:	
Stress @ Failure, psi:	109.31	Sample Dry Density, pcf:	
Strain @ Failure, %:	1.68	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.8
		Max. Load lbf:	343.4
		at Displacement, in:	0.0673

Soil Type: 7.5% PC 1%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

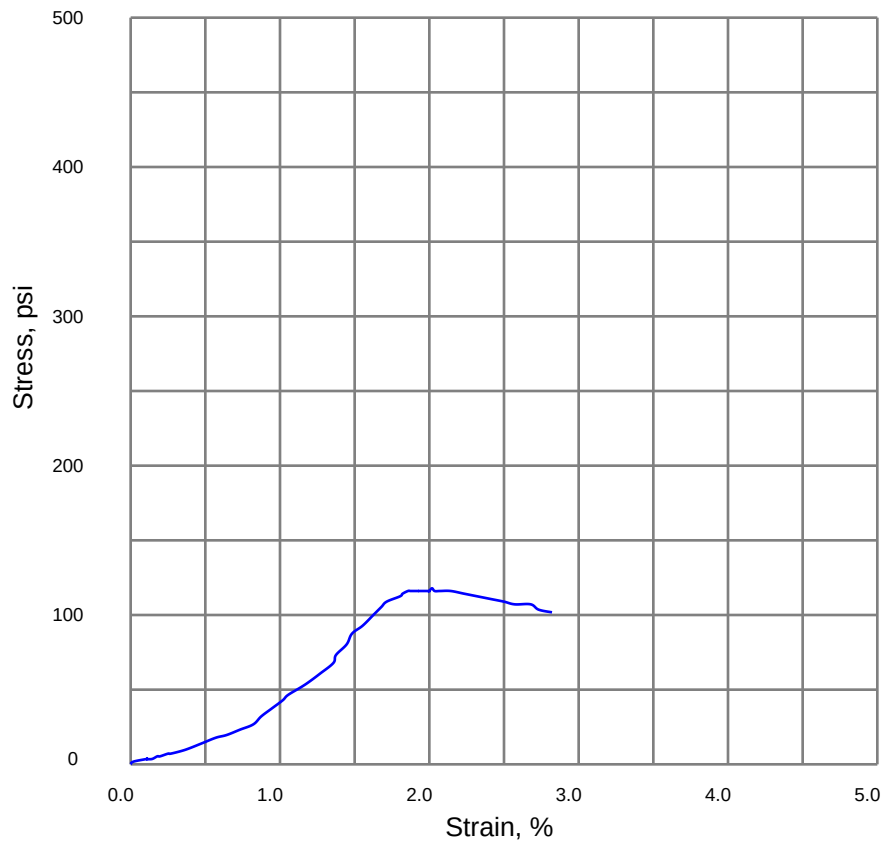
Project: 4101Arthur Kill Rd Benchscale
Project ID: E9285
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC1GAC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	2.65
Date Tested:	7/10/2024	Sample Moisture, %:	
Stress @ Failure, psi:	117.04	Sample Dry Density, pcf:	
Strain @ Failure, %:	2.02	Height/Diameter Ratio:	1.3
		Strain Rate, %/min:	1.6
		Max. Load lbf:	367.7
		at Displacement, in:	0.0535

Soil Type: ISS4 7.5%PC1%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

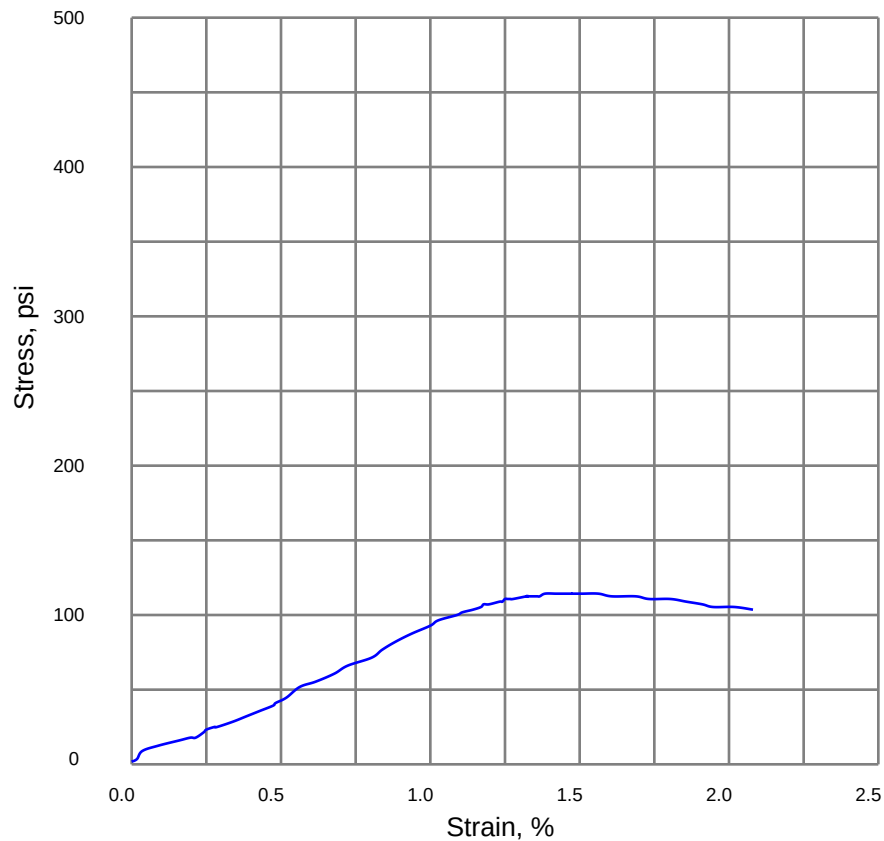
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC1.5GAC 8Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	6/19/2024	Sample Moisture, %:	
Stress @ Failure, psi:	114.27	Sample Dry Density, pcf:	`
Strain @ Failure, %:	1.47	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	1.0
		Max. Load lbf:	359.0
		at Displacement, in:	0.0589

Soil Type: **ISS4 7.5%PC1.5%GAC**



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

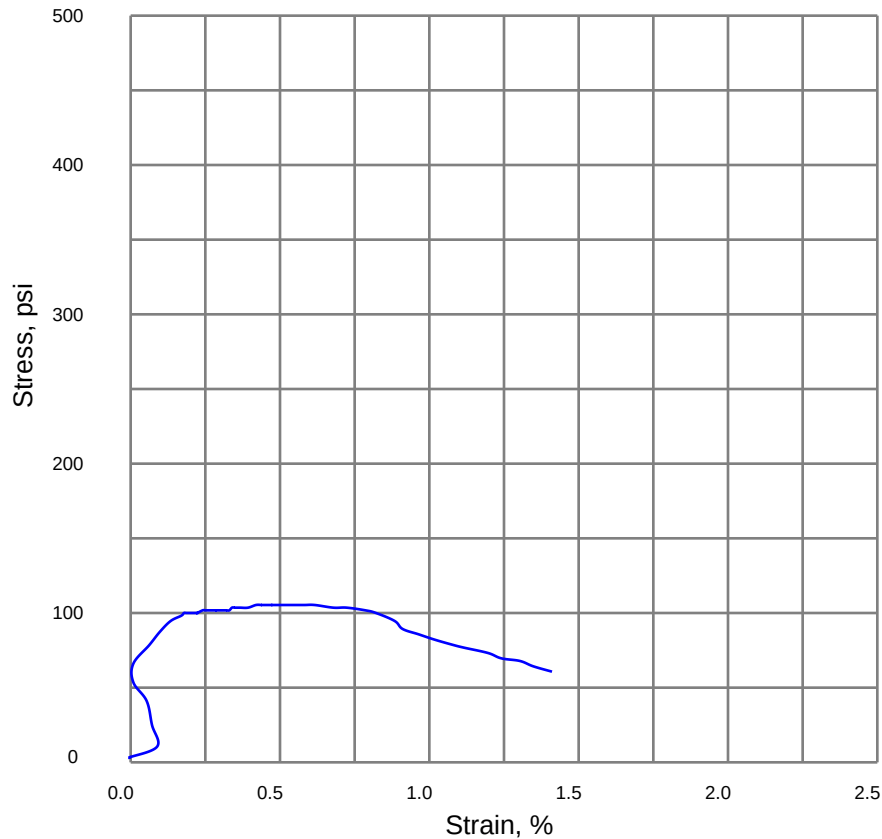
Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix- ISS4-7.5PC1.5GAC 14Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	3.9
Date Tested:	6/25/2024	Sample Moisture, %:	
Stress @ Failure, psi:	106.00	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.47	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.7
		Max. Load lbf:	333.0
		at Displacement, in:	0.0185

Soil Type: 7.5% PC 1.5%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101Arthur Kill Rd Benchscale

Project ID: E9285

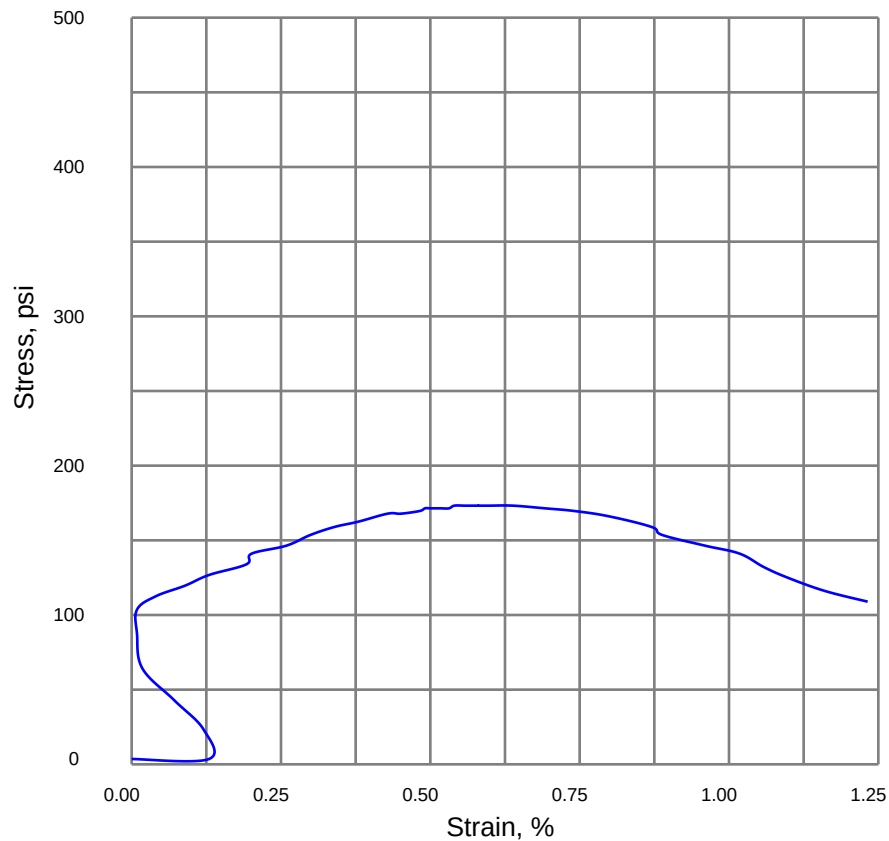
Client: Northpoint

Unconfined Compressive Strength of Cohesive Soil

ASTM D-2166

Boring No:	Mix-ISS4-7.5PC1.5GAC 28Day	Sample Diameter, in:	2
Boring Depth, ft:	061124	Sample Height, in:	4
Date Tested:	7/10/2024	Sample Moisture, %:	
Stress @ Failure, psi:	173.26	Sample Dry Density, pcf:	
Strain @ Failure, %:	0.58	Height/Diameter Ratio:	2.0
		Strain Rate, %/min:	0.9
		Max. Load lbf:	544.3
		at Displacement, in:	0.0233

Soil Type: ISS4 7.5%PC1.5%GAC



Equipment: KW HM-398/6572 Readout

ENTACT

2873 West Hardies Rd Ste 300
Gibsonia, PA 15044

Project: 4101 Arthur Kill Rd
Project ID: E9285
Client: Northpoint

ATTACHMENT 3
ISS MIX PERMEABILITY REPORTS

PERMEABILITY TEST

ASTM D 5084-16a Method C

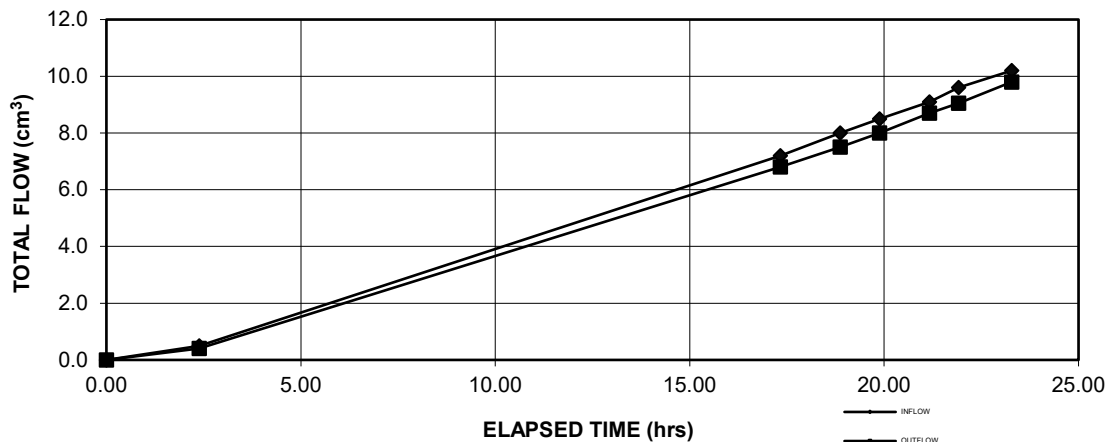


Client: ENTACT, LLC Boring No.: 5/1/24
Client Project: Fmr. Kinder Morgan E9285 Depth (ft): Iss2-7.5PC
Project No.: 2024-369-002 Sample No.: 28 Day
Lab ID No.: 2024-369-002-001 Avg. Effective Consol. Pressure (psi): 6.25

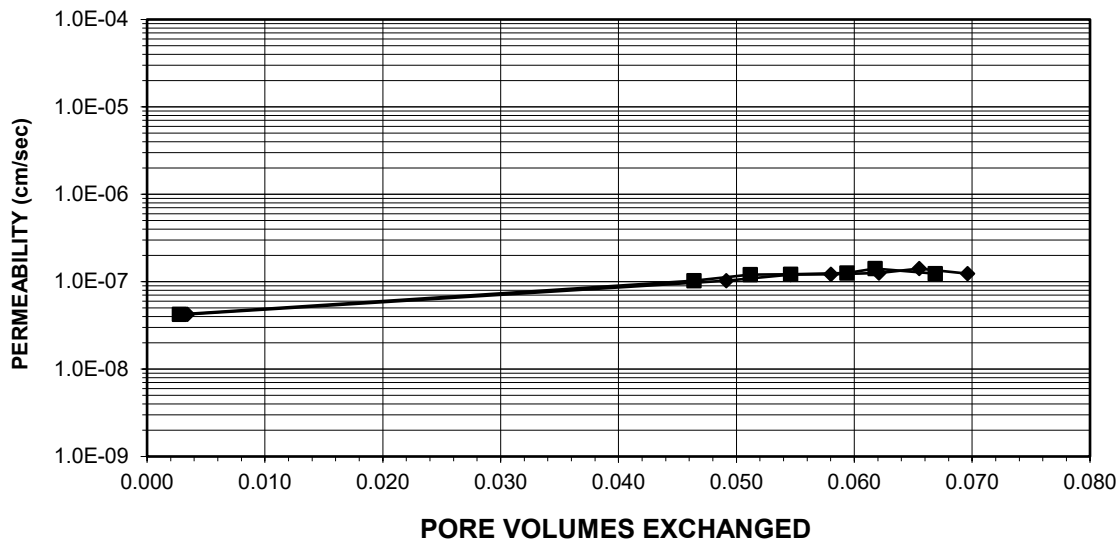
AVERAGE PERMEABILITY = $1.3\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.3\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-001

Boring No.: 5/1/24
Depth (ft): Iss2-7.5PC
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	899	1696
Weight of Tare & Wet Sample (g)	543.28	775.91
Weight of Tare & Dry Sample (g)	460.00	634.33
Weight of Tare (g)	109.46	82.58
Weight of Water (g)	83.28	141.58
Weight of Dry Sample (g)	350.54	551.75
Moisture Content (%)	23.8	25.7

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	687.54	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	687.54	698.11
Length 1 (in)	3.034	3.025
Length 2 (in)	3.021	3.044
Length 3 (in)	3.028	3.031
Top Diameter (in)	3.015	3.015
Middle Diameter (in)	3.002	3.003
Bottom Diameter (in)	2.994	2.994
Average Length (in)	3.03	3.03
Average Area (in ²)	7.09	7.09
Sample Volume (cm ³)	351.56	352.30
Unit Wet Weight (g/cm ³)	1.96	1.98
Unit Wet Weight (pcf)	122.1	123.7
Unit Dry Weight (pcf)	98.6	98.4
Unit Dry Weight (g/cm ³)	1.58	1.58
Void Ratio, e	0.71	0.71
Porosity, n	0.41	0.42
Pore Volume (cm ³)	145.8	146.5
Total Weight of Sample After Test (g)		697.33

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-001

Boring No.: 5/1/24
Depth (ft): Iss2-7.5PC
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.81

Final Sample Dimensions

Sample Length (cm), L	7.70
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.73
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 1.3E-07 cm/sec @ 20°C
AVERAGE PERMEABILITY = 1.3E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	13	50	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	16	13	2.383	0.5	0.4	195.8	0	22.4	4.2E-08
5/31/2024	7	10	17.333	7.2	6.8	182.3	0	21.9	1.0E-07
5/31/2024	8	42	18.867	8.0	7.5	180.7	0	21.8	1.2E-07
5/31/2024	9	43	19.883	8.5	8.0	179.7	0	21.9	1.2E-07
5/31/2024	11	0	21.167	9.1	8.7	178.4	0	22.0	1.3E-07
5/31/2024	11	45	21.917	9.6	9.1	177.5	0	22.0	1.4E-07
5/31/2024	13	7	23.283	10.2	9.8	176.1	1	22.2	1.2E-07

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

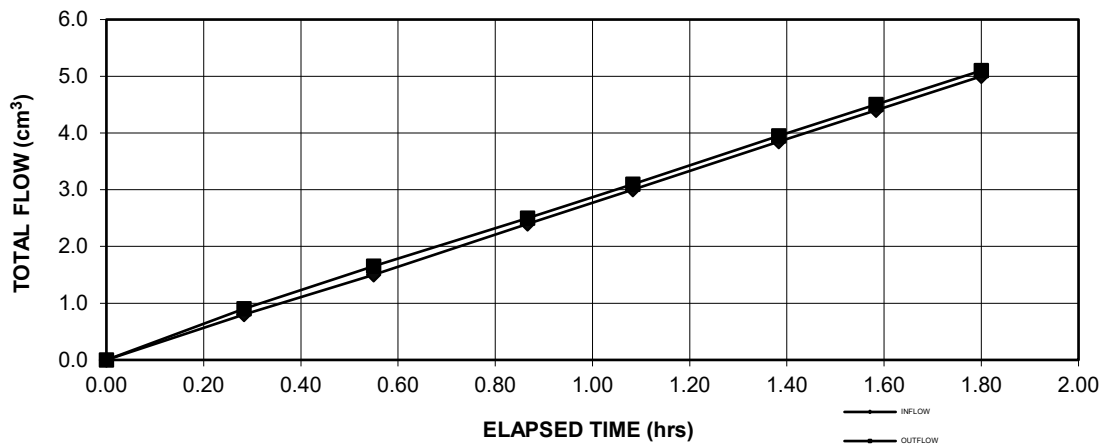


Client: ENTACT, LLC Boring No.: 5/1/24
Client Project: Fmr. Kinder Morgan E9285 Depth (ft): ISS2-7.5-2PC1Slag
Project No.: 2024-369-002 Sample No.: NA
Lab ID No.: 2024-369-002-002 Avg. Effective Consol. Pressure (psi): 6.25

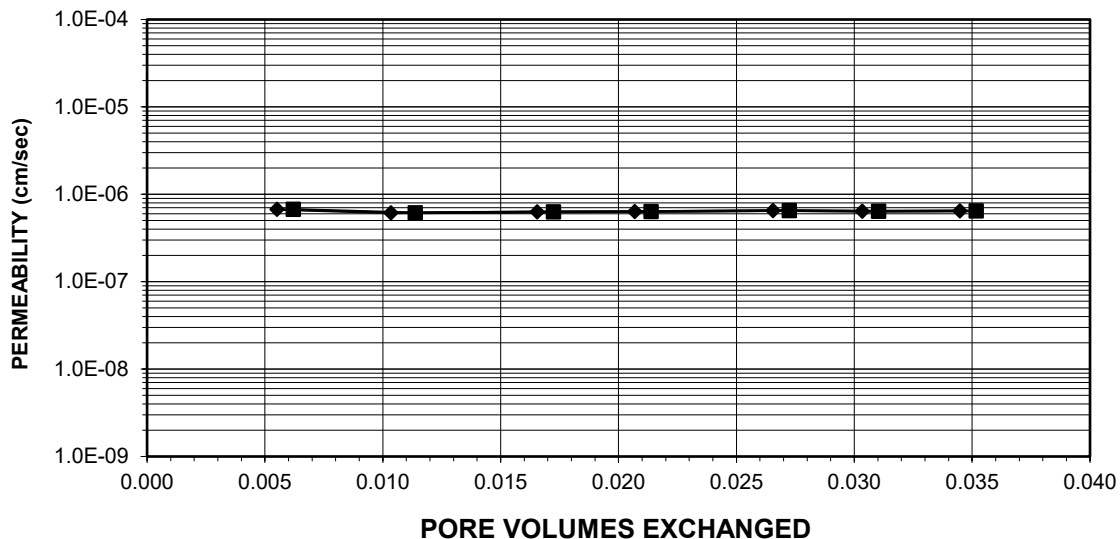
AVERAGE PERMEABILITY = $6.4\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $6.4\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: Wt Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-002

Boring No.: 5/1/24
Depth (ft): ISS2-7.5-2PC1Slag
Sample No.: NA
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:

BEFORE TEST

AFTER TEST

Tare Number	604	591
Weight of Tare & Wet Sample (g)	506.48	774.92
Weight of Tare & Dry Sample (g)	427.02	635.66
Weight of Tare (g)	86.56	87.04
Weight of Water (g)	79.46	139.26
Weight of Dry Sample (g)	340.46	548.62
Moisture Content (%)	23.3	25.4

SPECIMEN:

BEFORE TEST

AFTER TEST

Weight of Tube & Wet Sample (g)	680.14	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	680.14	691.42
Length 1 (in)	3.012	3.007
Length 2 (in)	2.999	3.017
Length 3 (in)	3.015	3.013
Top Diameter (in)	2.995	2.992
Middle Diameter (in)	3.000	3.000
Bottom Diameter (in)	3.013	3.012
Average Length (in)	3.01	3.01
Average Area (in ²)	7.08	7.07
Sample Volume (cm ³)	349.12	349.24
Unit Wet Weight (g/cm ³)	1.95	1.98
Unit Wet Weight (pcf)	121.6	123.6
Unit Dry Weight (pcf)	98.6	98.6
Unit Dry Weight (g/cm ³)	1.58	1.58
Void Ratio, e	0.71	0.71
Porosity, n	0.42	0.42
Pore Volume (cm ³)	144.9	145.0
Total Weight of Sample After Test (g)		689.73

Tested By: Wt Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-002

Boring No.: 5/1/24
Depth (ft): ISS2-7.5-2PC1Slag
Sample No.: NA
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.97

Final Sample Dimensions

Sample Length (cm), L	7.65
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.64
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 6.4E-07 cm/sec @ 20°C
AVERAGE PERMEABILITY = 6.4E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	14	26	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	14	43	0.283	0.8	0.9	195.0	0	22.3	6.7E-07
5/30/2024	14	59	0.550	1.5	1.7	193.5	0	22.3	6.1E-07
5/30/2024	15	18	0.867	2.4	2.5	191.7	0	22.4	6.3E-07
5/30/2024	15	31	1.083	3.0	3.1	190.5	0	22.4	6.3E-07
5/30/2024	15	49	1.383	3.9	4.0	188.7	0	22.4	6.5E-07
5/30/2024	16	1	1.583	4.4	4.5	187.6	0	22.4	6.4E-07
5/30/2024	16	14	1.800	5.0	5.1	186.3	1	22.4	6.5E-07

Tested By: Wt

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

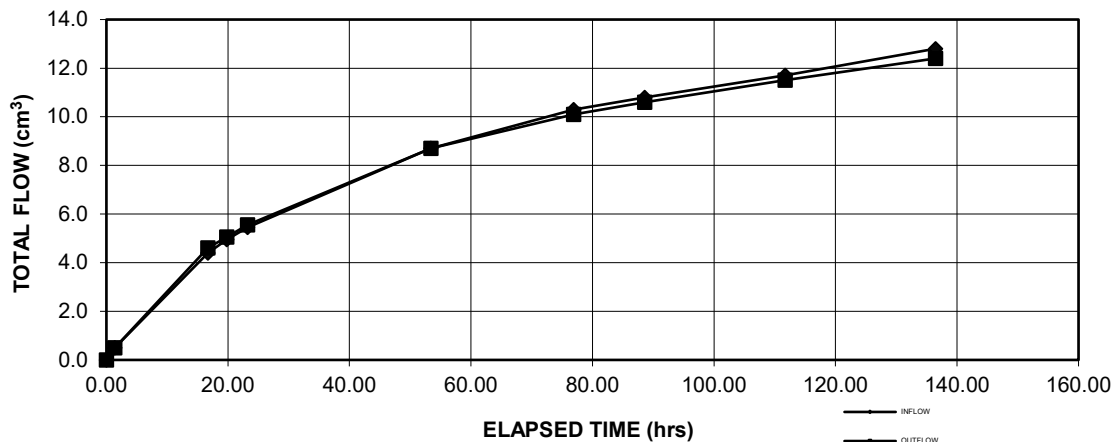


Client: ENTACT, LLC Boring No.: 5/1/24
Client Project: Fmr. Kinder Morgan E9285 Depth (ft): ISS2-10-1PC1Slag
Project No.: 2024-369-002 Sample No.: 28 Day
Lab ID No.: 2024-369-002-003 Avg. Effective Consol. Pressure (psi): 6.25

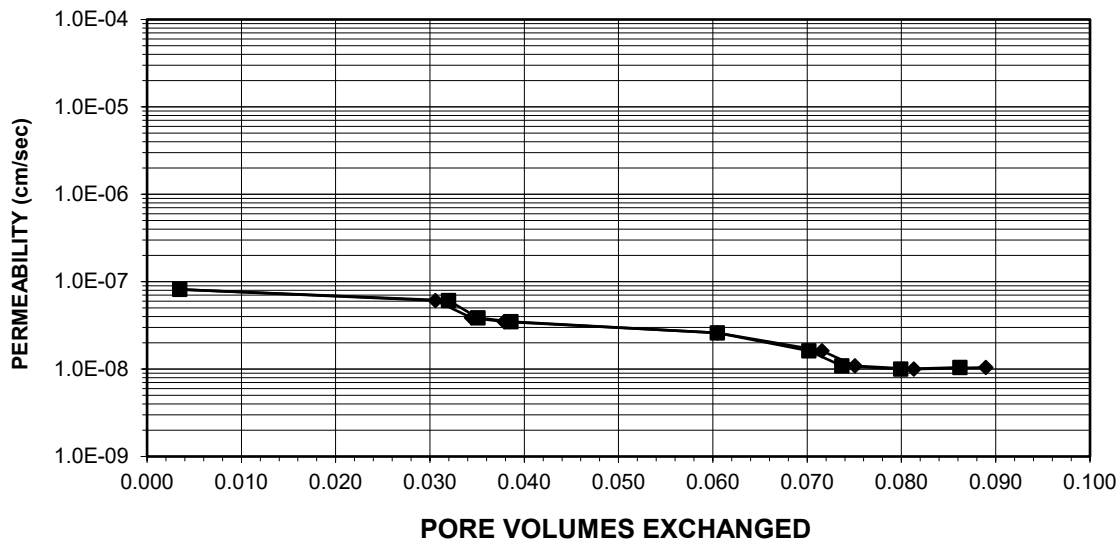
AVERAGE PERMEABILITY = $1.2\text{E-}08$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.2\text{E-}10$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/6/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-003

Boring No.: 5/1/24
Depth (ft): ISS2-10-1PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	1131A	1723
Weight of Tare & Wet Sample (g)	512.15	786.89
Weight of Tare & Dry Sample (g)	434.11	650.14
Weight of Tare (g)	83.73	82.67
Weight of Water (g)	78.04	136.75
Weight of Dry Sample (g)	350.38	567.47
Moisture Content (%)	22.3	24.1

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	696.76	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	696.76	707.16
Length 1 (in)	3.052	3.058
Length 2 (in)	3.061	3.049
Length 3 (in)	3.049	3.063
Top Diameter (in)	3.016	3.012
Middle Diameter (in)	3.002	3.002
Bottom Diameter (in)	2.991	2.997
Average Length (in)	3.05	3.06
Average Area (in ²)	7.08	7.09
Sample Volume (cm ³)	354.46	354.93
Unit Wet Weight (g/cm ³)	1.97	1.99
Unit Wet Weight (pcf)	122.7	124.4
Unit Dry Weight (pcf)	100.4	100.2
Unit Dry Weight (g/cm ³)	1.61	1.61
Void Ratio, e	0.68	0.68
Porosity, n	0.40	0.41
Pore Volume (cm ³)	143.4	143.9
Total Weight of Sample After Test (g)		709.12

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/6/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-003

Boring No.: 5/1/24
Depth (ft): ISS2-10-1PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.64

Final Sample Dimensions

Sample Length (cm), L	7.76
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.72
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 1.2E-08 cm/sec @ 20°C
AVERAGE PERMEABILITY = 1.2E-10 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	14	27	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	15	50	1.383	0.5	0.5	195.7	0	22.4	8.2E-08
5/31/2024	7	9	16.700	4.4	4.6	187.5	0	21.9	6.1E-08
5/31/2024	10	16	19.817	5.0	5.1	186.4	0	21.9	3.8E-08
5/31/2024	13	42	23.250	5.5	5.6	185.4	0	22.2	3.5E-08
6/1/2024	19	51	53.400	8.7	8.7	178.8	0	22.0	2.6E-08
6/2/2024	19	21	76.900	10.3	10.1	175.7	0	21.9	1.6E-08
6/3/2024	7	4	88.617	10.8	10.6	174.6	0	22.0	1.1E-08
6/4/2024	6	10	111.717	11.7	11.5	172.8	0	22.1	1.0E-08
6/5/2024	6	55	136.467	12.8	12.4	170.7	1	22.2	1.0E-08

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/6/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

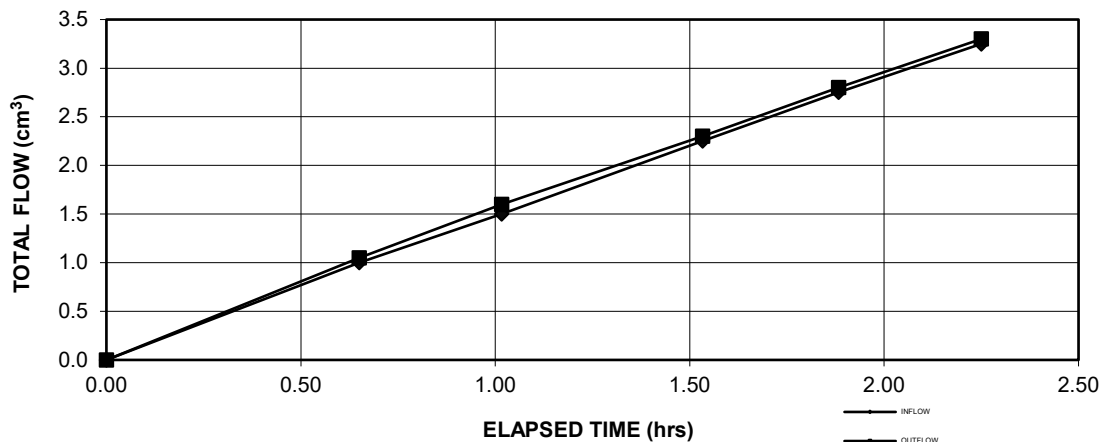


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	ISS3-7.5PC
Project No.:	2024-369-002	Sample No.:	28 Day
Lab ID No.:	2024-369-002-004	Avg. Effective Consol. Pressure (psi):	6.25

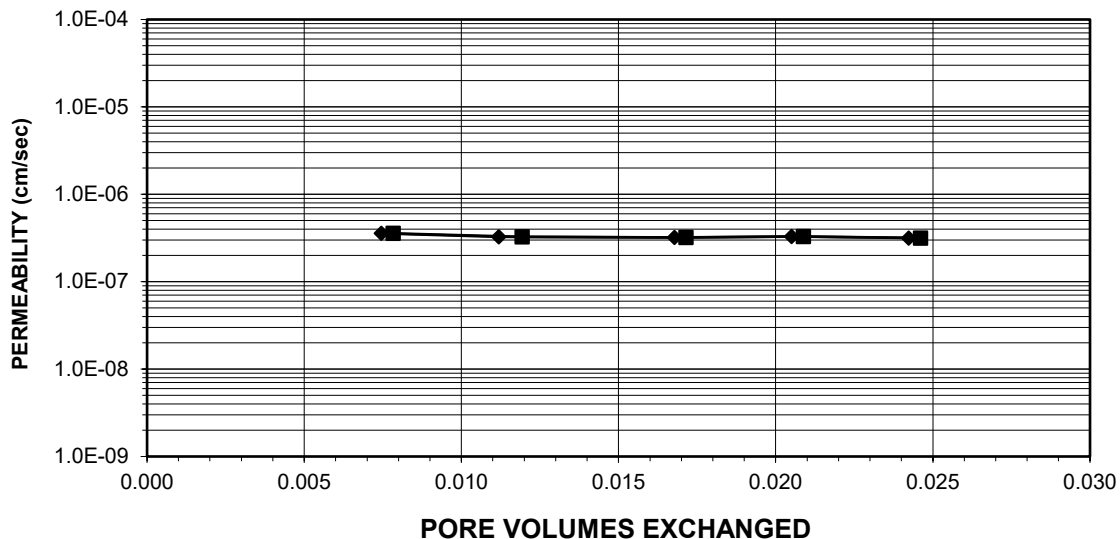
AVERAGE PERMEABILITY = $3.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $3.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-004

Boring No.: 5/1/24
Depth (ft): ISS3-7.5PC
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	893	Z10
Weight of Tare & Wet Sample (g)	534.64	794.83
Weight of Tare & Dry Sample (g)	465.09	665.76
Weight of Tare (g)	110.29	85.22
Weight of Water (g)	69.55	129.07
Weight of Dry Sample (g)	354.80	580.54
Moisture Content (%)	19.6	22.2

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	710.44	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	710.44	726.06
Length 1 (in)	3.051	3.051
Length 2 (in)	3.040	3.040
Length 3 (in)	3.072	3.062
Top Diameter (in)	3.019	3.015
Middle Diameter (in)	3.004	3.003
Bottom Diameter (in)	2.992	2.991
Average Length (in)	3.05	3.05
Average Area (in ²)	7.09	7.08
Sample Volume (cm ³)	354.97	354.11
Unit Wet Weight (g/cm ³)	2.00	2.05
Unit Wet Weight (pcf)	124.9	128.0
Unit Dry Weight (pcf)	104.5	104.7
Unit Dry Weight (g/cm ³)	1.67	1.68
Void Ratio, e	0.61	0.61
Porosity, n	0.38	0.38
Pore Volume (cm ³)	135.0	134.1
Total Weight of Sample After Test (g)		720.54

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-004

Boring No.: 5/1/24
Depth (ft): ISS3-7.5PC
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.68

Final Sample Dimensions

Sample Length (cm), L	7.75
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.69
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	96

AVERAGE PERMEABILITY = 3.2E-07 cm/sec @ 20°C
AVERAGE PERMEABILITY = 3.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	13	45	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	14	24	0.650	1.0	1.1	194.6	0	22.3	3.6E-07
5/30/2024	14	46	1.017	1.5	1.6	193.6	0	22.3	3.3E-07
5/30/2024	15	17	1.533	2.3	2.3	192.1	0	22.4	3.2E-07
5/30/2024	15	38	1.883	2.8	2.8	191.0	0	22.4	3.3E-07
5/30/2024	16	0	2.250	3.3	3.3	190.0	1	22.4	3.2E-07

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

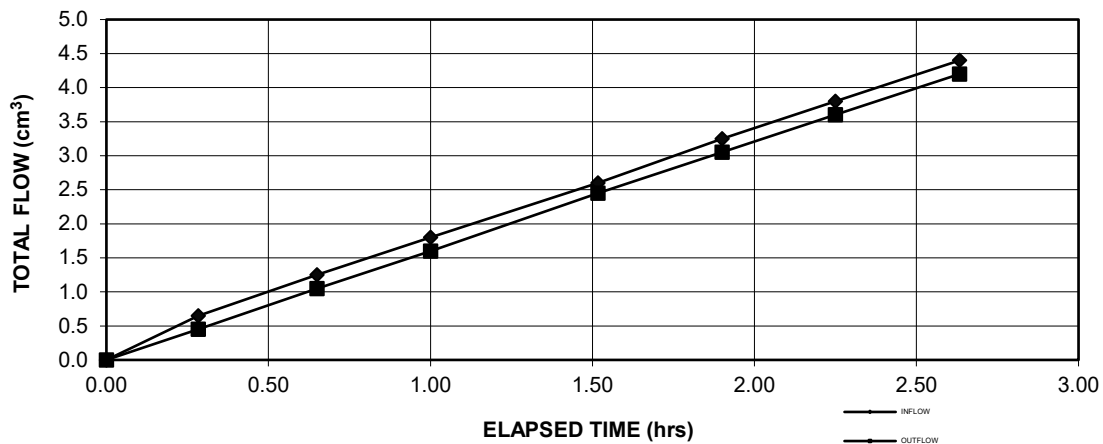


Client: ENTACT, LLC Boring No.: 5/1/24
Client Project: Fmr. Kinder Morgan E9285 Depth (ft): ISS3-7.5-2PC1Slag
Project No.: 2024-369-002 Sample No.: 28 Day
Lab ID No.: 2024-369-002-005 Avg. Effective Consol. Pressure (psi): 6.25

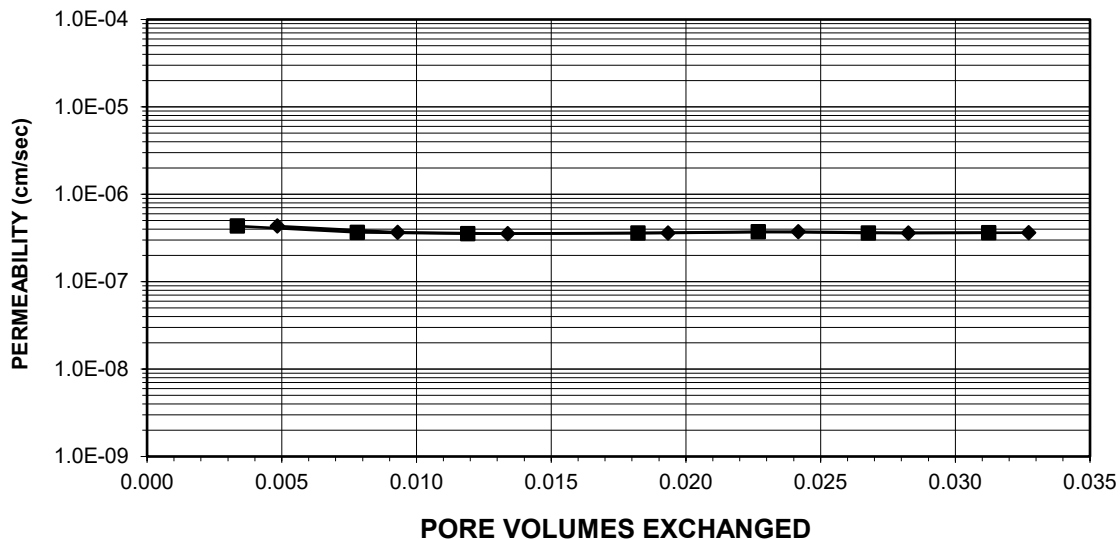
AVERAGE PERMEABILITY = $3.6\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $3.6\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-005

Boring No.: 5/1/24
Depth (ft): ISS3-7.5-2PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:

BEFORE TEST

AFTER TEST

Tare Number	569	555
Weight of Tare & Wet Sample (g)	525.37	554.14
Weight of Tare & Dry Sample (g)	452.57	467.02
Weight of Tare (g)	82.70	81.32
Weight of Water (g)	72.80	87.12
Weight of Dry Sample (g)	369.87	385.70
Moisture Content (%)	19.7	22.6

SPECIMEN:

BEFORE TEST

AFTER TEST

Weight of Tube & Wet Sample (g)	693.69	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	693.69	710.53
Length 1 (in)	3.006	3.018
Length 2 (in)	2.989	3.022
Length 3 (in)	3.024	2.986
Top Diameter (in)	3.018	3.012
Middle Diameter (in)	3.005	3.003
Bottom Diameter (in)	2.994	2.993
Average Length (in)	3.01	3.01
Average Area (in ²)	7.10	7.08
Sample Volume (cm ³)	349.55	349.12
Unit Wet Weight (g/cm ³)	1.98	2.04
Unit Wet Weight (pcf)	123.9	127.0
Unit Dry Weight (pcf)	103.5	103.6
Unit Dry Weight (g/cm ³)	1.66	1.66
Void Ratio, e	0.63	0.63
Porosity, n	0.39	0.39
Pore Volume (cm ³)	134.9	134.5
Total Weight of Sample After Test (g)		704.50

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-005

Boring No.: 5/1/24
Depth (ft): ISS3-7.5-2PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.00

Final Sample Dimensions

Sample Length (cm), L	7.64
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.68
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	96

AVERAGE PERMEABILITY = 3.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 3.6E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	13	45	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	14	2	0.283	0.7	0.4	195.6	0	22.3	4.3E-07
5/30/2024	14	24	0.650	1.3	1.1	194.4	0	22.3	3.7E-07
5/30/2024	14	45	1.000	1.8	1.6	193.2	0	22.3	3.5E-07
5/30/2024	15	16	1.517	2.6	2.5	191.5	0	22.4	3.6E-07
5/30/2024	15	39	1.900	3.3	3.1	190.2	0	22.4	3.7E-07
5/30/2024	16	0	2.250	3.8	3.6	189.1	0	22.4	3.6E-07
5/30/2024	16	23	2.633	4.4	4.2	187.9	1	22.3	3.6E-07

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

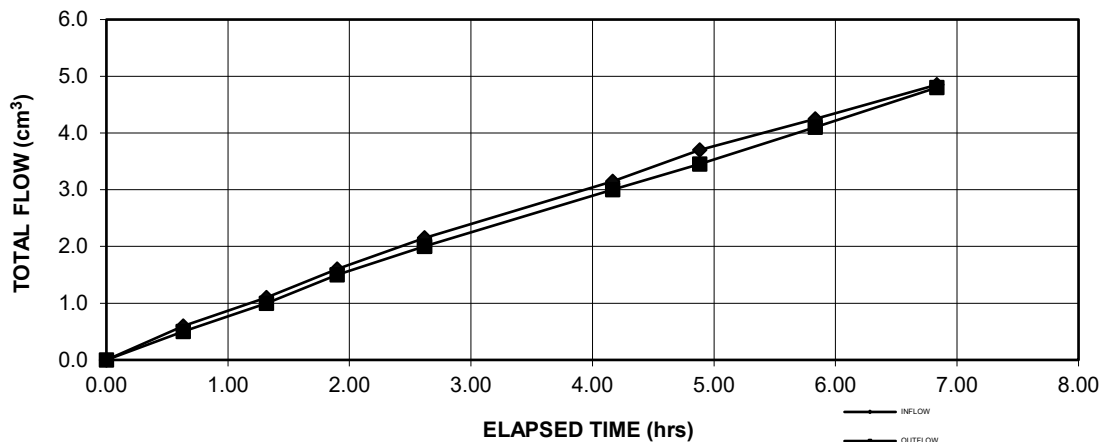


Client:	ENTACT, LLC	Boring No.:	5/1/2/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	ISS3-10-3PC1Slag
Project No.:	2024-369-002	Sample No.:	28 Day
Lab ID No.:	2024-369-002-006	Avg. Effective Consol. Pressure (psi):	6.25

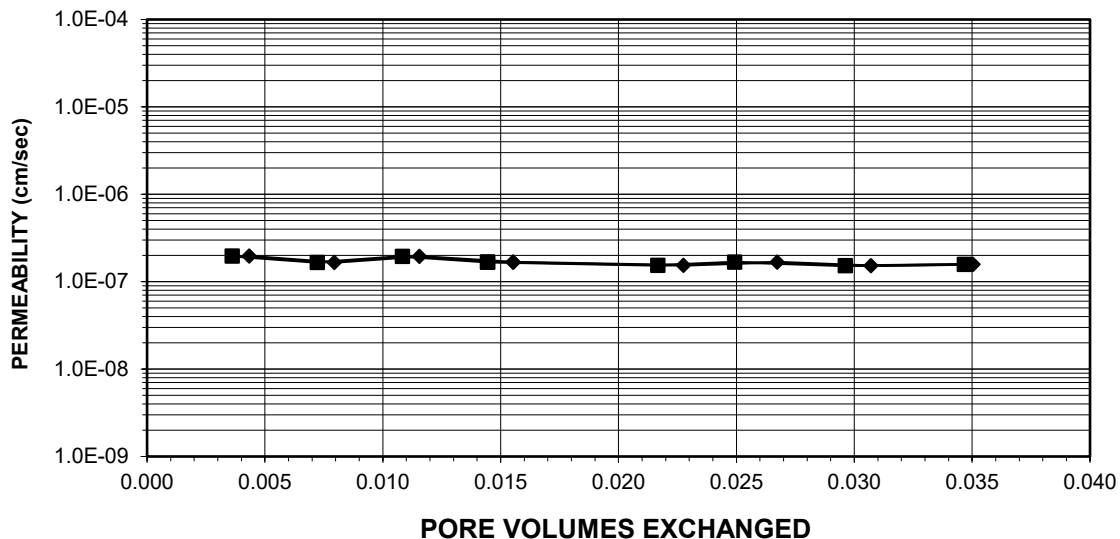
AVERAGE PERMEABILITY = 1.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.6E-09 m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-006

Boring No.: 5/1/2/24
Depth (ft): ISS3-10-3PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	555	609
Weight of Tare & Wet Sample (g)	513.46	789.36
Weight of Tare & Dry Sample (g)	438.74	655.23
Weight of Tare (g)	81.35	80.64
Weight of Water (g)	74.72	134.13
Weight of Dry Sample (g)	357.39	574.59
Moisture Content (%)	20.9	23.3

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	703.20	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	703.20	717.37
Length 1 (in)	3.053	3.041
Length 2 (in)	3.038	3.048
Length 3 (in)	3.047	3.055
Top Diameter (in)	3.014	3.015
Middle Diameter (in)	3.002	3.003
Bottom Diameter (in)	2.991	2.992
Average Length (in)	3.05	3.05
Average Area (in ²)	7.08	7.08
Sample Volume (cm ³)	353.38	353.85
Unit Wet Weight (g/cm ³)	1.99	2.03
Unit Wet Weight (pcf)	124.2	126.6
Unit Dry Weight (pcf)	102.7	102.6
Unit Dry Weight (g/cm ³)	1.65	1.64
Void Ratio, e	0.64	0.64
Porosity, n	0.39	0.39
Pore Volume (cm ³)	138.0	138.4
Total Weight of Sample After Test (g)		713.59

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-006

Boring No.: 5/1/2/24
Depth (ft): ISS3-10-3PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.70

Final Sample Dimensions

Sample Length (cm), L	7.74
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.71
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962
B Parameter (%)	95

AVERAGE PERMEABILITY = 1.6E-07 cm/sec @ 20°C
AVERAGE PERMEABILITY = 1.6E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	13	45	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	14	23	0.633	0.6	0.5	195.6	0	22.3	2.0E-07
5/30/2024	15	4	1.317	1.1	1.0	194.6	0	22.3	1.7E-07
5/30/2024	15	39	1.900	1.6	1.5	193.6	0	22.4	2.0E-07
5/30/2024	16	22	2.617	2.2	2.0	192.5	1	22.3	1.7E-07
5/31/2024	7	9	2.617	2.2	2.0	189.3	0	21.9	NA
5/31/2024	8	42	4.167	3.2	3.0	187.2	0	21.8	1.5E-07
5/31/2024	9	25	4.883	3.7	3.5	186.2	0	21.9	1.7E-07
5/31/2024	10	22	5.833	4.3	4.1	185.0	0	21.9	1.5E-07
5/31/2024	11	22	6.833	4.9	4.8	183.6	1	22.0	1.6E-07

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

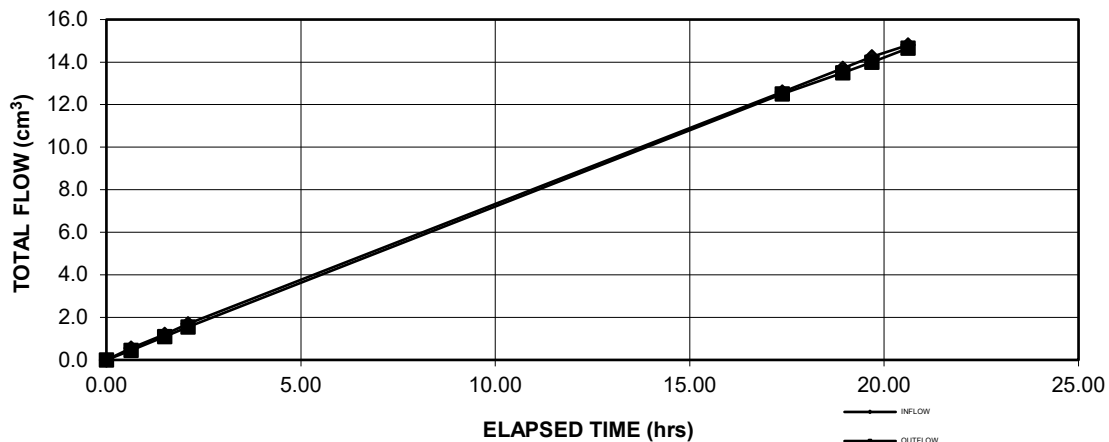


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	ISS3-10-1PC1Slag
Project No.:	2024-369-002	Sample No.:	28 Day
Lab ID No.:	2024-369-002-007	Avg. Effective Consol. Pressure (psi):	6.25

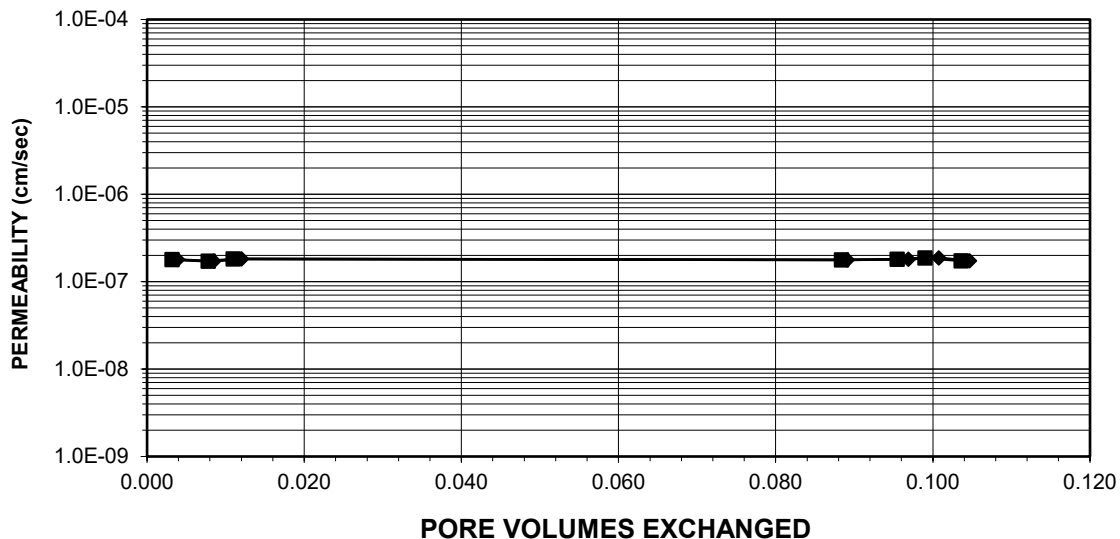
AVERAGE PERMEABILITY = $1.8\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.8\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-007

Boring No.: 5/1/24
Depth (ft): ISS3-10-1PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	591	550
Weight of Tare & Wet Sample (g)	500.82	657.80
Weight of Tare & Dry Sample (g)	428.09	547.27
Weight of Tare (g)	87.06	81.16
Weight of Water (g)	72.73	110.53
Weight of Dry Sample (g)	341.03	466.11
Moisture Content (%)	21.3	23.7

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	707.94	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	707.94	721.87
Length 1 (in)	3.072	3.077
Length 2 (in)	3.081	3.073
Length 3 (in)	3.075	3.079
Top Diameter (in)	3.016	3.015
Middle Diameter (in)	3.005	3.004
Bottom Diameter (in)	2.995	2.996
Average Length (in)	3.08	3.08
Average Area (in ²)	7.09	7.09
Sample Volume (cm ³)	357.57	357.53
Unit Wet Weight (g/cm ³)	1.98	2.02
Unit Wet Weight (pcf)	123.6	126.0
Unit Dry Weight (pcf)	101.9	101.9
Unit Dry Weight (g/cm ³)	1.63	1.63
Void Ratio, e	0.65	0.65
Porosity, n	0.40	0.40
Pore Volume (cm ³)	141.5	141.4
Total Weight of Sample After Test (g)		718.83

Tested By: WT Date: 5/29/24 Checked By: JLK Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-002
Lab ID No.: 2024-369-002-007

Boring No.: 5/1/24
Depth (ft): ISS3-10-1PC1Slag
Sample No.: 28 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.49

Final Sample Dimensions

Sample Length (cm), L	7.81
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.76
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962

AVERAGE PERMEABILITY = 1.8E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.8E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
5/30/2024	13	45	0.000	0.0	0.0	196.8	0	22.3	NA
5/30/2024	14	23	0.633	0.6	0.4	195.7	0	22.3	1.8E-07
5/30/2024	15	15	1.500	1.2	1.1	194.4	0	22.4	1.7E-07
5/30/2024	15	51	2.100	1.7	1.6	193.4	0	22.4	1.8E-07
5/31/2024	7	8	17.383	12.6	12.5	170.8	0	21.9	1.8E-07
5/31/2024	8	41	18.933	13.7	13.5	168.6	0	21.8	1.8E-07
5/31/2024	9	26	19.683	14.3	14.0	167.6	0	21.9	1.9E-07
5/31/2024	10	22	20.617	14.8	14.7	166.3	1	21.9	1.7E-07

Tested By: WT

Date: 5/29/24

Checked By: JLK

Date: 6/3/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

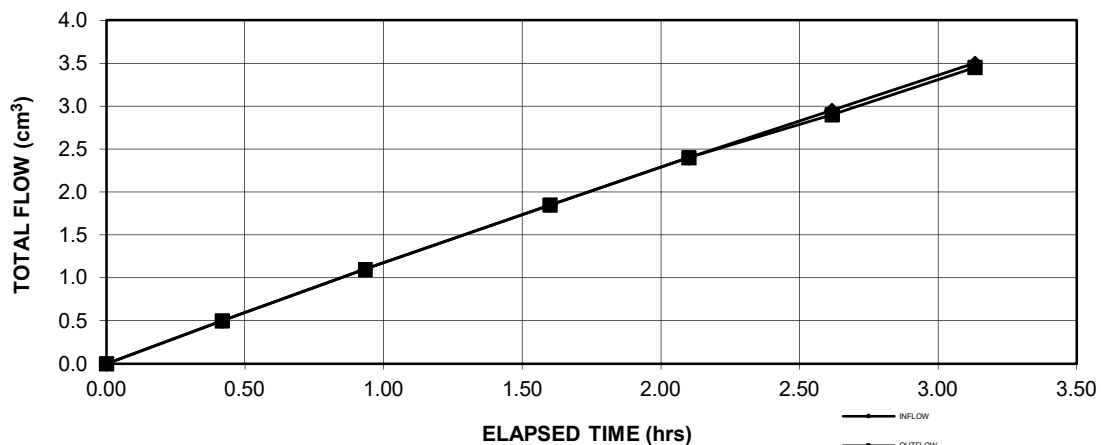


Client:	ENTACT, LLC	Boring No.:	5/1/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	ISS2-10-3PC1Slag
Project No.:	2024-369-004	Sample No.:	34 Day
Lab ID No.:	2024-369-004-001	Avg. Effective Consol. Pressure (psi):	6.25

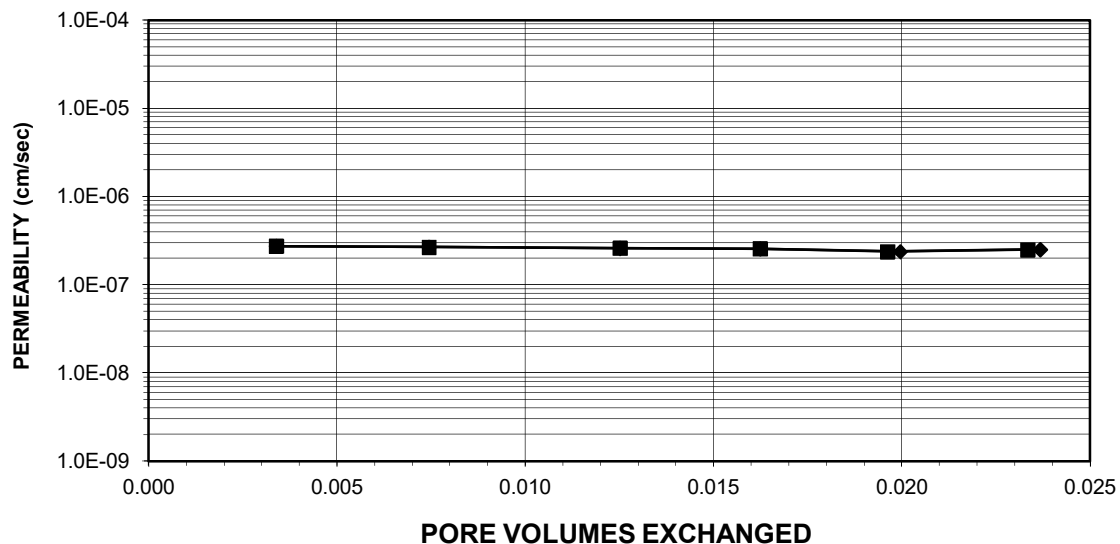
AVERAGE PERMEABILITY = 2.5E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 2.5E-09 m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 6/4/24 Checked By: JLK Date: 6/7/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-004
Lab ID No.: 2024-369-004-001

Boring No.: 5/1/24
Depth (ft): ISS2-10-3PC1Slag
Sample No.: 34 Day
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Reddish-Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	569	1131A
Weight of Tare & Wet Sample (g)	493.26	764.73
Weight of Tare & Dry Sample (g)	413.17	624.40
Weight of Tare (g)	82.68	83.72
Weight of Water (g)	80.09	140.33
Weight of Dry Sample (g)	330.49	540.68
Moisture Content (%)	24.2	26.0

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	674.47	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	674.47	683.81
Length 1 (in)	3.015	3.015
Length 2 (in)	2.996	3.016
Length 3 (in)	3.024	2.998
Top Diameter (in)	3.012	3.012
Middle Diameter (in)	3.001	3.000
Bottom Diameter (in)	2.993	2.992
Average Length (in)	3.01	3.01
Average Area (in ²)	7.08	7.07
Sample Volume (cm ³)	349.32	348.93
Unit Wet Weight (g/cm ³)	1.93	1.96
Unit Wet Weight (pcf)	120.5	122.3
Unit Dry Weight (pcf)	97.0	97.1
Unit Dry Weight (g/cm ³)	1.55	1.56
Void Ratio, e	0.74	0.74
Porosity, n	0.42	0.42
Pore Volume (cm ³)	148.2	147.9
Total Weight of Sample After Test (g)		684.27

Tested By: WT Date: 6/4/24 Checked By: JLK Date: 6/7/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-004
Lab ID No.: 2024-369-004-001

Boring No.: 5/1/24
Depth (ft): ISS2-10-3PC1Slag
Sample No.: 34 Day
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.99

Final Sample Dimensions

Sample Length (cm), L	7.64
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.64
Inflow Burette Area (cm ²), a-in	0.936
Outflow Burette Area (cm ²), a-out	0.972

AVERAGE PERMEABILITY = 2.5E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 2.5E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
6/5/24	12	26	0.000	0.0	0.0	200.9	0	20.5	NA
6/5/24	12	51	0.417	0.5	0.5	199.8	0	20.6	2.7E-07
6/5/24	13	22	0.933	1.1	1.1	198.6	0	20.6	2.7E-07
6/5/24	14	2	1.600	1.9	1.9	197.0	0	20.7	2.6E-07
6/5/24	14	32	2.100	2.4	2.4	195.8	0	20.7	2.6E-07
6/5/24	15	3	2.617	3.0	2.9	194.7	0	20.7	2.4E-07
6/5/24	15	34	3.133	3.5	3.5	193.6	1	20.7	2.5E-07

Tested By: WT

Date: 6/4/24

Checked By: JLK

Date: 6/7/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

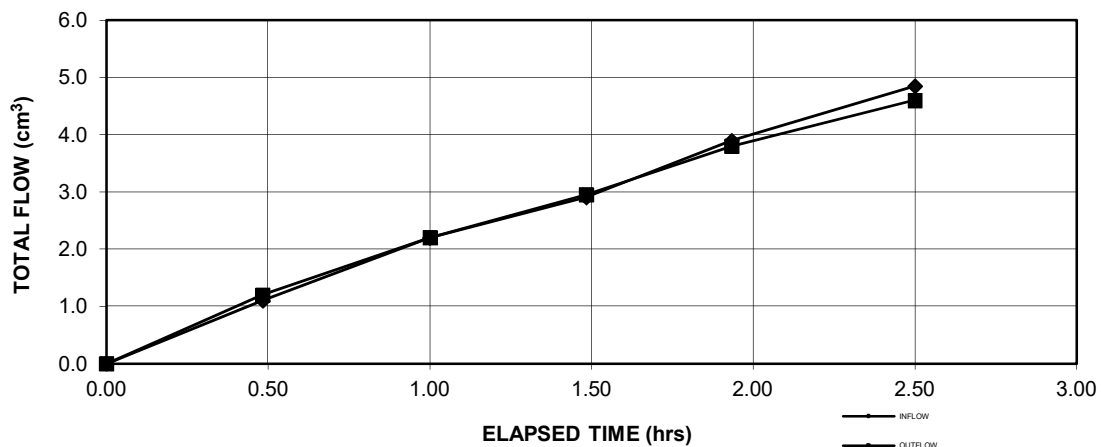


Client:	ENTACT, LLC	Boring No.:	6/11/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC0.5C
Lab ID No.:	2024-369-005-001	Avg. Effective Consol. Pressure (psi):	6.25

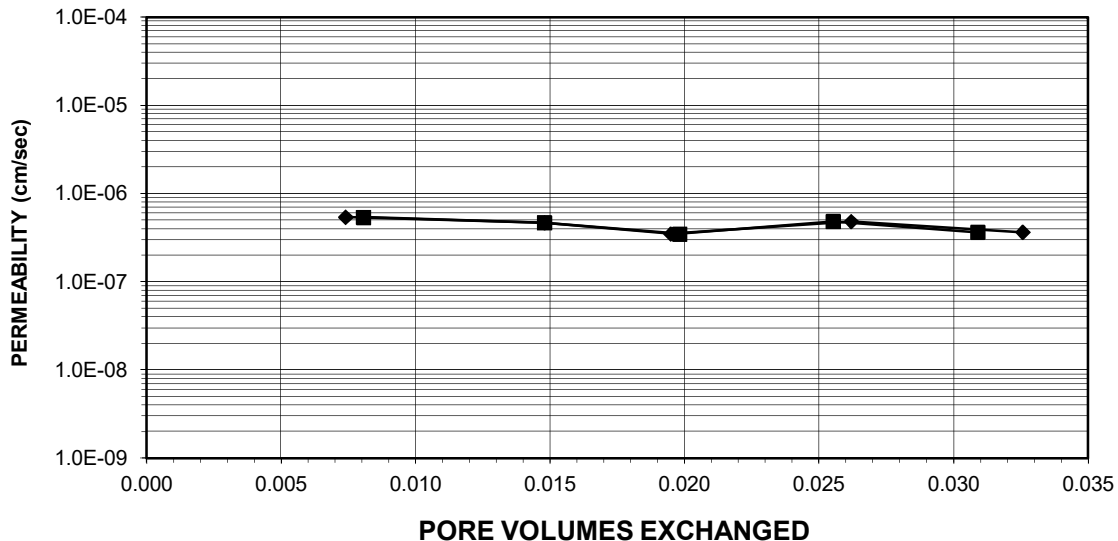
AVERAGE PERMEABILITY = $4.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $4.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 6/18/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-001

Boring No.: 6/11/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC0.5C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	550	893
Weight of Tare & Wet Sample (g)	506.27	781.70
Weight of Tare & Dry Sample (g)	427.47	645.48
Weight of Tare (g)	81.12	110.28
Weight of Water (g)	78.80	136.22
Weight of Dry Sample (g)	346.35	535.20
Moisture Content (%)	22.8	25.5

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	658.02	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	658.02	672.50
Length 1 (in)	2.998	2.973
Length 2 (in)	2.974	3.012
Length 3 (in)	2.991	2.990
Top Diameter (in)	3.012	3.012
Middle Diameter (in)	3.001	3.002
Bottom Diameter (in)	2.993	2.998
Average Length (in)	2.99	2.99
Average Area (in ²)	7.08	7.09
Sample Volume (cm ³)	346.53	347.46
Unit Wet Weight (g/cm ³)	1.90	1.94
Unit Wet Weight (pcf)	118.5	120.8
Unit Dry Weight (pcf)	96.6	96.3
Unit Dry Weight (g/cm ³)	1.55	1.54
Void Ratio, e	0.75	0.75
Porosity, n	0.43	0.43
Pore Volume (cm ³)	148.0	148.9
Total Weight of Sample After Test (g)		672.50

Tested By: WT Date: 6/18/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-001

Boring No.: 6/11/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC0.5C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	97.5
Bottom Cap (psi)	100.0
Cell (psi)	105.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.13

Final Sample Dimensions

Sample Length (cm), L	7.60
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.73
Inflow Burette Area (cm ²), a-in	0.879
Outflow Burette Area (cm ²), a-out	0.896

AVERAGE PERMEABILITY = 4.2E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
6/20/24	8	40	0.000	0.0	0.0	203.3	0	20.3	NA
6/20/24	9	9	0.483	1.1	1.2	200.7	0	20.4	5.4E-07
6/20/24	9	40	1.000	2.2	2.2	198.3	0	20.4	4.7E-07
6/20/24	10	9	1.483	2.9	3.0	196.7	0	20.4	3.5E-07
6/20/24	10	36	1.933	3.9	3.8	194.6	0	20.4	4.8E-07
6/20/24	11	10	2.500	4.9	4.6	192.6	1	20.5	3.6E-07

Tested By: WT

Date: 6/18/24

Checked By: JLK

Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

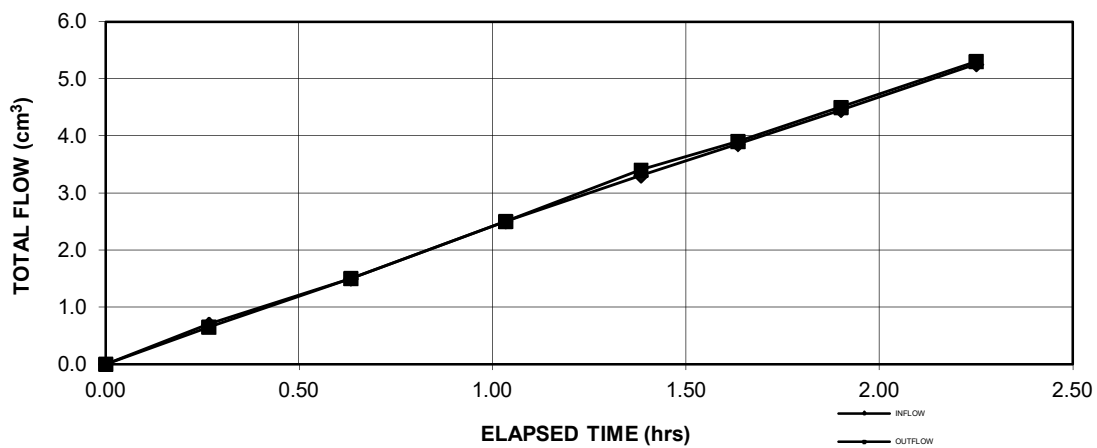


Client:	ENTACT, LLC	Boring No.:	6/11/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	28 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC0.5C
Lab ID No.:	2024-369-005-002	Avg. Effective Consol. Pressure (psi):	6.25

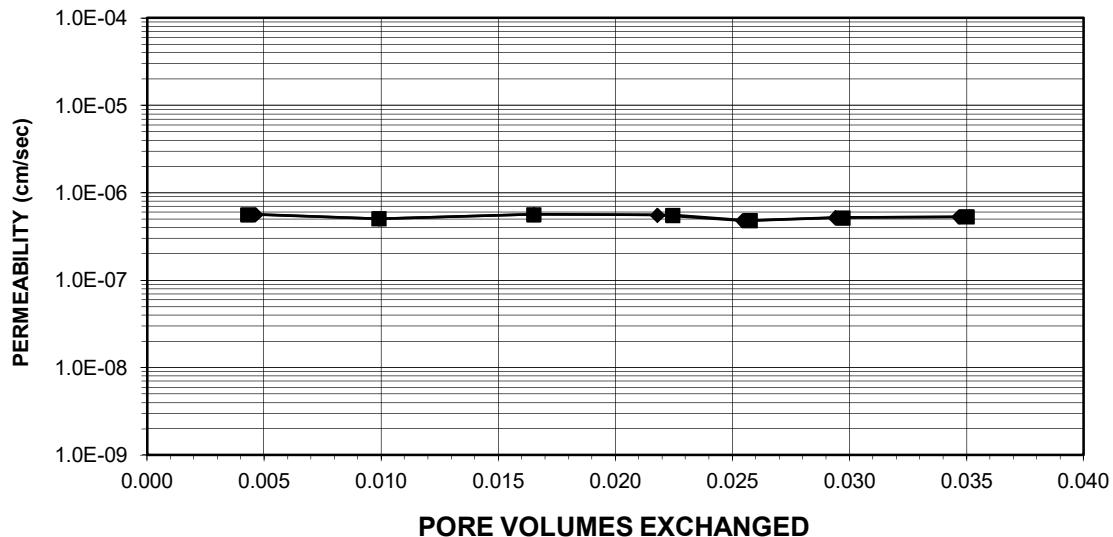
AVERAGE PERMEABILITY = $5.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $5.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 7/9/24 Checked By: JLK Date: 7/12/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-002

Boring No.: 6/11/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC0.5C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	890	623
Weight of Tare & Wet Sample (g)	496.54	760.35
Weight of Tare & Dry Sample (g)	423.97	622.94
Weight of Tare (g)	109.67	82.89
Weight of Water (g)	72.57	137.41
Weight of Dry Sample (g)	314.30	540.05
Moisture Content (%)	23.1	25.4

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	664.39	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	664.39	677.10
Length 1 (in)	3.012	3.022
Length 2 (in)	3.033	3.030
Length 3 (in)	3.028	3.009
Top Diameter (in)	3.130	3.013
Middle Diameter (in)	3.004	3.006
Bottom Diameter (in)	2.993	3.000
Average Length (in)	3.02	3.02
Average Area (in ²)	7.27	7.10
Sample Volume (cm ³)	360.28	351.33
Unit Wet Weight (g/cm ³)	1.84	1.93
Unit Wet Weight (pcf)	115.1	120.3
Unit Dry Weight (pcf)	93.5	95.9
Unit Dry Weight (g/cm ³)	1.50	1.54
Void Ratio, e	0.80	0.76
Porosity, n	0.45	0.43
Pore Volume (cm ³)	160.4	151.4
Total Weight of Sample After Test (g)		678.50

Tested By: WT Date: 7/9/24 Checked By: JLK Date: 7/12/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-002

Boring No.: 6/11/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC0.5C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	97.5
Bottom Cap (psi)	100.0
Cell (psi)	105.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.91

Final Sample Dimensions

Sample Length (cm), L	7.67
Sample Diameter (cm)	7.64
Sample Area (cm ²), A	45.80
Inflow Burette Area (cm ²), a-in	0.945
Outflow Burette Area (cm ²), a-out	0.915
B Parameter (%)	95

AVERAGE PERMEABILITY = 5.2E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 5.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
7/11/24	9	21	0.000	0.0	0.0	201.0	0	20.7	NA
7/11/24	9	37	0.267	0.7	0.6	199.5	0	20.9	5.6E-07
7/11/24	9	59	0.633	1.5	1.5	197.8	0	20.9	5.1E-07
7/11/24	10	23	1.033	2.5	2.5	195.7	0	21.1	5.7E-07
7/11/24	10	44	1.383	3.3	3.4	193.9	0	21.1	5.6E-07
7/11/24	10	59	1.633	3.9	3.9	192.8	0	21.1	4.8E-07
7/11/24	11	15	1.900	4.5	4.5	191.5	0	21.1	5.2E-07
7/11/24	11	36	2.250	5.3	5.3	189.8	1	21.1	5.3E-07

Tested By: WT

Date: 7/9/24

Checked By: JLK

Date: 7/12/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

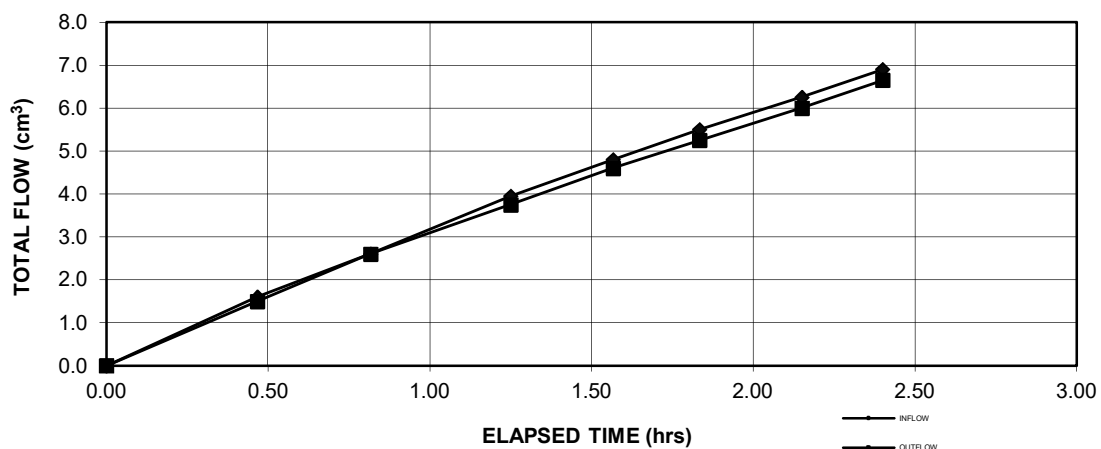


Client:	ENTACT, LLC	Boring No.:	6/12/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC1C
Lab ID No.:	2024-369-005-003	Avg. Effective Consol. Pressure (psi):	6.25

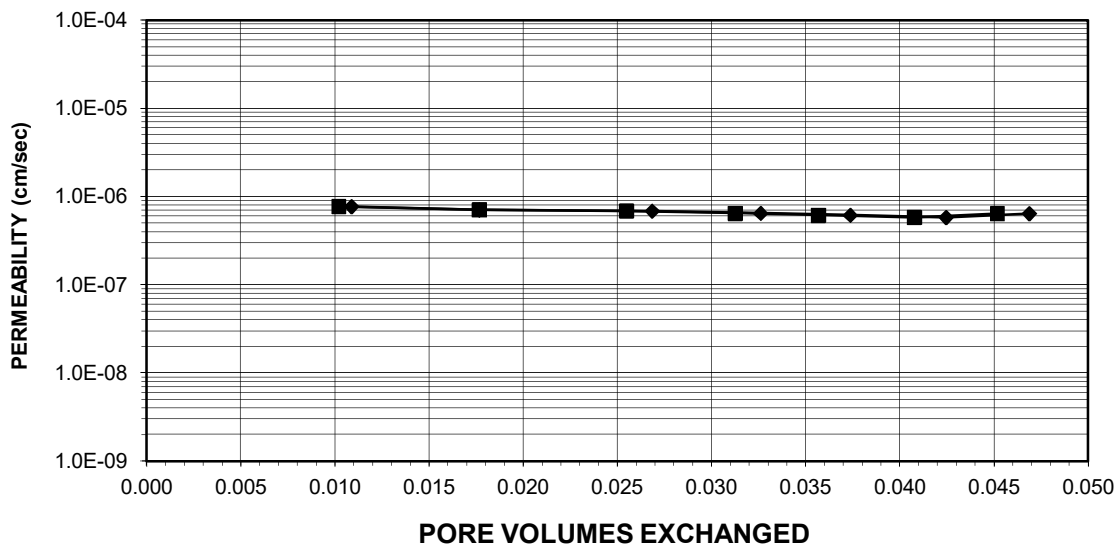
AVERAGE PERMEABILITY = $6.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $6.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 6/19/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-003

Boring No.: 6/12/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC1C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Gray Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	579	904
Weight of Tare & Wet Sample (g)	471.01	775.08
Weight of Tare & Dry Sample (g)	396.65	642.83
Weight of Tare (g)	82.50	109.43
Weight of Water (g)	74.36	132.25
Weight of Dry Sample (g)	314.15	533.40
Moisture Content (%)	23.7	24.8

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	658.80	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	658.80	664.79
Length 1 (in)	2.955	2.987
Length 2 (in)	2.982	2.964
Length 3 (in)	2.981	2.958
Top Diameter (in)	3.012	3.014
Middle Diameter (in)	3.000	3.001
Bottom Diameter (in)	2.990	2.992
Average Length (in)	2.97	2.97
Average Area (in ²)	7.07	7.08
Sample Volume (cm ³)	344.49	344.52
Unit Wet Weight (g/cm ³)	1.91	1.93
Unit Wet Weight (pcf)	119.4	120.4
Unit Dry Weight (pcf)	96.5	96.5
Unit Dry Weight (g/cm ³)	1.55	1.55
Void Ratio, e	0.75	0.75
Porosity, n	0.43	0.43
Pore Volume (cm ³)	147.2	147.2
Total Weight of Sample After Test (g)		666.47

Tested By: WT Date: 6/19/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-003

Boring No.: 6/12/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC1C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.30

Final Sample Dimensions

Sample Length (cm), L	7.54
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.67
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962

AVERAGE PERMEABILITY = 6.2E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 6.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
6/20/24	12	31	0.000	0.0	0.0	194.7	0	20.6	NA
6/20/24	12	59	0.467	1.6	1.5	191.5	0	20.7	7.7E-07
6/20/24	13	20	0.817	2.6	2.6	189.3	0	20.7	7.1E-07
6/20/24	13	46	1.250	4.0	3.8	186.7	0	20.7	6.9E-07
6/20/24	14	5	1.567	4.8	4.6	185.0	0	20.7	6.5E-07
6/20/24	14	21	1.833	5.5	5.3	183.6	0	20.7	6.2E-07
6/20/24	14	40	2.150	6.3	6.0	182.0	0	20.7	5.8E-07
6/20/24	14	55	2.400	6.9	6.7	180.7	1	20.8	6.4E-07

Tested By: WT

Date: 6/19/24

Checked By: JLK

Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

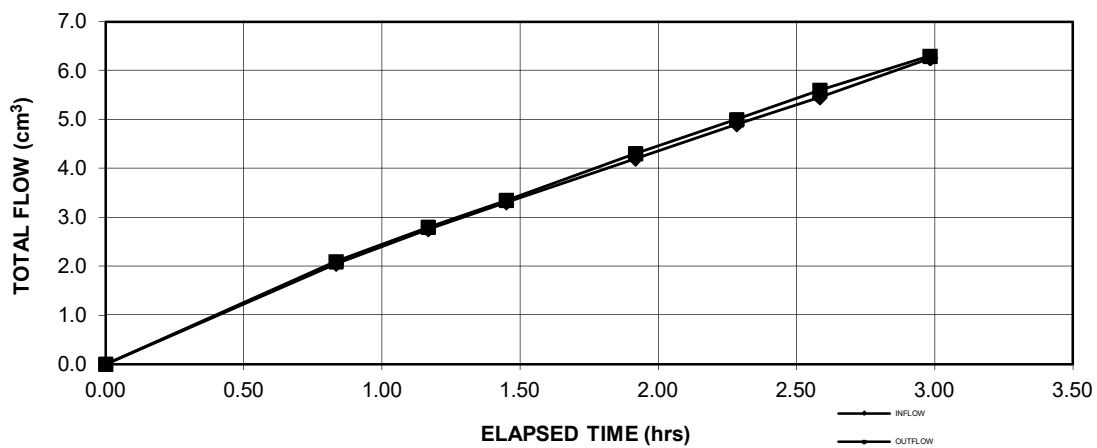


Client:	ENTACT, LLC	Boring No.:	6/12/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	28 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC1C
Lab ID No.:	2024-369-005-004	Avg. Effective Consol. Pressure (psi):	6.25

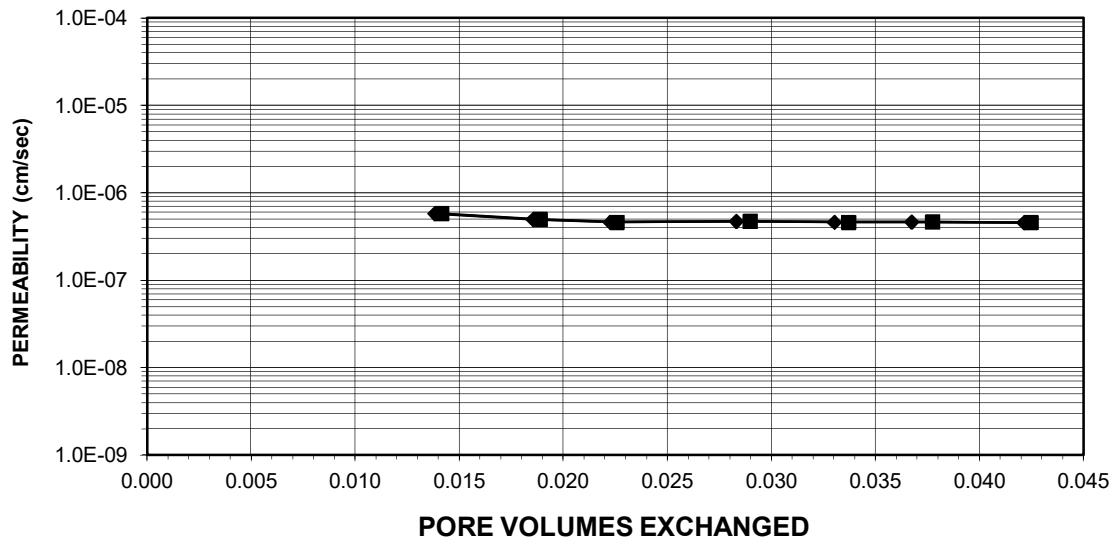
AVERAGE PERMEABILITY = 4.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.6E-09 m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: MS Date: 7/10/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-004

Boring No.: 6/12/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC1C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Dark Gray and Brown Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	1694	1122
Weight of Tare & Wet Sample (g)	453.67	757.59
Weight of Tare & Dry Sample (g)	385.30	621.72
Weight of Tare (g)	83.11	83.77
Weight of Water (g)	68.37	135.87
Weight of Dry Sample (g)	302.19	537.95
Moisture Content (%)	22.6	25.3

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	665.15	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	665.15	679.43
Length 1 (in)	3.028	3.018
Length 2 (in)	3.027	3.019
Length 3 (in)	3.056	3.009
Top Diameter (in)	3.012	3.010
Middle Diameter (in)	3.003	2.999
Bottom Diameter (in)	3.001	2.991
Average Length (in)	3.04	3.02
Average Area (in ²)	7.09	7.07
Sample Volume (cm ³)	353.04	349.28
Unit Wet Weight (g/cm ³)	1.88	1.95
Unit Wet Weight (pcf)	117.6	121.4
Unit Dry Weight (pcf)	95.9	96.9
Unit Dry Weight (g/cm ³)	1.54	1.55
Void Ratio, e	0.76	0.74
Porosity, n	0.43	0.42
Pore Volume (cm ³)	152.1	148.4
Total Weight of Sample After Test (g)		678.22

Tested By: MS Date: 7/10/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-004

Boring No.: 6/12/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC1C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.95

Final Sample Dimensions

Sample Length (cm), L	7.66
Sample Diameter (cm)	7.62
Sample Area (cm ²), A	45.60
Inflow Burette Area (cm ²), a-in	0.961
Outflow Burette Area (cm ²), a-out	1.020
B Parameter (%)	95

AVERAGE PERMEABILITY = 4.6E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 4.6E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
7/12/24	8	15	0.000	0.0	0.0	196.1	0	21.0	NA
7/12/24	9	5	0.833	2.1	2.1	191.9	0	21.1	5.8E-07
7/12/24	9	25	1.167	2.8	2.8	190.5	0	21.1	5.0E-07
7/12/24	9	42	1.450	3.3	3.4	189.4	0	21.2	4.6E-07
7/12/24	10	10	1.917	4.2	4.3	187.5	0	21.3	4.7E-07
7/12/24	10	32	2.283	4.9	5.0	186.1	0	21.3	4.6E-07
7/12/24	10	50	2.583	5.5	5.6	184.9	0	21.3	4.7E-07
7/12/24	11	14	2.983	6.3	6.3	183.4	1	21.4	4.6E-07

Tested By: MS

Date: 7/10/24

Checked By: JLK

Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

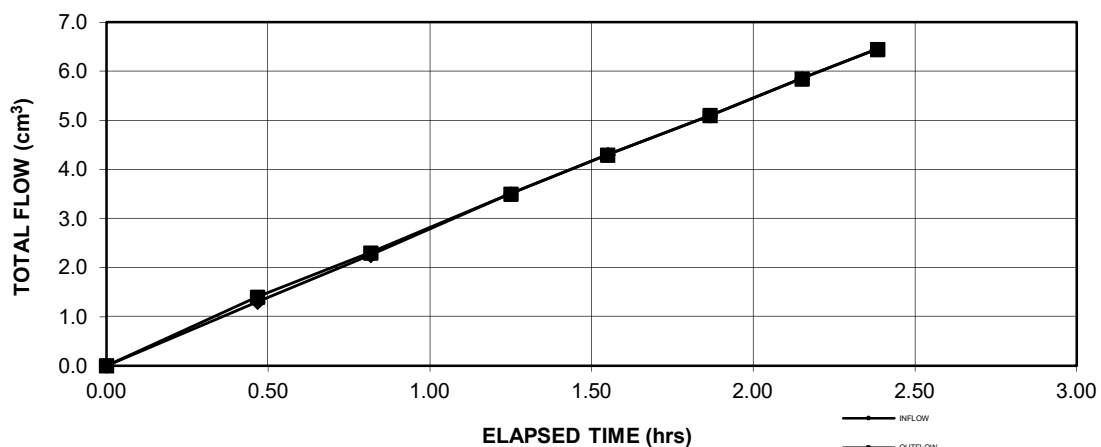


Client:	ENTACT, LLC	Boring No.:	6/12/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC1.5C
Lab ID No.:	2024-369-005-005	Avg. Effective Consol. Pressure (psi):	6.25

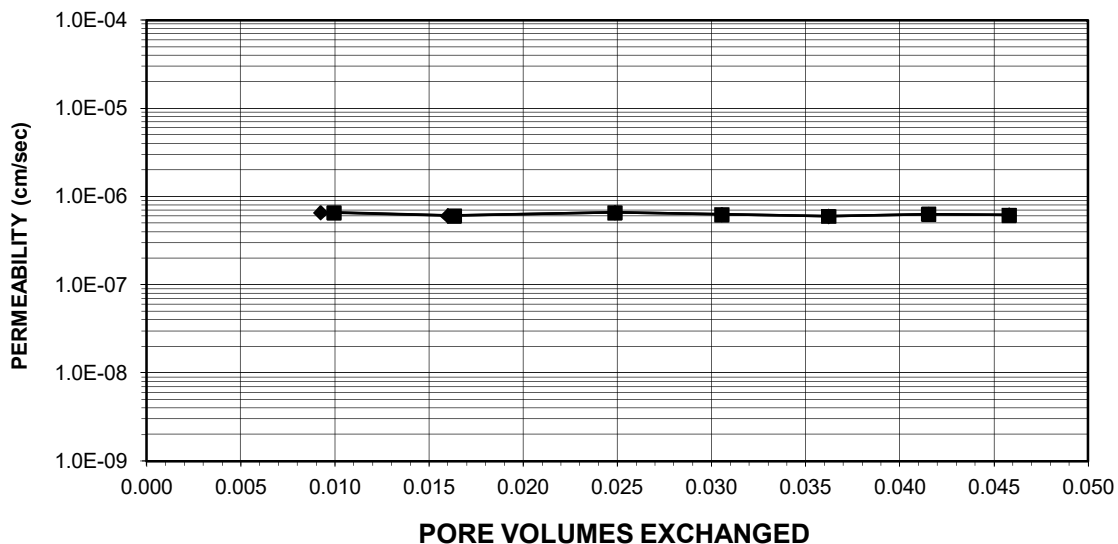
AVERAGE PERMEABILITY = $6.2\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $6.2\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 6/19/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-005

Boring No.: 6/12/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC1.5C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Gray Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	591	555
Weight of Tare & Wet Sample (g)	510.28	770.90
Weight of Tare & Dry Sample (g)	435.91	641.82
Weight of Tare (g)	87.07	81.30
Weight of Water (g)	74.37	129.08
Weight of Dry Sample (g)	348.84	560.52
Moisture Content (%)	21.3	23.0

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	680.25	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	680.25	689.83
Length 1 (in)	3.022	2.994
Length 2 (in)	2.996	2.999
Length 3 (in)	3.004	3.022
Top Diameter (in)	3.013	3.013
Middle Diameter (in)	3.001	3.000
Bottom Diameter (in)	2.993	2.993
Average Length (in)	3.01	3.01
Average Area (in ²)	7.08	7.08
Sample Volume (cm ³)	348.89	348.54
Unit Wet Weight (g/cm ³)	1.95	1.98
Unit Wet Weight (pcf)	121.7	123.5
Unit Dry Weight (pcf)	100.3	100.4
Unit Dry Weight (g/cm ³)	1.61	1.61
Void Ratio, e	0.68	0.68
Porosity, n	0.40	0.40
Pore Volume (cm ³)	141.2	140.9
Total Weight of Sample After Test (g)		691.35

Tested By: WT Date: 6/19/24 Checked By: JLK Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-005

Boring No.: 6/12/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC1.5C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	23.03

Final Sample Dimensions

Sample Length (cm), L	7.63
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.66
Inflow Burette Area (cm ²), a-in	0.963
Outflow Burette Area (cm ²), a-out	0.957
B Parameter (%)	95

AVERAGE PERMEABILITY = 6.2E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 6.2E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD	FLOW	TEMP.	INCREMENTAL PERMEABILITY
			t			h	(0 flow)		@ 20°C
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)	(1 stop)	(°C)	(cm/sec)
6/20/24	12	31	0.000	0.0	0.0	200.2	0	20.6	NA
6/20/24	12	59	0.467	1.3	1.4	197.4	0	20.7	6.6E-07
6/20/24	13	20	0.817	2.3	2.3	195.5	0	20.7	6.1E-07
6/20/24	13	46	1.250	3.5	3.5	193.0	0	20.7	6.6E-07
6/20/24	14	4	1.550	4.3	4.3	191.4	0	20.7	6.3E-07
6/20/24	14	23	1.867	5.1	5.1	189.7	0	20.7	6.0E-07
6/20/24	14	40	2.150	5.9	5.9	188.2	0	20.7	6.3E-07
6/20/24	14	54	2.383	6.5	6.5	186.9	1	20.8	6.2E-07

Tested By: WT

Date: 6/19/24

Checked By: JLK

Date: 6/21/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

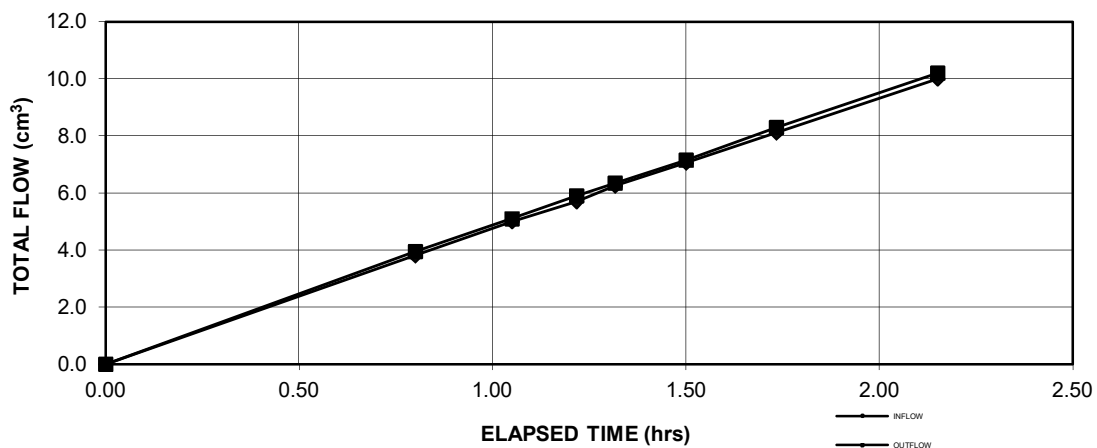


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-006
Boring No.: 6/12/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC1.5C
Avg. Effective Consol. Pressure (psi): 6.25

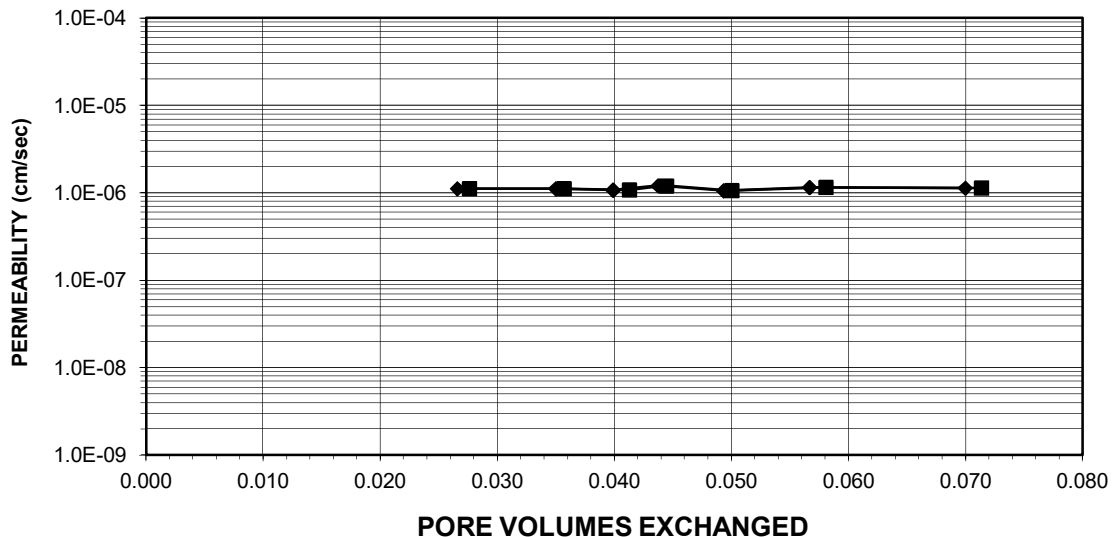
AVERAGE PERMEABILITY = $1.1\text{E-}06$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $1.1\text{E-}08$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: MS Date: 7/10/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-006

Boring No.: 6/12/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC1.5C
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Dark Gray Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	538	886
Weight of Tare & Wet Sample (g)	444.34	804.71
Weight of Tare & Dry Sample (g)	381.70	675.64
Weight of Tare (g)	81.25	109.28
Weight of Water (g)	62.64	129.07
Weight of Dry Sample (g)	300.45	566.36
Moisture Content (%)	20.8	22.8

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	685.36	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	685.36	696.37
Length 1 (in)	3.078	3.031
Length 2 (in)	3.064	3.048
Length 3 (in)	3.049	3.047
Top Diameter (in)	3.012	3.010
Middle Diameter (in)	3.004	3.003
Bottom Diameter (in)	2.995	2.995
Average Length (in)	3.06	3.04
Average Area (in ²)	7.09	7.08
Sample Volume (cm ³)	355.74	352.99
Unit Wet Weight (g/cm ³)	1.93	1.97
Unit Wet Weight (pcf)	120.3	123.1
Unit Dry Weight (pcf)	99.5	100.3
Unit Dry Weight (g/cm ³)	1.59	1.61
Void Ratio, e	0.69	0.68
Porosity, n	0.41	0.40
Pore Volume (cm ³)	145.7	142.9
Total Weight of Sample After Test (g)		696.32

Tested By: MS Date: 7/10/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-006

Boring No.: 6/12/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC1.5C
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	77.5
Bottom Cap (psi)	80.0
Cell (psi)	85.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.75

Final Sample Dimensions

Sample Length (cm), L	7.73
Sample Diameter (cm)	7.63
Sample Area (cm ²), A	45.68
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962

AVERAGE PERMEABILITY = 1.1E-06 cm/sec @ 20°C

AVERAGE PERMEABILITY = 1.1E-08 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
7/12/24	8	21	0.000	0.0	0.0	200.6	0	21.0	NA
7/12/24	9	9	0.800	3.8	4.0	192.5	0	21.1	1.1E-06
7/12/24	9	24	1.050	5.0	5.1	190.1	0	21.1	1.1E-06
7/12/24	9	34	1.217	5.7	5.9	188.6	0	21.2	1.1E-06
7/12/24	9	40	1.317	6.3	6.4	187.5	0	21.2	1.2E-06
7/12/24	9	51	1.500	7.1	7.2	185.9	0	21.2	1.1E-06
7/12/24	10	5	1.733	8.1	8.3	183.6	0	21.2	1.2E-06
7/12/24	10	30	2.150	10.0	10.2	179.7	1	21.2	1.1E-06

Tested By: MS

Date: 7/10/24

Checked By: JLK

Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

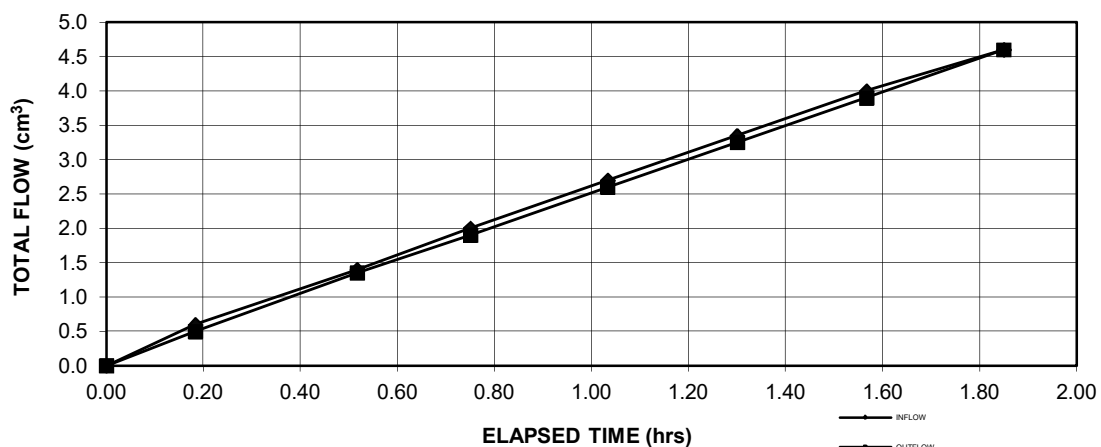


Client:	ENTACT, LLC	Boring No.:	6/13/24
Client Project:	Fmr. Kinder Morgan E9285	Depth (ft):	7 Day, Soilcrete
Project No.:	2024-369-005	Sample No.:	ISS4-7.5PC
Lab ID No.:	2024-369-005-007	Avg. Effective Consol. Pressure (psi):	6.25

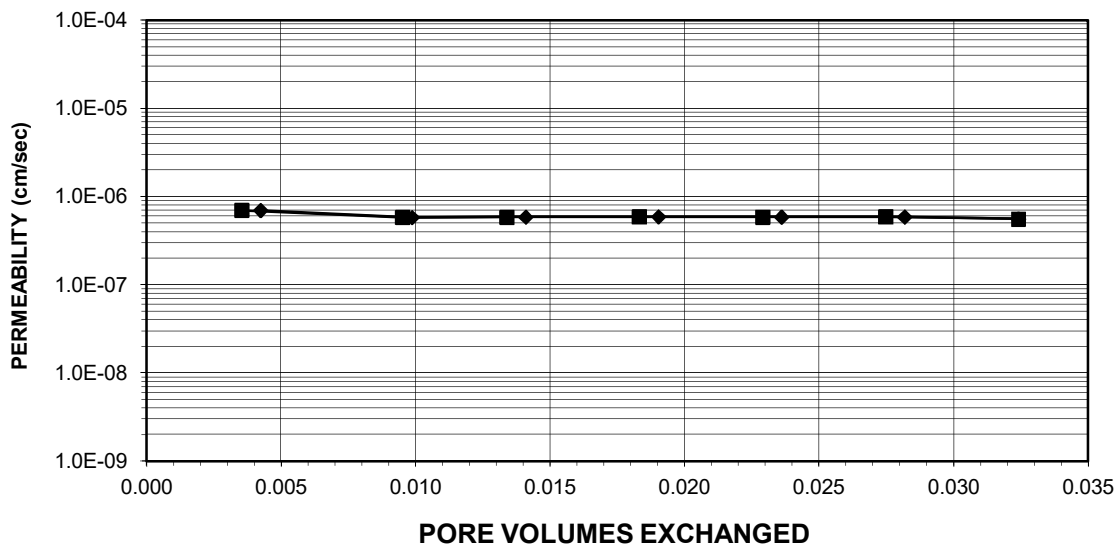
AVERAGE PERMEABILITY = $5.8\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $5.8\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 6/20/24 Checked By: JLK Date: 6/24/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-007

Boring No.: 6/13/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Dark Gray Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	590	538
Weight of Tare & Wet Sample (g)	491.26	774.66
Weight of Tare & Dry Sample (g)	420.35	646.42
Weight of Tare (g)	81.46	81.21
Weight of Water (g)	70.91	128.24
Weight of Dry Sample (g)	338.89	565.21
Moisture Content (%)	20.9	22.7

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	683.87	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	683.87	693.85
Length 1 (in)	3.024	3.035
Length 2 (in)	3.004	3.025
Length 3 (in)	3.032	2.993
Top Diameter (in)	3.015	3.009
Middle Diameter (in)	3.002	3.017
Bottom Diameter (in)	2.992	2.998
Average Length (in)	3.02	3.02
Average Area (in ²)	7.08	7.11
Sample Volume (cm ³)	350.52	351.41
Unit Wet Weight (g/cm ³)	1.95	1.97
Unit Wet Weight (pcf)	121.8	123.2
Unit Dry Weight (pcf)	100.7	100.5
Unit Dry Weight (g/cm ³)	1.61	1.61
Void Ratio, e	0.67	0.68
Porosity, n	0.40	0.40
Pore Volume (cm ³)	141.1	142.0
Total Weight of Sample After Test (g)		695.14

Tested By: WT Date: 6/20/24 Checked By: JLK Date: 6/24/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-007

Boring No.: 6/13/24
Depth (ft): 7 Day, Soilcrete
Sample No.: ISS4-7.5PC
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.93

Final Sample Dimensions

Sample Length (cm), L	7.66
Sample Diameter (cm)	7.64
Sample Area (cm ²), A	45.85
Inflow Burette Area (cm ²), a-in	0.962
Outflow Burette Area (cm ²), a-out	0.962

AVERAGE PERMEABILITY = 5.8E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 5.8E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
6/21/24	12	6	0.000	0.0	0.0	195.7	0	20.5	NA
6/21/24	12	17	0.183	0.6	0.5	194.6	0	20.6	7.0E-07
6/21/24	12	37	0.517	1.4	1.4	192.9	0	20.6	5.8E-07
6/21/24	12	51	0.750	2.0	1.9	191.7	0	20.6	5.8E-07
6/21/24	13	8	1.033	2.7	2.6	190.2	0	20.6	5.9E-07
6/21/24	13	24	1.300	3.4	3.3	188.9	0	20.6	5.9E-07
6/21/24	13	40	1.567	4.0	3.9	187.6	0	20.7	5.9E-07
6/21/24	13	57	1.850	4.6	4.6	186.2	1	20.7	5.6E-07

Tested By: WT

Date: 6/20/24

Checked By: JLK

Date: 6/24/24

PERMEABILITY TEST

ASTM D 5084-16a Method C

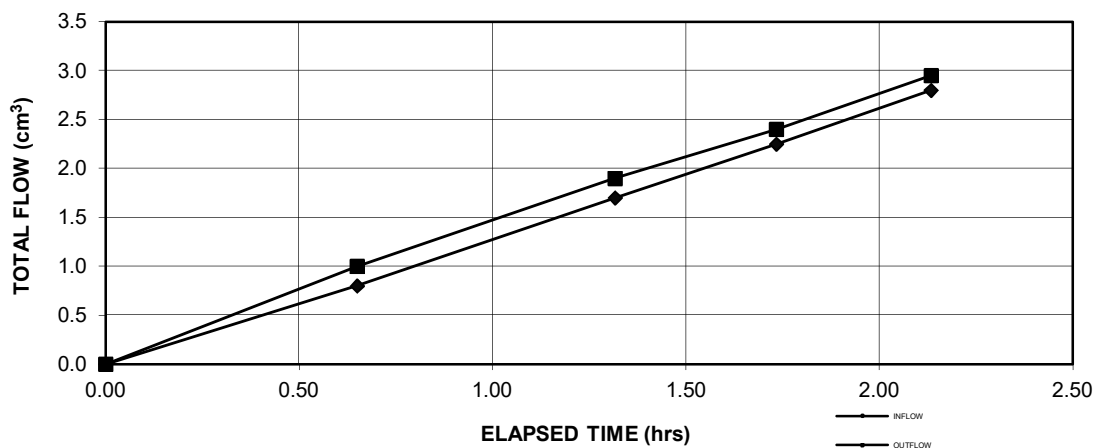


Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-008
Boring No.: 6/13/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC
Avg. Effective Consol. Pressure (psi): 6.25

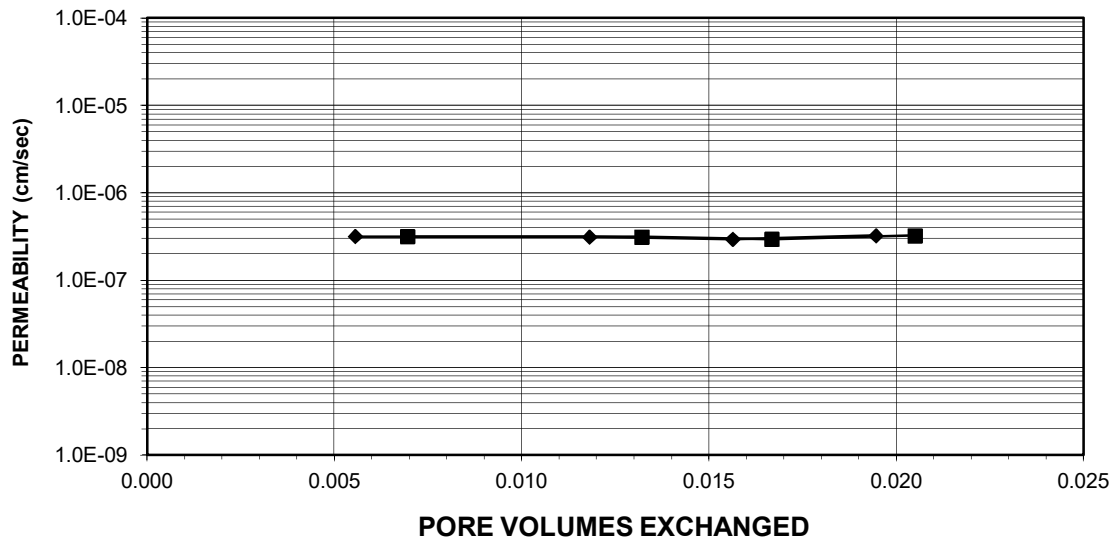
AVERAGE PERMEABILITY = $3.1\text{E-}07$ cm/sec @ 20°C

AVERAGE PERMEABILITY = $3.1\text{E-}09$ m/sec @ 20°C

TOTAL FLOW vs. ELAPSED TIME



PORE VOLUMES EXCHANGED vs. PERMEABILITY



Tested By: WT Date: 7/11/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-008

Boring No.: 6/13/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC
Avg. Effective Consol. Pressure (psi): 6.25

Specific Gravity: 2.70 Assumed
Sample Condition: Previously Remolded

Visual Description: Dark Gray Stabilized Material

Permeant Type: Deaired Water

MOISTURE CONTENT:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Tare Number	630	550
Weight of Tare & Wet Sample (g)	452.21	774.69
Weight of Tare & Dry Sample (g)	388.87	642.95
Weight of Tare (g)	81.99	81.17
Weight of Water (g)	63.34	131.74
Weight of Dry Sample (g)	306.88	561.78
Moisture Content (%)	20.6	23.5

SPECIMEN:	<u>BEFORE TEST</u>	<u>AFTER TEST</u>
Weight of Tube & Wet Sample (g)	679.72	NA
Weight of Tube (g)	0.00	NA
Weight of Wet Sample (g)	679.72	695.55
Length 1 (in)	3.028	3.037
Length 2 (in)	3.031	3.025
Length 3 (in)	3.049	3.032
Top Diameter (in)	3.014	3.012
Middle Diameter (in)	3.001	3.005
Bottom Diameter (in)	2.990	3.002
Average Length (in)	3.04	3.03
Average Area (in ²)	7.08	7.10
Sample Volume (cm ³)	352.06	352.61
Unit Wet Weight (g/cm ³)	1.93	1.97
Unit Wet Weight (pcf)	120.5	123.1
Unit Dry Weight (pcf)	99.9	99.7
Unit Dry Weight (g/cm ³)	1.60	1.60
Void Ratio, e	0.69	0.69
Porosity, n	0.41	0.41
Pore Volume (cm ³)	143.4	143.9
Total Weight of Sample After Test (g)		695.54

Tested By: WT Date: 7/11/24 Checked By: JLK Date: 7/16/24

PERMEABILITY TEST

ASTM D 5084-16a Method C



Client: ENTACT, LLC
Client Project: Fmr. Kinder Morgan E9285
Project No.: 2024-369-005
Lab ID No.: 2024-369-005-008

Boring No.: 6/13/24
Depth (ft): 28 Day, Soilcrete
Sample No.: ISS4-7.5PC
Avg. Effective Consol. Pressure (psi): 6.25

Pressure Heads (Constant)

Top Cap (psi)	87.5
Bottom Cap (psi)	90.0
Cell (psi)	95.0
Total Pressure Head (cm)	175.8
Hydraulic Gradient	22.83

Final Sample Dimensions

Sample Length (cm), L	7.70
Sample Diameter (cm)	7.64
Sample Area (cm ²), A	45.80
Inflow Burette Area (cm ²), a-in	0.961
Outflow Burette Area (cm ²), a-out	1.020

AVERAGE PERMEABILITY = 3.1E-07 cm/sec @ 20°C

AVERAGE PERMEABILITY = 3.1E-09 m/sec @ 20°C

DATE	TIME		ELAPSED TIME t	TOTAL INFLOW	TOTAL OUTFLOW	TOTAL HEAD h	FLOW (0 flow) (1 stop)	TEMP. (°C)	INCREMENTAL PERMEABILITY @ 20°C (cm/sec)
(mm/dd/yy)	(hr)	(min)	(hr)	(cm ³)	(cm ³)	(cm)			
7/12/24	13	6	0.000	0.0	0.0	196.1	0	21.4	NA
7/12/24	13	45	0.650	0.8	1.0	194.2	0	21.5	3.2E-07
7/12/24	14	25	1.317	1.7	1.9	192.4	0	21.5	3.1E-07
7/12/24	14	50	1.733	2.3	2.4	191.4	0	21.5	3.0E-07
7/12/24	15	14	2.133	2.8	3.0	190.3	1	21.5	3.2E-07

Tested By: WT

Date: 7/11/24

Checked By: JLK

Date: 7/16/24

ATTACHMENT 4
COMPOSITE AND ISS MIX ANALYTICAL REPORTS



ANALYTICAL REPORT

PREPARED FOR

Attn: Jule Carr
ENTACT, LLC
2873 Hardies Road
Suite 3

Gibsonia, Pennsylvania 15044

Generated 7/17/2024 3:37:20 PM Revision 1

JOB DESCRIPTION

Staten Island ISS Bench

JOB NUMBER

180-173221-1

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



Authorized for release by
Debra Bowen, Project Manager I
Debra.Bowen@et.eurofinsus.com
(412)963-2445

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7/17/2024 3:37:20 PM
Revision 1

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Case Narrative

Client: ENTACT, LLC
Project: Staten Island ISS Bench

Job ID: 180-173221-1

Job ID: 180-173221-1

Eurofins Pittsburgh

**Job Narrative
180-173221-1**

Revision 1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/30/2024 12:06 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 180-467514 was outside the method criteria for the following analyte(s): 2-Hexanone, Acetone, Naphthalene, Dichloro-difluoromethane, Chloromethane, 4-Methyl-2-pentanone and 1,2-Dibromo-3-Chloropropane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed in 180-467514 was outside the method criteria for the following analyte(s): Chloroethane, Styrene, Tetrachloroethene and Trichlorofluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 180-467514 was outside criteria for the following analyte(s): 2-Butanone and Acetone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8260D: The laboratory control sample (LCS) for analytical batch 180-467514 recovered outside control limits for the following analytes: Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The laboratory control sample duplicate (LCSD) for analytical batch 180-467514 recovered outside control limits for the following analytes: Chloroethane and Styrene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 180-467514 recovered outside control limits for the following analytes: Acetone, 4-Methyl-2-pentanone and Bromomethane.

Method 8260D: The laboratory control sample (LCS) for analytical batch 180-467514 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 180-467886 was outside the method criteria for the following surrogate: 4-Bromofluorobenzene, Toluene-d8 and Dibromofluoromethane. All samples recovered this surrogate within QC criteria.

Method 8260D: The laboratory control sample duplicate (LCSD) for analytical batch 180-467886 recovered outside control limits for the following analytes: 1,2-Dibromoethane and Methyl tert-butyl ether. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

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Case Narrative

Client: ENTACT, LLC
Project: Staten Island ISS Bench

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Eurofins Pittsburgh

Method 8260D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 180-467886 recovered outside control limits for the following analytes: 1,2-Dibromoethane.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 180-467886 was outside the method criteria for the following analyte(s): 2-Hexanone, Acetone, 1,3-Dichlorobenzene, trans-1,3-Dichloropropene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 4-Methyl-2-pentanone, 1,2-Dibromo-3-Chloropropane and 1,2-Dichloropropane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 180-467886 was outside criteria for the following analyte(s): 2-Butanone, Acetone and Methyl acetate. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8260D: The laboratory control sample (LCS) for analytical batch 180-467886 recovered outside control limits for the following analytes: Chloroethane, Vinyl chloride, Styrene, Methylene Chloride and Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 180-467886 recovered outside control limits for the following analytes: Chloroethane, 2-Hexanone, 1,2-Dibromo-3-Chloropropane, Acetone, 1,1,2,2-Tetrachloroethane, 4-Methyl-2-pentanone, 1,2-Dibromoethane, Methyl acetate and 2-Butanone.

Method 8260D: LCSD recovered high for 1,2-Dichloroethane-d4 (Surrogate). Samples recovered this surrogate within QC criteria.

(LCSD 180-467886/4)

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 180-468365 was outside the method criteria for the following analyte(s): Carbon disulfide, 2-Hexanone, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene, Naphthalene, Dichlorodifluoromethane, Chloromethane, 4-Methyl-2-pentanone, 1,2-Dibromo-3-Chloropropane, 2-Chloroethyl vinyl ether, Trichlorofluoromethane, 2-Butanone and Hexachlorobutadiene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed in 180-468365 was outside the method criteria for the following analyte(s): 1,2,3-Trichloropropane, Vinyl acetate and Chloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: COMP-3 (180-173221-2). Elevated reporting limits (RLs) are provided.

Method 8260D - SPLP: LCSD recovered high for Toluene-d8 and 4-Bromofluorobenzene (Surrogate). Sample recovered this Surrogate within QC.

(LCSD 180-467887/5)

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-467887 was outside the method criteria for the following analyte(s): 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, Acetone and Carbon disulfide. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-467887 was outside the method criteria for the following analyte(s): Bromomethane, Chloroethane and Vinyl chloride. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270E: The continuing calibration verification (CCV) associated with batch 180-467554 recovered above the upper control limit for 2-Nitroaniline, Nitrobenzene, N-Nitrosodi-n-propylamine and 2,2'-oxybis[1-chloropropane]. The samples associated with

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Case Narrative

Client: ENTACT, LLC
Project: Staten Island ISS Bench

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Eurofins Pittsburgh

this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 180-467554/3).

Method 8270E: The following sample was diluted to bring the concentration of target analytes within the calibration range: COMP-4 (180-173221-3). Elevated reporting limits (RLs) are provided.

Method 8270E - SPLP East: The continuing calibration verification (CCV) associated with batch 180-468356 recovered above the upper control limit for Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 180-468356/3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS

Method 1633: Target analyte(s) Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) were detected in the method blank associated with the following sample: COMP-4 (180-173221-3). Since the result in the sample non-detect, the data is reported.

Method 1633: Samples COMP-4 (180-173221-3), (180-173221-D-3-C MS) and (180-173221-D-3-D MSD) were extracted as per client protocol.

The methanol extraction of sample COMP-4 (180-173221-3) is denoted with an RA on the analytical report.

Metals

Method 6010D: The following samples were diluted to bring the concentration of target analytes within the calibration range: COMP-2 (ISS-2) (180-173221-1) and COMP-3 (180-173221-2). Elevated reporting limits (RLs) are provided.

Method 6010D - SPLP East: The continuing calibration blank (CCB) for analytical batch 180-468483 contained Iron above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010D - SPLP East: The continuing calibration blank (CCB) for analytical batch 180-468483 contained Iron above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010D - SPLP East: The continuing calibration blank (CCB) for analytical batch 180-468483 contained Iron above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010D - SPLP East: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-467035 and 180-468172 and analytical batch 180-468483 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Definitions/Glossary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
^c	CCV Recovery is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Analyte was found in the blank.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Analyte was found in the blank.
FH	MS and/or MSD recovery above control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)

Eurofins Pittsburgh

Definitions/Glossary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
EPA 7470A	7470A	Solid	Mercury

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Draft-4 1633	1633	Solid	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
Draft-4 1633	1633	Solid	Perfluorobutanesulfonic acid (PFBS)
Draft-4 1633	1633	Solid	Perfluorohexanesulfonic acid (PFHxS)
Draft-4 1633	1633 Shake	Solid	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
Draft-4 1633	1633 Shake	Solid	Perfluorobutanesulfonic acid (PFBS)
Draft-4 1633	1633 Shake	Solid	Perfluorohexanesulfonic acid (PFHxS)

Sample Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-173221-1	COMP-2 (ISS-2)	Solid	04/29/24 14:33	04/30/24 12:06
180-173221-2	COMP-3	Solid	04/29/24 14:59	04/30/24 12:06
180-173221-3	COMP-4	Solid	04/29/24 15:20	04/30/24 12:06

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Method Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method	Method Description	Protocol	Laboratory
EPA 8260D	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
Draft-4 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
EPA 6010D	Metals (ICP)	SW846	EET PIT
EPA 7470A	Mercury (CVAA)	SW846	EET PIT
EPA 7471B	Mercury (CVAA)	SW846	EET PIT
2540G	SM 2540G	SM22	EET PIT
1312	SPLP Extraction	SW846	ELLE
1633	Solid-Phase Extraction (SPE)	EPA	ELLE
1633 Shake	Shake Extraction with SPE	EPA	ELLE
3010A	Preparation, Total Metals	SW846	EET PIT
3050B	Preparation, Metals	SW846	EET PIT
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
5030C	Purge and Trap	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	EET PIT
7470A	Preparation, Mercury	SW846	EET PIT
7471B	Preparation, Mercury	SW846	EET PIT
EPA 1312	SPLP Extraction	SW846	EET PIT

Protocol References:

EPA = US Environmental Protection Agency

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.03 g	500 mL	467048	05/01/24 09:00	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	0.25 mL	5 mL	467887	05/08/24 17:32	PJJ	EET PIT
	Instrument ID: CHHP11									
Total/NA	Prep	5035			5.0306 g	5 mL	467518	05/05/24 20:00	PJJ	EET PIT
Total/NA	Analysis	EPA 8260D		1	5 mL	5 mL	467886	05/08/24 14:39	PJJ	EET PIT
	Instrument ID: CHHP3									
SPLP East	Leach	EPA 1312			100.65 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	467805	05/08/24 14:42	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	468356	05/13/24 15:42	VVP	EET PIT
	Instrument ID: CH731									
Total/NA	Prep	3541			15.5 g	5.0 mL	467520	05/05/24 12:25	VJC	EET PIT
Total/NA	Analysis	EPA 8270E		1	1 mL	1 mL	467554	05/06/24 17:48	VVP	EET PIT
	Instrument ID: CH733									
SPLP East	Leach	EPA 1312			100.65 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468483	05/13/24 19:29	MRG	EET PIT
	Instrument ID: C									
SPLP East	Leach	EPA 1312			100.65 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468957	05/16/24 16:16	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.94 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			468041	05/09/24 00:35	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.94 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		5			468380	05/10/24 10:41	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.94 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			470034	05/28/24 17:02	MRG	EET PIT
	Instrument ID: Q									
SPLP East	Leach	EPA 1312			100.65 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	467404	05/03/24 10:03	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			467649	05/06/24 12:30	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	7471B			0.65 g	100 mL	468100	05/09/24 14:35	LNF	EET PIT
Total/NA	Analysis	EPA 7471B		1			468255	05/10/24 11:02	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Analysis	2540G		1			466987	04/30/24 20:33	EJH	EET PIT
	Instrument ID: NOEQUIP									

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.09 g	500 mL	467048	05/01/24 09:00	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	0.25 mL	5 mL	467887	05/08/24 17:53	PJJ	EET PIT
	Instrument ID: CHHP11									
Total/NA	Prep	5035			5.0031 g	5 mL	468442	05/13/24 07:11	PJJ	EET PIT
Total/NA	Analysis	EPA 8260D		10	0.1 mL	5 mL	468365	05/13/24 15:10	PJJ	EET PIT
	Instrument ID: CHHP11									
Total/NA	Prep	5035	DL		5.0031 g	5 mL	468442	05/13/24 07:11	PJJ	EET PIT
Total/NA	Analysis	EPA 8260D	DL	100	0.1 mL	5 mL	468365	05/13/24 17:15	PJJ	EET PIT
	Instrument ID: CHHP11									
Total/NA	Prep	5035			5.6273 g	5 mL	467518	05/05/24 08:15	PJJ	EET PIT
Total/NA	Analysis	EPA 8260D		1	5 mL	5 mL	467514	05/05/24 17:02	PJJ	EET PIT
	Instrument ID: CHHP3									
SPLP East	Leach	EPA 1312			100.72 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3520C			220 mL	2.5 mL	467805	05/08/24 14:42	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	468356	05/13/24 16:04	VVP	EET PIT
	Instrument ID: CH731									
Total/NA	Prep	3541			15.2 g	5.0 mL	467520	05/05/24 12:25	VJC	EET PIT
Total/NA	Analysis	EPA 8270E		1	1 mL	1 mL	467554	05/06/24 18:09	VVP	EET PIT
	Instrument ID: CH733									
SPLP East	Leach	EPA 1312			100.72 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468483	05/13/24 18:59	MRG	EET PIT
	Instrument ID: C									
SPLP East	Leach	EPA 1312			100.72 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468957	05/16/24 15:46	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.59 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			468041	05/09/24 00:40	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.59 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		5			468380	05/10/24 10:51	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.59 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			470034	05/28/24 17:07	MRG	EET PIT
	Instrument ID: Q									
SPLP East	Leach	EPA 1312			100.72 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	467404	05/03/24 10:03	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			467649	05/06/24 12:29	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	7471B			0.68 g	100 mL	468100	05/09/24 14:35	LNF	EET PIT
Total/NA	Analysis	EPA 7471B		1			468255	05/10/24 11:03	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Analysis	2540G		1			466987	04/30/24 20:33	EJH	EET PIT
	Instrument ID: NOEQUIP									

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.15 g	500 mL	467048	05/01/24 09:00	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	0.25 mL	5 mL	467887	05/08/24 18:14	PJJ	EET PIT
	Instrument ID: CHHP11									
Total/NA	Prep	5035			5.3021 g	5 mL	467518	05/05/24 08:15	PJJ	EET PIT
Total/NA	Analysis	EPA 8260D		1	5 mL	5 mL	467514	05/05/24 17:23	PJJ	EET PIT
	Instrument ID: CHHP3									
SPLP East	Leach	EPA 1312			100.51 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	467805	05/08/24 14:42	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	468356	05/13/24 16:27	VVP	EET PIT
	Instrument ID: CH731									
Total/NA	Prep	3541			15.4 g	5.0 mL	467520	05/05/24 12:25	VJC	EET PIT
Total/NA	Analysis	EPA 8270E		4	1 mL	1 mL	467554	05/06/24 18:31	VVP	EET PIT
	Instrument ID: CH733									
SPLP East	Leach	1312			50.0 g	1000 mL	501738	05/03/24 16:00	UNWS	ELLE
SPLP East	Prep	1633			428.7 mL	5 mL	505557	05/13/24 17:01	Y4GV	ELLE
SPLP East	Analysis	Draft-4 1633		1			506654	05/15/24 21:16	UCD3	ELLE
	Instrument ID: 29347									
SPLP East	Leach	1312	DL		50.0 g	1000 mL	501738	05/03/24 16:00	UNWS	ELLE
SPLP East	Prep	1633	DL		428.7 mL	5 mL	505557	05/13/24 17:01	Y4GV	ELLE
SPLP East	Analysis	Draft-4 1633	DL	10			506953	05/16/24 13:22	UCD3	ELLE
	Instrument ID: 29347									
SPLP East	Leach	1312	RE		50.1 g	1000 mL	509044	05/24/24 12:38	UNWS	ELLE
SPLP East	Prep	1633	RE		450.2 mL	5 mL	516108	06/11/24 14:23	Y4GV	ELLE
SPLP East	Analysis	Draft-4 1633	RE	1			517233	06/14/24 00:10	QY4X	ELLE
	Instrument ID: LM32481									
Total/NA	Prep	1633 Shake			5.78 g	5 mL	506813	05/16/24 05:51	UFD4	ELLE
Total/NA	Analysis	Draft-4 1633		1			507383	05/17/24 16:38	Q7NP	ELLE
	Instrument ID: 29347									
Total/NA	Prep	1633 Shake	RA		5.82 g	5 mL	506816	05/16/24 05:54	UFD4	ELLE
Total/NA	Analysis	Draft-4 1633	RA	1			509273	05/22/24 14:04	Q7NP	ELLE
	Instrument ID: 29347									
SPLP East	Leach	EPA 1312			100.51 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468483	05/13/24 19:34	MRG	EET PIT
	Instrument ID: C									
SPLP East	Leach	EPA 1312			100.51 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468653	05/14/24 14:58	MRG	EET PIT
	Instrument ID: C									
SPLP East	Leach	EPA 1312			100.51 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	468172	05/11/24 07:04	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			468957	05/16/24 16:21	MRG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.80 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			468041	05/09/24 00:45	MRG	EET PIT
	Instrument ID: C									

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.80 g	50 mL	467731	05/07/24 10:00	NWW	EET PIT
Total/NA	Analysis	EPA 6010D		1			470034	05/28/24 17:23	MRG	EET PIT
		Instrument ID: Q								
SPLP East	Leach	EPA 1312			100.51 g	2000 mL	467035	05/01/24 08:09	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	467404	05/03/24 10:03	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			467649	05/06/24 12:31	MTW	EET PIT
		Instrument ID: HGZ								
Total/NA	Prep	7471B			0.61 g	100 mL	468100	05/09/24 14:35	LNF	EET PIT
Total/NA	Analysis	EPA 7471B		1			468255	05/10/24 11:04	MTW	EET PIT
		Instrument ID: HGZ								
Total/NA	Analysis	2540G		1			466987	04/30/24 20:33	EJH	EET PIT
		Instrument ID: NOEQUIP								

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT

Batch Type: Leach

MTM = Matthew McGhee

Batch Type: Prep

BJT = Bill Trout

LNF = Lauren Frey

NWW = Nicholas Woten

PJJ = Patrick Journet

RJR = Ron Rosenbaum

SJM = Shannon Mueller

VJC = Vincent Cervone

Batch Type: Analysis

EJH = Everett Hinchberger

MRG = Mismel Garcia

MTW = Michael Wesoloski

PJJ = Patrick Journet

VVP = Vincent Piccolino

Lab: ELLE

Batch Type: Leach

UNWS = Nicholas Shroyer

Batch Type: Prep

UFD4 = Taylor Sweigart

Y4GV = Zoe Eckman

Batch Type: Analysis

Q7NP = Grace Bedesem

QY4X = Jack Coble

UCD3 = Christine Dolman

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	1.7	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,1,2,2-Tetrachloroethane	ND	*+ *1	5.0	1.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	^c *+	5.0	2.0	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,1,2-Trichloroethane	ND	*+	5.0	0.98	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,1-Dichloroethane	ND		5.0	1.6	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,1-Dichloroethene	ND		5.0	2.2	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2-Dibromo-3-Chloropropane	ND	^c *1	5.0	3.2	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2-Dichlorobenzene	ND		5.0	1.7	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2-Dichloroethane	ND		5.0	1.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2-Dichloropropane	ND	^c	5.0	1.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,3-Dichlorobenzene	ND	^c	5.0	3.1	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
2-Butanone (MEK)	ND	*+ *1	25	2.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
2-Hexanone	ND	^c *1	25	1.6	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
4-Methyl-2-pentanone (MIBK)	ND	^c *+ *1	25	1.8	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Acetone	ND	^c *+ *1	25	3.9	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Benzene	ND		5.0	1.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Bromoform	ND		5.0	2.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Bromomethane	ND	^c *+	5.0	2.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Carbon disulfide	ND		5.0	4.0	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Carbon tetrachloride	ND		5.0	2.0	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Chlorobenzene	ND		5.0	1.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Chlorodibromomethane	ND		5.0	2.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Chloroform	ND		5.0	3.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Chloromethane	ND		5.0	2.0	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Chloroethane	ND	^c *1 *+	5.0	2.9	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
cis-1,2-Dichloroethene	ND		5.0	1.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Dichlorobromomethane	ND		5.0	2.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Dichlorodifluoromethane	ND		5.0	2.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Ethylbenzene	ND		5.0	1.8	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
1,2-Dibromoethane	ND	*+ *1	5.0	1.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Cyclohexane	ND		5.0	2.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Isopropylbenzene	ND		5.0	2.6	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Methyl acetate	ND	*+ *1	25	7.3	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Methyl tert-butyl ether	ND	*+	5.0	1.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Methylcyclohexane	ND		5.0	2.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Methylene Chloride	ND	*+	5.0	4.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Styrene	ND	^c *+	5.0	1.5	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Tetrachloroethene	ND		5.0	2.0	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Toluene	ND		5.0	1.4	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
trans-1,2-Dichloroethene	ND		5.0	1.7	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.2	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Trichloroethene	ND		5.0	1.6	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Trichlorofluoromethane	ND	^c	5.0	4.1	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Vinyl chloride	ND	*+	5.0	3.6	ug/Kg		05/05/24 20:00	05/08/24 14:39	1
Xylenes, Total	ND		9.9	7.2	ug/Kg		05/05/24 20:00	05/08/24 14:39	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		73 - 135	05/05/24 20:00	05/08/24 14:39	1
4-Bromofluorobenzene (Surr)	103	^c	60 - 124	05/05/24 20:00	05/08/24 14:39	1
Dibromofluoromethane (Surr)	111	^c	69 - 126	05/05/24 20:00	05/08/24 14:39	1
Toluene-d8 (Surr)	110	^c	67 - 134	05/05/24 20:00	05/08/24 14:39	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	60	ug/L			05/08/24 17:32	1
1,1,2,2-Tetrachloroethane	ND		100	60	ug/L			05/08/24 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	86	ug/L			05/08/24 17:32	1
1,1,2-Trichloroethane	ND		100	45	ug/L			05/08/24 17:32	1
1,1-Dichloroethane	ND		100	63	ug/L			05/08/24 17:32	1
1,1-Dichloroethene	ND		100	55	ug/L			05/08/24 17:32	1
1,2-Dibromo-3-Chloropropane	ND	^c	100	89	ug/L			05/08/24 17:32	1
1,2-Dichlorobenzene	ND		100	36	ug/L			05/08/24 17:32	1
1,2-Dichloroethane	ND		100	57	ug/L			05/08/24 17:32	1
1,2-Dichloropropane	ND		100	66	ug/L			05/08/24 17:32	1
1,2,4-Trichlorobenzene	ND	^c	100	77	ug/L			05/08/24 17:32	1
1,3-Dichlorobenzene	ND		100	50	ug/L			05/08/24 17:32	1
1,4-Dichlorobenzene	ND		100	54	ug/L			05/08/24 17:32	1
2-Butanone (MEK)	ND		500	260	ug/L			05/08/24 17:32	1
2-Hexanone	ND		500	330	ug/L			05/08/24 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		500	310	ug/L			05/08/24 17:32	1
Acetone	ND	^c	500	340	ug/L			05/08/24 17:32	1
Benzene	ND		100	60	ug/L			05/08/24 17:32	1
Bromoform	ND		100	98	ug/L			05/08/24 17:32	1
Bromomethane	ND	^c	100	89	ug/L			05/08/24 17:32	1
Carbon disulfide	ND	^c	100	88	ug/L			05/08/24 17:32	1
Carbon tetrachloride	ND		100	88	ug/L			05/08/24 17:32	1
Chlorobenzene	ND		100	50	ug/L			05/08/24 17:32	1
Chlorodibromomethane	ND		100	84	ug/L			05/08/24 17:32	1
Chloroform	ND		100	60	ug/L			05/08/24 17:32	1
Chloromethane	ND		100	90	ug/L			05/08/24 17:32	1
Chloroethane	ND	^c	100	90	ug/L			05/08/24 17:32	1
cis-1,2-Dichloroethene	ND		100	71	ug/L			05/08/24 17:32	1
cis-1,3-Dichloropropene	ND		100	59	ug/L			05/08/24 17:32	1
Dichlorobromomethane	ND		100	64	ug/L			05/08/24 17:32	1
Dichlorodifluoromethane	ND		100	83	ug/L			05/08/24 17:32	1
Ethylbenzene	ND		100	51	ug/L			05/08/24 17:32	1
1,2-Dibromoethane	ND		100	50	ug/L			05/08/24 17:32	1
Cyclohexane	ND		100	63	ug/L			05/08/24 17:32	1
Isopropylbenzene	ND		100	34	ug/L			05/08/24 17:32	1
Methyl acetate	ND		500	170	ug/L			05/08/24 17:32	1
Methyl tert-butyl ether	ND		100	59	ug/L			05/08/24 17:32	1
Methylcyclohexane	ND		100	61	ug/L			05/08/24 17:32	1
Methylene Chloride	ND		100	89	ug/L			05/08/24 17:32	1
Styrene	ND		100	47	ug/L			05/08/24 17:32	1
Tetrachloroethene	ND		100	47	ug/L			05/08/24 17:32	1
Toluene	ND		100	46	ug/L			05/08/24 17:32	1
trans-1,2-Dichloroethene	ND		100	67	ug/L			05/08/24 17:32	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		100	58	ug/L			05/08/24 17:32	1
Trichloroethene	ND		100	69	ug/L			05/08/24 17:32	1
Trichlorofluoromethane	ND		100	87	ug/L			05/08/24 17:32	1
Vinyl chloride	ND	^c	100	41	ug/L			05/08/24 17:32	1
Xylenes, Total	ND		200	89	ug/L			05/08/24 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		52 - 151		05/08/24 17:32	1
4-Bromofluorobenzene (Surr)	85		49 - 118		05/08/24 17:32	1
Dibromofluoromethane (Surr)	96		60 - 132		05/08/24 17:32	1
Toluene-d8 (Surr)	102		53 - 124		05/08/24 17:32	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,2'-oxybis[1-chloropropane]	ND	^c	65	24	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4,5-Trichlorophenol	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4,6-Trichlorophenol	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4-Dichlorophenol	ND		65	25	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4-Dimethylphenol	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4-Dinitrophenol	ND		3200	2000	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,4-Dinitrotoluene	ND		320	190	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2,6-Dinitrotoluene	ND		320	130	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Chloronaphthalene	ND		65	15	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Chlorophenol	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Methylnaphthalene	74		65	15	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Methylphenol	ND		320	93	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Nitroaniline	ND	^c	1600	150	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
2-Nitrophenol	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
3,3'-Dichlorobenzidine	ND		320	300	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
3-Nitroaniline	ND		1600	82	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4,6-Dinitro-2-methylphenol	ND		1600	560	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Bromophenyl phenyl ether	ND		320	140	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Chloro-3-methylphenol	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Chloroaniline	ND		320	85	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Chlorophenyl phenyl ether	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Methylphenol, 3 & 4	ND		320	95	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Nitroaniline	ND		1600	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
4-Nitrophenol	ND		1600	230	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Acenaphthene	ND		65	19	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Acenaphthylene	ND		65	14	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Acetophenone	ND		650	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Anthracene	ND		65	17	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Atrazine	ND		650	140	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzaldehyde	ND		650	40	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzo[a]anthracene	ND		65	29	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzo[a]pyrene	ND		65	28	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzo[b]fluoranthene	ND		65	16	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzo[g,h,i]perylene	ND		65	14	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Benzo[k]fluoranthene	ND		65	19	ug/Kg		05/05/24 12:25	05/06/24 17:48	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Bis(2-chloroethyl)ether	ND		65	20	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Bis(2-ethylhexyl) phthalate	ND		3200	340	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Butyl benzyl phthalate	ND		1600	220	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Caprolactam	ND		1600	210	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Carbazole	ND		65	15	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Chrysene	ND		65	36	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Dibenz(a,h)anthracene	ND		65	41	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Dibenzofuran	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Diethyl phthalate	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Dimethyl phthalate	ND		650	360	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Di-n-butyl phthalate	ND		3200	670	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Di-n-octyl phthalate	ND		320	190	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Fluoranthene	ND		65	17	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Fluorene	ND		65	13	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Hexachlorobenzene	ND		65	23	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Hexachlorobutadiene	ND		65	19	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Hexachlorocyclopentadiene	ND		320	87	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Hexachloroethane	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Indeno[1,2,3-cd]pyrene	ND		65	32	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Isophorone	ND		320	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Naphthalene	ND		65	13	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Nitrobenzene	ND	^c	650	120	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
N-Nitrosodi-n-propylamine	ND	^c	65	22	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
N-Nitrosodiphenylamine	ND		320	110	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Pentachlorophenol	ND		1600	520	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Phenanthrene	210		65	17	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Phenol	ND		320	98	ug/Kg		05/05/24 12:25	05/06/24 17:48	1
Pyrene	ND		65	23	ug/Kg		05/05/24 12:25	05/06/24 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	56		34 - 108	05/05/24 12:25	05/06/24 17:48	1
2-Fluorobiphenyl	61		44 - 105	05/05/24 12:25	05/06/24 17:48	1
2-Fluorophenol (Surr)	65		48 - 105	05/05/24 12:25	05/06/24 17:48	1
Nitrobenzene-d5 (Surr)	74		46 - 105	05/05/24 12:25	05/06/24 17:48	1
Phenol-d5 (Surr)	66		46 - 105	05/05/24 12:25	05/06/24 17:48	1
Terphenyl-d14 (Surr)	60		39 - 105	05/05/24 12:25	05/06/24 17:48	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4-Dinitrophenol	ND		100	33	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		05/08/24 14:42	05/13/24 15:42	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		05/08/24 14:42	05/13/24 15:42	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 15:42	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		10	2.3	ug/L		05/08/24 14:42	05/13/24 15:42	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		05/08/24 14:42	05/13/24 15:42	1
2-Methylphenol	ND		10	5.6	ug/L		05/08/24 14:42	05/13/24 15:42	1
2-Nitroaniline	ND		50	5.5	ug/L		05/08/24 14:42	05/13/24 15:42	1
2-Nitrophenol	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		05/08/24 14:42	05/13/24 15:42	1
3-Nitroaniline	ND		50	4.4	ug/L		05/08/24 14:42	05/13/24 15:42	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Chloroaniline	ND		10	3.8	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 15:42	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Nitroaniline	ND		50	3.6	ug/L		05/08/24 14:42	05/13/24 15:42	1
4-Nitrophenol	ND		50	9.4	ug/L		05/08/24 14:42	05/13/24 15:42	1
Acenaphthene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 15:42	1
Acenaphthylene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 15:42	1
Acetophenone	ND		10	1.6	ug/L		05/08/24 14:42	05/13/24 15:42	1
Anthracene	ND		1.9	0.49	ug/L		05/08/24 14:42	05/13/24 15:42	1
Atrazine	ND		10	6.3	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzaldehyde	ND		10	5.4	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 15:42	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		05/08/24 14:42	05/13/24 15:42	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		05/08/24 14:42	05/13/24 15:42	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		05/08/24 14:42	05/13/24 15:42	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		05/08/24 14:42	05/13/24 15:42	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		05/08/24 14:42	05/13/24 15:42	1
Caprolactam	ND		50	14	ug/L		05/08/24 14:42	05/13/24 15:42	1
Carbazole	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 15:42	1
Chrysene	ND		1.9	0.81	ug/L		05/08/24 14:42	05/13/24 15:42	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		05/08/24 14:42	05/13/24 15:42	1
Dibenzofuran	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
Diethyl phthalate	ND		10	5.7	ug/L		05/08/24 14:42	05/13/24 15:42	1
Dimethyl phthalate	ND		20	2.0	ug/L		05/08/24 14:42	05/13/24 15:42	1
Di-n-butyl phthalate	ND		100	49	ug/L		05/08/24 14:42	05/13/24 15:42	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
Fluoranthene	ND		1.9	0.60	ug/L		05/08/24 14:42	05/13/24 15:42	1
Fluorene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 15:42	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		05/08/24 14:42	05/13/24 15:42	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 15:42	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/24 14:42	05/13/24 15:42	1
Hexachloroethane	ND		10	1.3	ug/L		05/08/24 14:42	05/13/24 15:42	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		05/08/24 14:42	05/13/24 15:42	1
Isophorone	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
Naphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 15:42	1
Nitrobenzene	ND		20	5.0	ug/L		05/08/24 14:42	05/13/24 15:42	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		05/08/24 14:42	05/13/24 15:42	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		05/08/24 14:42	05/13/24 15:42	1
Pentachlorophenol	ND	^c	50	8.5	ug/L		05/08/24 14:42	05/13/24 15:42	1
Phenanthrene	ND		1.9	1.6	ug/L		05/08/24 14:42	05/13/24 15:42	1
Phenol	ND		10	4.9	ug/L		05/08/24 14:42	05/13/24 15:42	1
Pyrene	ND		1.9	0.54	ug/L		05/08/24 14:42	05/13/24 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	58		39 - 121	05/08/24 14:42	05/13/24 15:42	1
2-Fluorobiphenyl	53		45 - 105	05/08/24 14:42	05/13/24 15:42	1
2-Fluorophenol (Surr)	51		38 - 105	05/08/24 14:42	05/13/24 15:42	1
Nitrobenzene-d5 (Surr)	51		45 - 106	05/08/24 14:42	05/13/24 15:42	1
Phenol-d5 (Surr)	56		38 - 105	05/08/24 14:42	05/13/24 15:42	1
Terphenyl-d14 (Surr)	42		28 - 125	05/08/24 14:42	05/13/24 15:42	1

Method: SW846 EPA 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.27	0.055	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Aluminum	3600		11	5.0	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Arsenic	4.2		0.53	0.33	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Antimony	0.51	J	0.53	0.16	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Barium	22		11	1.9	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Beryllium	0.32		0.21	0.058	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Cadmium	0.10	J	0.27	0.039	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Calcium	600		270	34	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Chromium	9.5		0.27	0.24	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Cobalt	5.0		2.7	0.37	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Copper	28		1.3	0.80	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Iron	12000		21	15	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Lead	60		5.3	3.3	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Magnesium	1200		270	29	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Manganese	110		0.80	0.61	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Nickel	14		2.1	0.27	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Potassium	450		270	45	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Selenium	ND		2.7	1.2	mg/Kg		05/07/24 10:00	05/10/24 10:41	5
Sodium	43	J	270	27	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Thallium	ND		1.1	0.15	mg/Kg		05/07/24 10:00	05/28/24 17:02	1
Vanadium	16		2.7	0.42	mg/Kg		05/07/24 10:00	05/09/24 00:35	1
Zinc	73		5.3	2.4	mg/Kg		05/07/24 10:00	05/09/24 00:35	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/16/24 16:16	1
Aluminum	8600		200	110	ug/L		05/11/24 07:04	05/13/24 19:29	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/13/24 19:29	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/13/24 19:29	1
Barium	40	J	200	27	ug/L		05/11/24 07:04	05/13/24 19:29	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/13/24 19:29	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/13/24 19:29	1
Calcium	1300	J	5000	640	ug/L		05/11/24 07:04	05/13/24 19:29	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-2 (ISS-2)

Lab Sample ID: 180-173221-1

Date Collected: 04/29/24 14:33

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	13		5.0	3.1	ug/L		05/11/24 07:04	05/13/24 19:29	1
Cobalt	6.3	J	50	3.4	ug/L		05/11/24 07:04	05/13/24 19:29	1
Copper	23	J	25	2.2	ug/L		05/11/24 07:04	05/16/24 16:16	1
Iron	15000	^2	100	72	ug/L		05/11/24 07:04	05/13/24 19:29	1
Lead	60		10	4.4	ug/L		05/11/24 07:04	05/13/24 19:29	1
Magnesium	1600	J	5000	690	ug/L		05/11/24 07:04	05/13/24 19:29	1
Manganese	98		15	2.4	ug/L		05/11/24 07:04	05/13/24 19:29	1
Nickel	8.6	J	40	3.5	ug/L		05/11/24 07:04	05/16/24 16:16	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/13/24 19:29	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/13/24 19:29	1
Sodium	31000	B	5000	800	ug/L		05/11/24 07:04	05/13/24 19:29	1
Thallium	4.2	J	20	3.0	ug/L		05/11/24 07:04	05/13/24 19:29	1
Vanadium	33	J	50	5.3	ug/L		05/11/24 07:04	05/13/24 19:29	1
Zinc	72		50	42	ug/L		05/11/24 07:04	05/13/24 19:29	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:30	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.020	mg/Kg		05/09/24 14:35	05/10/24 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.7	!	0.1	0.1	%			04/30/24 20:33	1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	1.5	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1,1-Trichloroethane	ND		2500	830	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,1,2,2-Tetrachloroethane	ND		4.4	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1,2,2-Tetrachloroethane	ND		2500	760	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*-	4.4	1.8	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	1000	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,1,2-Trichloroethane	ND		4.4	0.88	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1,2-Trichloroethane	ND		2500	490	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,1-Dichloroethane	ND		4.4	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1-Dichloroethane	ND		2500	800	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,1-Dichloroethene	ND		4.4	2.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,1-Dichloroethene	ND		2500	1100	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,2-Dibromo-3-Chloropropane	ND	^c	4.4	2.9	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2-Dibromo-3-Chloropropane	ND	^c	2500	1600	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,2-Dichlorobenzene	ND		4.4	1.5	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2-Dichlorobenzene	ND		2500	840	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,2-Dichloroethane	ND		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2-Dichloroethane	ND		2500	720	ug/Kg		05/13/24 07:11	05/13/24 15:10	10

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		4.4	1.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2-Dichloropropane	ND		2500	660	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,2,4-Trichlorobenzene	ND		4.4	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2,4-Trichlorobenzene	ND	^c	2500	1300	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,3-Dichlorobenzene	ND		4.4	2.7	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,3-Dichlorobenzene	ND		2500	1500	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,4-Dichlorobenzene	ND		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,4-Dichlorobenzene	ND		2500	750	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
2-Butanone (MEK)	ND		22	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
2-Butanone (MEK)	ND	^c	12000	1300	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
2-Hexanone	ND	^c	22	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
2-Hexanone	ND	^c	12000	780	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
4-Methyl-2-pentanone (MIBK)	ND	*1 ^c	22	1.6	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
4-Methyl-2-pentanone (MIBK)	ND	^c	12000	910	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Acetone	ND	*1 ^c	22	3.5	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Acetone	ND		12000	1900	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Benzene	12		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Benzene	ND		2500	700	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Bromoform	ND		4.4	2.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Bromoform	ND		2500	1300	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Bromomethane	ND	*1	4.4	2.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Bromomethane	ND		2500	1100	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Carbon disulfide	ND		4.4	3.6	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Carbon disulfide	ND	^c	2500	2000	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Carbon tetrachloride	ND		4.4	1.8	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Carbon tetrachloride	ND		2500	1000	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Chlorobenzene	ND		4.4	1.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Chlorobenzene	ND		2500	650	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Chlorodibromomethane	ND		4.4	2.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Chlorodibromomethane	ND		2500	1200	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Chloroform	ND		4.4	3.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Chloroform	ND		2500	1700	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Chloromethane	ND	^c	4.4	1.8	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Chloromethane	ND	^c	2500	990	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Chloroethane	ND	*+ ^c	4.4	2.6	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Chloroethane	ND	^c	2500	1500	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
cis-1,2-Dichloroethene	ND		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
cis-1,2-Dichloroethene	ND		2500	750	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
cis-1,3-Dichloropropene	ND		4.4	2.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
cis-1,3-Dichloropropene	ND		2500	1100	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Dichlorobromomethane	ND		4.4	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Dichlorobromomethane	ND		2500	1200	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Dichlorodifluoromethane	ND	^c	4.4	2.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Dichlorodifluoromethane	ND	^c	2500	1200	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Ethylbenzene	210		4.4	1.6	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Ethylbenzene	6100		2500	920	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
1,2-Dibromoethane	ND		4.4	1.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
1,2-Dibromoethane	ND		2500	680	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Cyclohexane	33		4.4	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:02	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		2500	1200	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Isopropylbenzene	24		4.4	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Isopropylbenzene	ND		2500	1300	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Methyl acetate	62		22	6.5	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Methyl acetate	ND		12000	3700	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Methyl tert-butyl ether	ND		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Methyl tert-butyl ether	ND		2500	730	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Methylcyclohexane	40		4.4	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Methylcyclohexane	1500	J	2500	1200	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Methylene Chloride	ND		4.4	4.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Methylene Chloride	ND		2500	2300	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Styrene	ND	*+ ^c	4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Styrene	ND		2500	750	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Tetrachloroethene	ND	^c	4.4	1.8	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Tetrachloroethene	ND		2500	1000	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Toluene	43		4.4	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Toluene	810	J	2500	720	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
trans-1,2-Dichloroethene	ND		4.4	1.6	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
trans-1,2-Dichloroethene	ND		2500	870	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
trans-1,3-Dichloropropene	ND		4.4	2.0	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
trans-1,3-Dichloropropene	ND		2500	1100	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Trichloroethene	ND		4.4	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Trichloroethene	ND		2500	780	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Trichlorofluoromethane	ND	^c	4.4	3.7	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Trichlorofluoromethane	ND	^c	2500	2100	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Vinyl chloride	ND		4.4	3.2	ug/Kg		05/05/24 08:15	05/05/24 17:02	1
Vinyl chloride	ND		2500	1800	ug/Kg		05/13/24 07:11	05/13/24 15:10	10
Xylenes, Total	1700	E	8.9	6.4	ug/Kg		05/05/24 08:15	05/05/24 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		73 - 135	05/05/24 08:15	05/05/24 17:02	1
1,2-Dichloroethane-d4 (Surr)	75		49 - 147	05/13/24 07:11	05/13/24 15:10	10
4-Bromofluorobenzene (Surr)	78		60 - 124	05/05/24 08:15	05/05/24 17:02	1
4-Bromofluorobenzene (Surr)	94		54 - 119	05/13/24 07:11	05/13/24 15:10	10
Dibromofluoromethane (Surr)	88		69 - 126	05/05/24 08:15	05/05/24 17:02	1
Dibromofluoromethane (Surr)	68		57 - 126	05/13/24 07:11	05/13/24 15:10	10
Toluene-d8 (Surr)	99		67 - 134	05/05/24 08:15	05/05/24 17:02	1
Toluene-d8 (Surr)	81		55 - 118	05/13/24 07:11	05/13/24 15:10	10

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	85000		50000	36000	ug/Kg		05/13/24 07:11	05/13/24 17:15	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		49 - 147	05/13/24 07:11	05/13/24 17:15	100
4-Bromofluorobenzene (Surr)	100		54 - 119	05/13/24 07:11	05/13/24 17:15	100
Dibromofluoromethane (Surr)	82		57 - 126	05/13/24 07:11	05/13/24 17:15	100
Toluene-d8 (Surr)	89		55 - 118	05/13/24 07:11	05/13/24 17:15	100

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	60	ug/L			05/08/24 17:53	1
1,1,2,2-Tetrachloroethane	ND		100	60	ug/L			05/08/24 17:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	86	ug/L			05/08/24 17:53	1
1,1,2-Trichloroethane	ND		100	45	ug/L			05/08/24 17:53	1
1,1-Dichloroethane	ND		100	63	ug/L			05/08/24 17:53	1
1,1-Dichloroethene	ND		100	55	ug/L			05/08/24 17:53	1
1,2-Dibromo-3-Chloropropane	ND	^c	100	89	ug/L			05/08/24 17:53	1
1,2-Dichlorobenzene	ND		100	36	ug/L			05/08/24 17:53	1
1,2-Dichloroethane	ND		100	57	ug/L			05/08/24 17:53	1
1,2-Dichloropropane	ND		100	66	ug/L			05/08/24 17:53	1
1,2,4-Trichlorobenzene	ND	^c	100	77	ug/L			05/08/24 17:53	1
1,3-Dichlorobenzene	ND		100	50	ug/L			05/08/24 17:53	1
1,4-Dichlorobenzene	ND		100	54	ug/L			05/08/24 17:53	1
2-Butanone (MEK)	ND		500	260	ug/L			05/08/24 17:53	1
2-Hexanone	ND		500	330	ug/L			05/08/24 17:53	1
4-Methyl-2-pentanone (MIBK)	ND		500	310	ug/L			05/08/24 17:53	1
Acetone	ND	^c	500	340	ug/L			05/08/24 17:53	1
Benzene	ND		100	60	ug/L			05/08/24 17:53	1
Bromoform	ND		100	98	ug/L			05/08/24 17:53	1
Bromomethane	ND	^c	100	89	ug/L			05/08/24 17:53	1
Carbon disulfide	ND	^c	100	88	ug/L			05/08/24 17:53	1
Carbon tetrachloride	ND		100	88	ug/L			05/08/24 17:53	1
Chlorobenzene	ND		100	50	ug/L			05/08/24 17:53	1
Chlorodibromomethane	ND		100	84	ug/L			05/08/24 17:53	1
Chloroform	ND		100	60	ug/L			05/08/24 17:53	1
Chloromethane	ND		100	90	ug/L			05/08/24 17:53	1
Chloroethane	ND	^c	100	90	ug/L			05/08/24 17:53	1
cis-1,2-Dichloroethene	ND		100	71	ug/L			05/08/24 17:53	1
cis-1,3-Dichloropropene	ND		100	59	ug/L			05/08/24 17:53	1
Dichlorobromomethane	ND		100	64	ug/L			05/08/24 17:53	1
Dichlorodifluoromethane	ND		100	83	ug/L			05/08/24 17:53	1
Ethylbenzene	ND		100	51	ug/L			05/08/24 17:53	1
1,2-Dibromoethane	ND		100	50	ug/L			05/08/24 17:53	1
Cyclohexane	ND		100	63	ug/L			05/08/24 17:53	1
Isopropylbenzene	ND		100	34	ug/L			05/08/24 17:53	1
Methyl acetate	ND		500	170	ug/L			05/08/24 17:53	1
Methyl tert-butyl ether	ND		100	59	ug/L			05/08/24 17:53	1
Methylcyclohexane	ND		100	61	ug/L			05/08/24 17:53	1
Methylene Chloride	ND		100	89	ug/L			05/08/24 17:53	1
Styrene	ND		100	47	ug/L			05/08/24 17:53	1
Tetrachloroethene	ND		100	47	ug/L			05/08/24 17:53	1
Toluene	ND		100	46	ug/L			05/08/24 17:53	1
trans-1,2-Dichloroethene	ND		100	67	ug/L			05/08/24 17:53	1
trans-1,3-Dichloropropene	ND		100	58	ug/L			05/08/24 17:53	1
Trichloroethene	ND		100	69	ug/L			05/08/24 17:53	1
Trichlorofluoromethane	ND		100	87	ug/L			05/08/24 17:53	1
Vinyl chloride	ND	^c	100	41	ug/L			05/08/24 17:53	1
Xylenes, Total	310		200	89	ug/L			05/08/24 17:53	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		52 - 151		05/08/24 17:53	1
4-Bromofluorobenzene (Surr)	95		49 - 118		05/08/24 17:53	1
Dibromofluoromethane (Surr)	88		60 - 132		05/08/24 17:53	1
Toluene-d8 (Surr)	103		53 - 124		05/08/24 17:53	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,2'-oxybis[1-chloropropane]	ND	^c	66	24	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4,5-Trichlorophenol	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4,6-Trichlorophenol	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4-Dichlorophenol	ND		66	25	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4-Dimethylphenol	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4-Dinitrophenol	ND		3300	2000	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,4-Dinitrotoluene	ND		330	200	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2,6-Dinitrotoluene	ND		330	130	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Chloronaphthalene	ND		66	15	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Chlorophenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Methylnaphthalene	1900		66	16	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Methylphenol	ND		330	94	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Nitroaniline	ND	^c	1700	150	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
2-Nitrophenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
3,3'-Dichlorobenzidine	ND		330	310	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
3-Nitroaniline	ND		1700	84	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4,6-Dinitro-2-methylphenol	ND		1700	570	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Bromophenyl phenyl ether	ND		330	140	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Chloro-3-methylphenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Chloroaniline	ND		330	86	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Chlorophenyl phenyl ether	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Methylphenol, 3 & 4	ND		330	97	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Nitroaniline	ND		1700	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
4-Nitrophenol	ND		1700	230	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Acenaphthene	ND		66	19	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Acenaphthylene	110		66	14	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Acetophenone	ND		660	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Anthracene	290		66	17	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Atrazine	ND		660	140	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzaldehyde	ND		660	41	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzo[a]anthracene	140		66	30	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzo[a]pyrene	170		66	29	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzo[b]fluoranthene	180		66	16	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzo[g,h,i]perylene	150		66	14	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Benzo[k]fluoranthene	74		66	20	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Bis(2-chloroethoxy)methane	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Bis(2-chloroethyl)ether	ND		66	20	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Bis(2-ethylhexyl) phthalate	ND		3300	350	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Butyl benzyl phthalate	ND		1600	230	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Caprolactam	ND		1700	210	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Carbazole	ND		66	15	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Chrysene	220		66	37	ug/Kg		05/05/24 12:25	05/06/24 18:09	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		66	42	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Dibenzofuran	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Diethyl phthalate	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Dimethyl phthalate	ND		660	360	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Di-n-butyl phthalate	ND		3300	680	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Di-n-octyl phthalate	ND		330	190	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Fluoranthene	260		66	17	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Fluorene	200		66	13	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Hexachlorobenzene	ND		66	24	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Hexachlorobutadiene	ND		66	19	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Hexachlorocyclopentadiene	ND		330	89	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Hexachloroethane	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Indeno[1,2,3-cd]pyrene	120		66	33	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Isophorone	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Naphthalene	1100		66	13	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Nitrobenzene	ND	^c	660	120	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
N-Nitrosodi-n-propylamine	ND	^c	66	22	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
N-Nitrosodiphenylamine	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Pentachlorophenol	ND		1700	530	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Phenanthrene	200		66	18	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Phenol	ND		330	100	ug/Kg		05/05/24 12:25	05/06/24 18:09	1
Pyrene	560		66	23	ug/Kg		05/05/24 12:25	05/06/24 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	64		34 - 108	05/05/24 12:25	05/06/24 18:09	1
2-Fluorobiphenyl	70		44 - 105	05/05/24 12:25	05/06/24 18:09	1
2-Fluorophenol (Surr)	76		48 - 105	05/05/24 12:25	05/06/24 18:09	1
Nitrobenzene-d5 (Surr)	87		46 - 105	05/05/24 12:25	05/06/24 18:09	1
Phenol-d5 (Surr)	74		46 - 105	05/05/24 12:25	05/06/24 18:09	1
Terphenyl-d14 (Surr)	68		39 - 105	05/05/24 12:25	05/06/24 18:09	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	1.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.66	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4,5-Trichlorophenol	ND		11	2.9	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4,6-Trichlorophenol	ND		11	2.5	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4-Dichlorophenol	ND		2.2	0.58	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4-Dimethylphenol	ND		11	6.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4-Dinitrophenol	ND		110	37	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,4-Dinitrotoluene	ND		11	4.0	ug/L		05/08/24 14:42	05/13/24 16:04	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Chloronaphthalene	ND		2.2	0.67	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Chlorophenol	ND		11	2.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Methylnaphthalene	3.2		2.2	0.70	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Methylphenol	ND		11	6.3	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Nitroaniline	ND		57	6.2	ug/L		05/08/24 14:42	05/13/24 16:04	1
2-Nitrophenol	ND		11	2.2	ug/L		05/08/24 14:42	05/13/24 16:04	1
3,3'-Dichlorobenzidine	ND		11	6.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
3-Nitroaniline	ND		57	5.0	ug/L		05/08/24 14:42	05/13/24 16:04	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		57	17	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Bromophenyl phenyl ether	ND		11	3.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Chloro-3-methylphenol	ND		11	4.9	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Chloroaniline	ND		11	4.3	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Chlorophenyl phenyl ether	ND		11	2.5	ug/L		05/08/24 14:42	05/13/24 16:04	1
Methylphenol, 3 & 4	ND		11	4.2	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Nitroaniline	ND		57	4.1	ug/L		05/08/24 14:42	05/13/24 16:04	1
4-Nitrophenol	ND		57	11	ug/L		05/08/24 14:42	05/13/24 16:04	1
Acenaphthene	14		2.2	0.74	ug/L		05/08/24 14:42	05/13/24 16:04	1
Acenaphthylene	1.7	J	2.2	0.74	ug/L		05/08/24 14:42	05/13/24 16:04	1
Acetophenone	ND		11	1.8	ug/L		05/08/24 14:42	05/13/24 16:04	1
Anthracene	19		2.2	0.56	ug/L		05/08/24 14:42	05/13/24 16:04	1
Atrazine	ND		11	7.2	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzaldehyde	ND		11	6.1	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzo[a]anthracene	ND		2.2	0.85	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzo[a]pyrene	ND		2.2	0.60	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzo[b]fluoranthene	ND		2.2	1.1	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzo[g,h,i]perylene	ND		2.2	0.78	ug/L		05/08/24 14:42	05/13/24 16:04	1
Benzo[k]fluoranthene	ND		2.2	1.0	ug/L		05/08/24 14:42	05/13/24 16:04	1
Bis(2-chloroethoxy)methane	ND		11	1.7	ug/L		05/08/24 14:42	05/13/24 16:04	1
Bis(2-chloroethyl)ether	ND		2.2	0.45	ug/L		05/08/24 14:42	05/13/24 16:04	1
Bis(2-ethylhexyl) phthalate	ND		110	71	ug/L		05/08/24 14:42	05/13/24 16:04	1
Butyl benzyl phthalate	ND		23	11	ug/L		05/08/24 14:42	05/13/24 16:04	1
Caprolactam	ND		57	16	ug/L		05/08/24 14:42	05/13/24 16:04	1
Carbazole	77		2.2	0.58	ug/L		05/08/24 14:42	05/13/24 16:04	1
Chrysene	ND		2.2	0.92	ug/L		05/08/24 14:42	05/13/24 16:04	1
Dibenz(a,h)anthracene	ND		2.2	0.82	ug/L		05/08/24 14:42	05/13/24 16:04	1
Dibenzofuran	9.2	J	11	2.2	ug/L		05/08/24 14:42	05/13/24 16:04	1
Diethyl phthalate	ND		11	6.4	ug/L		05/08/24 14:42	05/13/24 16:04	1
Dimethyl phthalate	ND		23	2.3	ug/L		05/08/24 14:42	05/13/24 16:04	1
Di-n-butyl phthalate	ND		110	56	ug/L		05/08/24 14:42	05/13/24 16:04	1
Di-n-octyl phthalate	ND		11	7.8	ug/L		05/08/24 14:42	05/13/24 16:04	1
Fluoranthene	3.9		2.2	0.68	ug/L		05/08/24 14:42	05/13/24 16:04	1
Fluorene	20		2.2	0.78	ug/L		05/08/24 14:42	05/13/24 16:04	1
Hexachlorobenzene	ND		2.2	0.64	ug/L		05/08/24 14:42	05/13/24 16:04	1
Hexachlorobutadiene	ND		2.2	0.78	ug/L		05/08/24 14:42	05/13/24 16:04	1
Hexachlorocyclopentadiene	ND		11	5.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
Hexachloroethane	ND		11	1.5	ug/L		05/08/24 14:42	05/13/24 16:04	1
Indeno[1,2,3-cd]pyrene	ND		2.2	0.97	ug/L		05/08/24 14:42	05/13/24 16:04	1
Isophorone	ND		11	2.1	ug/L		05/08/24 14:42	05/13/24 16:04	1
Naphthalene	ND		2.2	0.67	ug/L		05/08/24 14:42	05/13/24 16:04	1
Nitrobenzene	ND		23	5.7	ug/L		05/08/24 14:42	05/13/24 16:04	1
N-Nitrosodi-n-propylamine	ND		2.2	0.81	ug/L		05/08/24 14:42	05/13/24 16:04	1
N-Nitrosodiphenylamine	ND		11	1.4	ug/L		05/08/24 14:42	05/13/24 16:04	1
Pentachlorophenol	ND	^c	57	9.6	ug/L		05/08/24 14:42	05/13/24 16:04	1
Phenanthrene	17		2.2	1.8	ug/L		05/08/24 14:42	05/13/24 16:04	1
Phenol	ND		11	5.5	ug/L		05/08/24 14:42	05/13/24 16:04	1
Pyrene	2.9		2.2	0.61	ug/L		05/08/24 14:42	05/13/24 16:04	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Lab Sample ID: 180-173221-2

Date Collected: 04/29/24 14:59

Matrix: Solid

Date Received: 04/30/24 12:06

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	76		39 - 121	05/08/24 14:42	05/13/24 16:04	1
2-Fluorobiphenyl	67		45 - 105	05/08/24 14:42	05/13/24 16:04	1
2-Fluorophenol (Surr)	61		38 - 105	05/08/24 14:42	05/13/24 16:04	1
Nitrobenzene-d5 (Surr)	62		45 - 106	05/08/24 14:42	05/13/24 16:04	1
Phenol-d5 (Surr)	66		38 - 105	05/08/24 14:42	05/13/24 16:04	1
Terphenyl-d14 (Surr)	54		28 - 125	05/08/24 14:42	05/13/24 16:04	1

Method: SW846 EPA 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.42	0.088	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Aluminum	4300		17	7.9	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Arsenic	2.8		0.85	0.53	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Antimony	0.37	J	0.85	0.26	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Barium	31		17	3.0	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Beryllium	0.34		0.34	0.092	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Cadmium	ND		0.42	0.062	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Calcium	600		420	55	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Chromium	9.0		0.42	0.39	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Cobalt	5.0		4.2	0.60	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Copper	13		2.1	1.3	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Iron	12000		34	24	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Lead	17		8.5	5.3	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Magnesium	1700		420	47	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Manganese	240		1.3	0.97	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Nickel	9.4		3.4	0.43	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Potassium	650		420	72	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Selenium	ND		4.2	2.0	mg/Kg		05/07/24 10:00	05/10/24 10:51	5
Sodium	46	J	420	43	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Thallium	ND		1.7	0.24	mg/Kg		05/07/24 10:00	05/28/24 17:07	1
Vanadium	15		4.2	0.67	mg/Kg		05/07/24 10:00	05/09/24 00:40	1
Zinc	34		8.5	3.9	mg/Kg		05/07/24 10:00	05/09/24 00:40	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/16/24 15:46	1
Aluminum	ND		200	110	ug/L		05/11/24 07:04	05/13/24 18:59	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/13/24 18:59	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/13/24 18:59	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/13/24 18:59	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/13/24 18:59	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/13/24 18:59	1
Calcium	2200	J	5000	640	ug/L		05/11/24 07:04	05/13/24 18:59	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/13/24 18:59	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/13/24 18:59	1
Copper	ND		25	2.2	ug/L		05/11/24 07:04	05/16/24 15:46	1
Iron	ND		100	72	ug/L		05/11/24 07:04	05/13/24 18:59	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/13/24 18:59	1
Magnesium	790	J	5000	690	ug/L		05/11/24 07:04	05/13/24 18:59	1
Manganese	160		15	2.4	ug/L		05/11/24 07:04	05/13/24 18:59	1
Nickel	ND		40	3.5	ug/L		05/11/24 07:04	05/16/24 15:46	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-3

Date Collected: 04/29/24 14:59

Date Received: 04/30/24 12:06

Lab Sample ID: 180-173221-2

Matrix: Solid

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/13/24 18:59	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/13/24 18:59	1
Sodium	1500	J B	5000	800	ug/L		05/11/24 07:04	05/13/24 18:59	1
Thallium	ND		20	3.0	ug/L		05/11/24 07:04	05/13/24 18:59	1
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/13/24 18:59	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/13/24 18:59	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:29	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.029	0.019	mg/Kg		05/09/24 14:35	05/10/24 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	15.6	!	0.1	0.1	%			04/30/24 20:33	1

Client Sample ID: COMP-4

Date Collected: 04/29/24 15:20

Date Received: 04/30/24 12:06

Lab Sample ID: 180-173221-3

Matrix: Solid

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	1.6	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,1,2,2-Tetrachloroethane	2.2	J	4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*-	4.7	1.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,1,2-Trichloroethane	ND		4.7	0.93	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,1-Dichloroethane	ND		4.7	1.5	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,1-Dichloroethene	ND		4.7	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2-Dibromo-3-Chloropropane	ND	^c	4.7	3.0	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2-Dichlorobenzene	ND		4.7	1.6	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2-Dichloroethane	ND		4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2-Dichloropropane	ND		4.7	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2,4-Trichlorobenzene	ND		4.7	2.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,3-Dichlorobenzene	ND		4.7	2.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,4-Dichlorobenzene	ND		4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
2-Butanone (MEK)	ND		24	2.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
2-Hexanone	ND	^c	24	1.5	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
4-Methyl-2-pentanone (MIBK)	ND	*1 ^c	24	1.7	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Acetone	ND	*1 ^c	24	3.7	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Benzene	ND		4.7	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Bromoform	ND		4.7	2.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Bromomethane	ND	*1	4.7	2.2	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Carbon disulfide	ND		4.7	3.8	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Carbon tetrachloride	ND		4.7	1.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Chlorobenzene	ND		4.7	1.2	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Chlorodibromomethane	ND		4.7	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Chloroform	ND		4.7	3.2	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Chloromethane	ND	^c	4.7	1.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND	*+ ^c	4.7	2.8	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
cis-1,2-Dichloroethene	ND		4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
cis-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Dichlorobromomethane	ND		4.7	2.2	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Dichlorodifluoromethane	ND	^c	4.7	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Ethylbenzene	6.6		4.7	1.7	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
1,2-Dibromoethane	ND		4.7	1.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Cyclohexane	ND		4.7	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Isopropylbenzene	ND		4.7	2.5	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Methyl acetate	17	J	24	6.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Methyl tert-butyl ether	ND		4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Methylcyclohexane	6.6		4.7	2.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Methylene Chloride	ND		4.7	4.3	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Styrene	ND	*+ ^c	4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Tetrachloroethene	ND	^c	4.7	1.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Toluene	ND		4.7	1.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
trans-1,2-Dichloroethene	ND		4.7	1.7	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
trans-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Trichloroethene	ND		4.7	1.5	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Trichlorofluoromethane	ND	^c	4.7	3.9	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Vinyl chloride	ND		4.7	3.4	ug/Kg		05/05/24 08:15	05/05/24 17:23	1
Xylenes, Total	24		9.4	6.8	ug/Kg		05/05/24 08:15	05/05/24 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		73 - 135	05/05/24 08:15	05/05/24 17:23	1
4-Bromofluorobenzene (Surr)	80		60 - 124	05/05/24 08:15	05/05/24 17:23	1
Dibromofluoromethane (Surr)	84		69 - 126	05/05/24 08:15	05/05/24 17:23	1
Toluene-d8 (Surr)	100		67 - 134	05/05/24 08:15	05/05/24 17:23	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	60	ug/L			05/08/24 18:14	1
1,1,2,2-Tetrachloroethane	ND		100	60	ug/L			05/08/24 18:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	86	ug/L			05/08/24 18:14	1
1,1,2-Trichloroethane	ND		100	45	ug/L			05/08/24 18:14	1
1,1-Dichloroethane	ND		100	63	ug/L			05/08/24 18:14	1
1,1-Dichloroethene	ND		100	55	ug/L			05/08/24 18:14	1
1,2-Dibromo-3-Chloropropane	ND	^c	100	89	ug/L			05/08/24 18:14	1
1,2-Dichlorobenzene	ND		100	36	ug/L			05/08/24 18:14	1
1,2-Dichloroethane	ND		100	57	ug/L			05/08/24 18:14	1
1,2-Dichloropropane	ND		100	66	ug/L			05/08/24 18:14	1
1,2,4-Trichlorobenzene	ND	^c	100	77	ug/L			05/08/24 18:14	1
1,3-Dichlorobenzene	ND		100	50	ug/L			05/08/24 18:14	1
1,4-Dichlorobenzene	ND		100	54	ug/L			05/08/24 18:14	1
2-Butanone (MEK)	ND		500	260	ug/L			05/08/24 18:14	1
2-Hexanone	ND		500	330	ug/L			05/08/24 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		500	310	ug/L			05/08/24 18:14	1
Acetone	ND	^c	500	340	ug/L			05/08/24 18:14	1
Benzene	ND		100	60	ug/L			05/08/24 18:14	1
Bromoform	ND		100	98	ug/L			05/08/24 18:14	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND	^c	100	89	ug/L			05/08/24 18:14	1
Carbon disulfide	ND	^c	100	88	ug/L			05/08/24 18:14	1
Carbon tetrachloride	ND		100	88	ug/L			05/08/24 18:14	1
Chlorobenzene	ND		100	50	ug/L			05/08/24 18:14	1
Chlorodibromomethane	ND		100	84	ug/L			05/08/24 18:14	1
Chloroform	ND		100	60	ug/L			05/08/24 18:14	1
Chloromethane	ND		100	90	ug/L			05/08/24 18:14	1
Chloroethane	ND	^c	100	90	ug/L			05/08/24 18:14	1
cis-1,2-Dichloroethene	ND		100	71	ug/L			05/08/24 18:14	1
cis-1,3-Dichloropropene	ND		100	59	ug/L			05/08/24 18:14	1
Dichlorobromomethane	ND		100	64	ug/L			05/08/24 18:14	1
Dichlorodifluoromethane	ND		100	83	ug/L			05/08/24 18:14	1
Ethylbenzene	ND		100	51	ug/L			05/08/24 18:14	1
1,2-Dibromoethane	ND		100	50	ug/L			05/08/24 18:14	1
Cyclohexane	ND		100	63	ug/L			05/08/24 18:14	1
Isopropylbenzene	ND		100	34	ug/L			05/08/24 18:14	1
Methyl acetate	ND		500	170	ug/L			05/08/24 18:14	1
Methyl tert-butyl ether	ND		100	59	ug/L			05/08/24 18:14	1
Methylcyclohexane	ND		100	61	ug/L			05/08/24 18:14	1
Methylene Chloride	ND		100	89	ug/L			05/08/24 18:14	1
Styrene	ND		100	47	ug/L			05/08/24 18:14	1
Tetrachloroethene	ND		100	47	ug/L			05/08/24 18:14	1
Toluene	ND		100	46	ug/L			05/08/24 18:14	1
trans-1,2-Dichloroethene	ND		100	67	ug/L			05/08/24 18:14	1
trans-1,3-Dichloropropene	ND		100	58	ug/L			05/08/24 18:14	1
Trichloroethene	ND		100	69	ug/L			05/08/24 18:14	1
Trichlorofluoromethane	ND		100	87	ug/L			05/08/24 18:14	1
Vinyl chloride	ND	^c	100	41	ug/L			05/08/24 18:14	1
Xylenes, Total	ND		200	89	ug/L			05/08/24 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		52 - 151		05/08/24 18:14	1
4-Bromofluorobenzene (Surr)	85		49 - 118		05/08/24 18:14	1
Dibromofluoromethane (Surr)	88		60 - 132		05/08/24 18:14	1
Toluene-d8 (Surr)	97		53 - 124		05/08/24 18:14	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		1300	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,2'-oxybis[1-chloropropane]	ND	^c	260	96	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4,5-Trichlorophenol	ND		1300	450	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4,6-Trichlorophenol	ND		1300	430	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4-Dichlorophenol	ND		260	100	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4-Dimethylphenol	ND		1300	440	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4-Dinitrophenol	ND		13000	8100	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,4-Dinitrotoluene	ND		1300	780	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2,6-Dinitrotoluene	ND		1300	510	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2-Chloronaphthalene	ND		260	60	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2-Chlorophenol	ND		1300	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2-Methylnaphthalene	2000		260	62	ug/Kg		05/05/24 12:25	05/06/24 18:31	4

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		1300	370	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2-Nitroaniline	ND	^c	6600	590	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
2-Nitrophenol	ND		1300	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
3,3'-Dichlorobenzidine	ND		1300	1200	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
3-Nitroaniline	ND		6600	330	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4,6-Dinitro-2-methylphenol	ND		6600	2200	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Bromophenyl phenyl ether	ND		1300	550	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Chloro-3-methylphenol	ND		1300	460	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Chloroaniline	ND		1300	340	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Chlorophenyl phenyl ether	ND		1300	430	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Methylphenol, 3 & 4	ND		1300	380	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Nitroaniline	ND		6600	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
4-Nitrophenol	ND		6600	910	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Acenaphthene	2600		260	75	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Acenaphthylene	2900		260	57	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Acetophenone	ND		2600	460	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Anthracene	26000		260	67	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Atrazine	ND		2600	570	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzaldehyde	ND		2600	160	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzo[a]anthracene	3700		260	120	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzo[a]pyrene	3800		260	110	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzo[b]fluoranthene	3500		260	64	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzo[g,h,i]perylene	2900		260	56	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Benzo[k]fluoranthene	1500		260	78	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Bis(2-chloroethoxy)methane	ND		1300	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Bis(2-chloroethyl)ether	ND		260	80	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Bis(2-ethylhexyl) phthalate	ND		13000	1400	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Butyl benzyl phthalate	ND		6500	890	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Caprolactam	ND		6600	850	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Carbazole	6500		260	61	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Chrysene	4100		260	140	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Dibenz(a,h)anthracene	570		260	170	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Dibenzofuran	2100		1300	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Diethyl phthalate	ND		1300	460	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Dimethyl phthalate	ND		2600	1400	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Di-n-butyl phthalate	ND		13000	2700	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Di-n-octyl phthalate	ND		1300	760	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Fluoranthene	8800		260	69	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Fluorene	5200		260	51	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Hexachlorobenzene	ND		260	93	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Hexachlorobutadiene	ND		260	76	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Hexachlorocyclopentadiene	ND		1300	350	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Hexachloroethane	ND		1300	460	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Indeno[1,2,3-cd]pyrene	1900		260	130	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Isophorone	ND		1300	490	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Naphthalene	1300		260	51	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Nitrobenzene	ND	^c	2600	480	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
N-Nitrosodi-n-propylamine	ND	^c	260	88	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
N-Nitrosodiphenylamine	ND		1300	430	ug/Kg		05/05/24 12:25	05/06/24 18:31	4

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		6600	2100	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Phenanthrene	14000		260	70	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Phenol	ND		1300	390	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Pyrene	11000		260	92	ug/Kg		05/05/24 12:25	05/06/24 18:31	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	56		34 - 108				05/05/24 12:25	05/06/24 18:31	4
2-Fluorobiphenyl	61		44 - 105				05/05/24 12:25	05/06/24 18:31	4
2-Fluorophenol (Surr)	62		48 - 105				05/05/24 12:25	05/06/24 18:31	4
Nitrobenzene-d5 (Surr)	71		46 - 105				05/05/24 12:25	05/06/24 18:31	4
Phenol-d5 (Surr)	67		46 - 105				05/05/24 12:25	05/06/24 18:31	4
Terphenyl-d14 (Surr)	62		39 - 105				05/05/24 12:25	05/06/24 18:31	4

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4-Dinitrophenol	ND		100	33	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		05/08/24 14:42	05/13/24 16:27	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Chlorophenol	ND		10	2.3	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Methylphenol	ND		10	5.6	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Nitroaniline	ND		50	5.5	ug/L		05/08/24 14:42	05/13/24 16:27	1
2-Nitrophenol	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		05/08/24 14:42	05/13/24 16:27	1
3-Nitroaniline	ND		50	4.4	ug/L		05/08/24 14:42	05/13/24 16:27	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Chloroaniline	ND		10	3.8	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 16:27	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Nitroaniline	ND		50	3.6	ug/L		05/08/24 14:42	05/13/24 16:27	1
4-Nitrophenol	ND		50	9.4	ug/L		05/08/24 14:42	05/13/24 16:27	1
Acenaphthene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 16:27	1
Acenaphthylene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 16:27	1
Acetophenone	ND		10	1.6	ug/L		05/08/24 14:42	05/13/24 16:27	1
Anthracene	ND		1.9	0.49	ug/L		05/08/24 14:42	05/13/24 16:27	1
Atrazine	ND		10	6.3	ug/L		05/08/24 14:42	05/13/24 16:27	1
Benzaldehyde	ND		10	5.4	ug/L		05/08/24 14:42	05/13/24 16:27	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		05/08/24 14:42	05/13/24 16:27	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		05/08/24 14:42	05/13/24 16:27	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		05/08/24 14:42	05/13/24 16:27	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 16:27	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		05/08/24 14:42	05/13/24 16:27	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		05/08/24 14:42	05/13/24 16:27	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		05/08/24 14:42	05/13/24 16:27	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		05/08/24 14:42	05/13/24 16:27	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		05/08/24 14:42	05/13/24 16:27	1
Caprolactam	ND		50	14	ug/L		05/08/24 14:42	05/13/24 16:27	1
Carbazole	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 16:27	1
Chrysene	ND		1.9	0.81	ug/L		05/08/24 14:42	05/13/24 16:27	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		05/08/24 14:42	05/13/24 16:27	1
Dibenzofuran	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
Diethyl phthalate	ND		10	5.7	ug/L		05/08/24 14:42	05/13/24 16:27	1
Dimethyl phthalate	ND		20	2.0	ug/L		05/08/24 14:42	05/13/24 16:27	1
Di-n-butyl phthalate	ND		100	49	ug/L		05/08/24 14:42	05/13/24 16:27	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
Fluoranthene	ND		1.9	0.60	ug/L		05/08/24 14:42	05/13/24 16:27	1
Fluorene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 16:27	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		05/08/24 14:42	05/13/24 16:27	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 16:27	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/24 14:42	05/13/24 16:27	1
Hexachloroethane	ND		10	1.3	ug/L		05/08/24 14:42	05/13/24 16:27	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		05/08/24 14:42	05/13/24 16:27	1
Isophorone	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
Naphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 16:27	1
Nitrobenzene	ND		20	5.0	ug/L		05/08/24 14:42	05/13/24 16:27	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		05/08/24 14:42	05/13/24 16:27	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		05/08/24 14:42	05/13/24 16:27	1
Pentachlorophenol	ND	^c	50	8.5	ug/L		05/08/24 14:42	05/13/24 16:27	1
Phenanthrene	ND		1.9	1.6	ug/L		05/08/24 14:42	05/13/24 16:27	1
Phenol	ND		10	4.9	ug/L		05/08/24 14:42	05/13/24 16:27	1
Pyrene	ND		1.9	0.54	ug/L		05/08/24 14:42	05/13/24 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		39 - 121	05/08/24 14:42	05/13/24 16:27	1
2-Fluorobiphenyl	70		45 - 105	05/08/24 14:42	05/13/24 16:27	1
2-Fluorophenol (Surr)	67		38 - 105	05/08/24 14:42	05/13/24 16:27	1
Nitrobenzene-d5 (Surr)	74		45 - 106	05/08/24 14:42	05/13/24 16:27	1
Phenol-d5 (Surr)	76		38 - 105	05/08/24 14:42	05/13/24 16:27	1
Terphenyl-d14 (Surr)	45		28 - 125	05/08/24 14:42	05/13/24 16:27	1

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.69	0.087	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorooctanesulfonic acid (PFOS)	0.33		0.17	0.044	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorooctanoic acid (PFOA)	1.2		0.17	0.044	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorohexanoic acid (PFHxA)	0.097	J I	0.17	0.051	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorononanoic acid (PFNA)	24		0.17	0.043	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorodecanoic acid (PFDA)	0.21		0.17	0.043	ng/g		05/16/24 05:51	05/17/24 16:38	1
Perfluorobutanesulfonic acid (PFBS)	0.19	I !	0.17	0.043	ng/g		05/16/24 05:51	05/17/24 16:38	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	0.080	J I !	0.17	0.043	ng/g		05/16/24 05:51	05/17/24 16:38	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	B !	0.69	0.044	ng/g		05/16/24 05:51	05/17/24 16:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	133		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C8 PFOS	115		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C9 PFNA	115		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C4 PFBA	109		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C5 PFHxA	120		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C6 PFDA	123		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C3 PFBS	110		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C3 PFHxS	109		20 - 150				05/16/24 05:51	05/17/24 16:38	1
13C3 HFPO-DA	114		20 - 150				05/16/24 05:51	05/17/24 16:38	1

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	FL *-	0.69	0.086	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorooctanesulfonic acid (PFOS)	ND	FL *-	0.17	0.044	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorooctanoic acid (PFOA)	ND	FL *+	0.17	0.044	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorohexanoic acid (PFHxA)	ND	FL *-	0.17	0.051	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorononanoic acid (PFNA)	17	4 *-	0.17	0.043	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorodecanoic acid (PFDA)	ND	FL	0.17	0.043	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorobutanesulfonic acid (PFBS)	ND	FL ! *-	0.17	0.043	ng/g		05/16/24 05:54	05/22/24 14:04	1
Perfluorohexanesulfonic acid (PFHxS)	ND	F2 FH ! *-	0.17	0.043	ng/g		05/16/24 05:54	05/22/24 14:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	! FL	0.69	0.044	ng/g		05/16/24 05:54	05/22/24 14:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 PFOA	0.583	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C8 PFOS	0.000	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C9 PFNA	0.990	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C4 PFBA	0.782	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C5 PFHxA	0.000	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C6 PFDA	1.02	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C3 PFBS	0.000	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C3 PFHxS	0.000	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1
13C3 HFPO-DA	0.926	*5-	20 - 150				05/16/24 05:54	05/22/24 14:04	1

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		9.3	2.3	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorohexanoic acid (PFHxA)	7.8	I	2.3	0.58	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorooctanoic acid (PFOA)	55	B	2.3	0.75	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorononanoic acid (PFNA)	930	E	2.3	0.58	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorodecanoic acid (PFDA)	6.0		2.3	0.58	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorobutanesulfonic acid (PFBS)	ND	!	2.3	0.35	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorohexanesulfonic acid (PFHxS)	1.1	J !	2.3	0.66	ng/L		05/13/24 17:01	05/15/24 21:16	1
Perfluorooctanesulfonic acid (PFOS)	6.7		2.3	0.58	ng/L		05/13/24 17:01	05/15/24 21:16	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	32	! B	9.3	2.3	ng/L		05/13/24 17:01	05/15/24 21:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	98.5		5 - 130				05/13/24 17:01	05/15/24 21:16	1
13C5 PFHxA	112		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C8 PFOA	107		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C9 PFNA	109		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C6 PFDA	105		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C3 PFBS	105		40 - 135				05/13/24 17:01	05/15/24 21:16	1
13C3 PFHxS	96.1		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C8 PFOS	104		40 - 130				05/13/24 17:01	05/15/24 21:16	1
13C3 HFPO-DA	105		40 - 130				05/13/24 17:01	05/15/24 21:16	1

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		93	23	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorohexanoic acid (PFHxA)	9.3	J I	23	5.8	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorooctanoic acid (PFOA)	62	B	23	7.5	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorononanoic acid (PFNA)	1000		23	5.8	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorodecanoic acid (PFDA)	8.1	J I	23	5.8	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorobutanesulfonic acid (PFBS)	ND	!	23	3.5	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorohexanesulfonic acid (PFHxS)	ND	!	23	6.6	ng/L		05/13/24 17:01	05/16/24 13:22	10
Perfluorooctanesulfonic acid (PFOS)	6.7	J	23	5.8	ng/L		05/13/24 17:01	05/16/24 13:22	10
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	36	J B !	93	23	ng/L		05/13/24 17:01	05/16/24 13:22	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	104		5 - 130				05/13/24 17:01	05/16/24 13:22	10
13C5 PFHxA	104		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C8 PFOA	104		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C9 PFNA	101		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C6 PFDA	115		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C3 PFBS	111		40 - 135				05/13/24 17:01	05/16/24 13:22	10
13C3 PFHxS	95.9		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C8 PFOS	108		40 - 130				05/13/24 17:01	05/16/24 13:22	10
13C3 HFPO-DA	107		40 - 130				05/13/24 17:01	05/16/24 13:22	10

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.1	J B	8.9	2.2	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorohexanoic acid (PFHxA)	4.1		2.2	0.56	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorooctanoic acid (PFOA)	69		2.2	0.71	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorononanoic acid (PFNA)	1100	E	2.2	0.56	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorodecanoic acid (PFDA)	7.9		2.2	0.56	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorobutanesulfonic acid (PFBS)	ND	!	2.2	0.33	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorohexanesulfonic acid (PFHxS)	1.2	J !	2.2	0.63	ng/L		06/11/24 14:23	06/14/24 00:10	1
Perfluorooctanesulfonic acid (PFOS)	9.7		2.2	0.56	ng/L		06/11/24 14:23	06/14/24 00:10	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	2.4	J !	8.9	2.2	ng/L		06/11/24 14:23	06/14/24 00:10	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	87.1		5 - 130	06/11/24 14:23	06/14/24 00:10	1
13C5 PFHxA	97.9		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C8 PFOA	95.7		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C9 PFNA	84.9		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C6 PFDA	90.1		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C3 PFBS	115		40 - 135	06/11/24 14:23	06/14/24 00:10	1
13C3 PFHxS	108		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C8 PFOS	92.6		40 - 130	06/11/24 14:23	06/14/24 00:10	1
13C3 HFPO-DA	93.0		40 - 130	06/11/24 14:23	06/14/24 00:10	1

Method: SW846 EPA 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.31	0.065	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Aluminum	910		13	5.8	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Arsenic	1.6		0.63	0.39	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Antimony	0.31	J	0.63	0.19	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Barium	5.4	J	13	2.2	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Beryllium	0.097	J	0.25	0.068	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Cadmium	ND		0.31	0.046	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Calcium	140	J	310	40	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Chromium	8.0		0.31	0.28	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Cobalt	0.65	J	3.1	0.44	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Copper	10		1.6	0.94	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Iron	4900		25	18	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Lead	17		6.3	3.9	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Magnesium	220	J	310	34	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Manganese	19		0.94	0.71	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Nickel	1.5	J	2.5	0.32	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Potassium	87	J	310	53	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Selenium	ND		0.63	0.29	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Sodium	ND		310	32	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Thallium	33		1.3	0.18	mg/Kg		05/07/24 10:00	05/28/24 17:23	1
Vanadium	18		3.1	0.49	mg/Kg		05/07/24 10:00	05/09/24 00:45	1
Zinc	10		6.3	2.9	mg/Kg		05/07/24 10:00	05/09/24 00:45	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/16/24 16:21	1
Aluminum	240		200	110	ug/L		05/11/24 07:04	05/13/24 19:34	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/13/24 19:34	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/13/24 19:34	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/13/24 19:34	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/13/24 19:34	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/13/24 19:34	1
Calcium	3200	J	5000	640	ug/L		05/11/24 07:04	05/13/24 19:34	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/13/24 19:34	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/13/24 19:34	1
Copper	ND		25	2.2	ug/L		05/11/24 07:04	05/16/24 16:21	1
Iron	290		100	72	ug/L		05/11/24 07:04	05/14/24 14:58	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/13/24 19:34	1
Magnesium	3400	J	5000	690	ug/L		05/11/24 07:04	05/13/24 19:34	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Client Sample ID: COMP-4

Lab Sample ID: 180-173221-3

Date Collected: 04/29/24 15:20

Matrix: Solid

Date Received: 04/30/24 12:06

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	3.2	J	15	2.4	ug/L		05/11/24 07:04	05/13/24 19:34	1
Nickel	ND		40	3.5	ug/L		05/11/24 07:04	05/16/24 16:21	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/13/24 19:34	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/13/24 19:34	1
Sodium	3900	J B	5000	800	ug/L		05/11/24 07:04	05/13/24 19:34	1
Thallium	ND		20	3.0	ug/L		05/11/24 07:04	05/13/24 19:34	1
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/13/24 19:34	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/13/24 19:34	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:31	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	J	0.032	0.021	mg/Kg		05/09/24 14:35	05/10/24 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	13.5	!	0.1	0.1	%			04/30/24 20:33	1

QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-467514/7

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	1.7	ug/Kg			05/05/24 11:40	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.5	ug/Kg			05/05/24 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.0	ug/Kg			05/05/24 11:40	1
1,1,2-Trichloroethane	ND		5.0	0.99	ug/Kg			05/05/24 11:40	1
1,1-Dichloroethane	ND		5.0	1.6	ug/Kg			05/05/24 11:40	1
1,1-Dichloroethene	ND		5.0	2.3	ug/Kg			05/05/24 11:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	3.2	ug/Kg			05/05/24 11:40	1
1,2-Dichlorobenzene	ND		5.0	1.7	ug/Kg			05/05/24 11:40	1
1,2-Dichloroethane	ND		5.0	1.4	ug/Kg			05/05/24 11:40	1
1,2-Dichloropropane	ND		5.0	1.3	ug/Kg			05/05/24 11:40	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/Kg			05/05/24 11:40	1
1,3-Dichlorobenzene	ND		5.0	3.1	ug/Kg			05/05/24 11:40	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg			05/05/24 11:40	1
2-Butanone (MEK)	ND		25	2.5	ug/Kg			05/05/24 11:40	1
2-Hexanone	ND		25	1.6	ug/Kg			05/05/24 11:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/Kg			05/05/24 11:40	1
Acetone	ND		25	3.9	ug/Kg			05/05/24 11:40	1
Benzene	ND		5.0	1.4	ug/Kg			05/05/24 11:40	1
Bromoform	ND		5.0	2.5	ug/Kg			05/05/24 11:40	1
Bromomethane	ND		5.0	2.3	ug/Kg			05/05/24 11:40	1
Carbon disulfide	ND		5.0	4.0	ug/Kg			05/05/24 11:40	1
Carbon tetrachloride	ND		5.0	2.0	ug/Kg			05/05/24 11:40	1
Chlorobenzene	ND		5.0	1.3	ug/Kg			05/05/24 11:40	1
Chlorodibromomethane	ND		5.0	2.5	ug/Kg			05/05/24 11:40	1
Chloroform	ND		5.0	3.4	ug/Kg			05/05/24 11:40	1
Chloromethane	ND		5.0	2.0	ug/Kg			05/05/24 11:40	1
Chloroethane	ND		5.0	2.9	ug/Kg			05/05/24 11:40	1
cis-1,2-Dichloroethene	ND		5.0	1.5	ug/Kg			05/05/24 11:40	1
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			05/05/24 11:40	1
Dichlorobromomethane	ND		5.0	2.3	ug/Kg			05/05/24 11:40	1
Dichlorodifluoromethane	ND		5.0	2.5	ug/Kg			05/05/24 11:40	1
Ethylbenzene	ND		5.0	1.9	ug/Kg			05/05/24 11:40	1
1,2-Dibromoethane	ND		5.0	1.4	ug/Kg			05/05/24 11:40	1
Cyclohexane	ND		5.0	2.4	ug/Kg			05/05/24 11:40	1
Isopropylbenzene	ND		5.0	2.6	ug/Kg			05/05/24 11:40	1
Methyl acetate	ND		25	7.4	ug/Kg			05/05/24 11:40	1
Methyl tert-butyl ether	ND		5.0	1.5	ug/Kg			05/05/24 11:40	1
Methylcyclohexane	ND		5.0	2.4	ug/Kg			05/05/24 11:40	1
Methylene Chloride	ND		5.0	4.5	ug/Kg			05/05/24 11:40	1
Styrene	ND		5.0	1.5	ug/Kg			05/05/24 11:40	1
Tetrachloroethene	ND		5.0	2.0	ug/Kg			05/05/24 11:40	1
Toluene	ND		5.0	1.4	ug/Kg			05/05/24 11:40	1
trans-1,2-Dichloroethene	ND		5.0	1.8	ug/Kg			05/05/24 11:40	1
trans-1,3-Dichloropropene	ND		5.0	2.3	ug/Kg			05/05/24 11:40	1
Trichloroethene	ND		5.0	1.6	ug/Kg			05/05/24 11:40	1
Trichlorofluoromethane	ND		5.0	4.2	ug/Kg			05/05/24 11:40	1
Vinyl chloride	ND		5.0	3.6	ug/Kg			05/05/24 11:40	1
Xylenes, Total	ND		10	7.2	ug/Kg			05/05/24 11:40	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-467514/7

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		73 - 135		05/05/24 11:40	1
4-Bromofluorobenzene (Surr)	91		60 - 124		05/05/24 11:40	1
Dibromofluoromethane (Surr)	93		69 - 126		05/05/24 11:40	1
Toluene-d8 (Surr)	93		67 - 134		05/05/24 11:40	1

Lab Sample ID: LCS 180-467514/32

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	40.0	32.1		ug/Kg		80	72 - 134
1,1,2,2-Tetrachloroethane	40.0	32.6		ug/Kg		82	36 - 170
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	25.8		ug/Kg		64	59 - 135
1,1,2-Trichloroethane	40.0	33.0		ug/Kg		82	66 - 128
1,1-Dichloroethane	40.0	33.7		ug/Kg		84	73 - 124
1,1-Dichloroethene	40.0	31.6		ug/Kg		79	55 - 136
1,2-Dibromo-3-Chloropropane	40.0	24.6		ug/Kg		61	30 - 163
1,2-Dichlorobenzene	40.0	34.8		ug/Kg		87	76 - 120
1,2-Dichloroethane	40.0	34.9		ug/Kg		87	64 - 140
1,2-Dichloropropane	40.0	32.1		ug/Kg		80	77 - 119
1,2,4-Trichlorobenzene	40.0	33.1		ug/Kg		83	22 - 170
1,3-Dichlorobenzene	40.0	34.1		ug/Kg		85	77 - 121
1,4-Dichlorobenzene	40.0	33.7		ug/Kg		84	79 - 120
2-Butanone (MEK)	40.0	30.2		ug/Kg		76	39 - 157
2-Hexanone	40.0	27.9		ug/Kg		70	42 - 152
4-Methyl-2-pentanone (MIBK)	40.0	28.0		ug/Kg		70	51 - 147
Acetone	40.0	53.3		ug/Kg		133	23 - 170
Benzene	40.0	34.3		ug/Kg		86	77 - 120
Bromoform	40.0	27.4		ug/Kg		69	37 - 147
Bromomethane	40.0	29.5		ug/Kg		74	47 - 149
Carbon disulfide	40.0	29.9		ug/Kg		75	40 - 156
Carbon tetrachloride	40.0	32.2		ug/Kg		81	73 - 130
Chlorobenzene	40.0	33.0		ug/Kg		82	79 - 122
Chlorodibromomethane	40.0	29.7		ug/Kg		74	60 - 134
Chloroform	40.0	34.6		ug/Kg		87	73 - 126
Chloromethane	40.0	24.2		ug/Kg		60	46 - 151
Chloroethane	40.0	88.7	E *+	ug/Kg		222	37 - 159
cis-1,2-Dichloroethene	40.0	33.0		ug/Kg		83	77 - 118
cis-1,3-Dichloropropene	40.0	31.0		ug/Kg		77	73 - 127
Dichlorobromomethane	40.0	31.2		ug/Kg		78	75 - 123
Dichlorodifluoromethane	40.0	19.5		ug/Kg		49	26 - 149
Ethylbenzene	40.0	33.6		ug/Kg		84	79 - 119
1,2-Dibromoethane	40.0	32.1		ug/Kg		80	59 - 137
Cyclohexane	40.0	30.0		ug/Kg		75	63 - 143
Isopropylbenzene	40.0	31.9		ug/Kg		80	70 - 125
Methyl acetate	80.0	65.1		ug/Kg		81	20 - 170
Methyl tert-butyl ether	40.0	31.5		ug/Kg		79	58 - 132
Methylcyclohexane	40.0	31.4		ug/Kg		79	70 - 125

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-467514/32

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	40.0	36.1		ug/Kg		90	67 - 131
m-Xylene & p-Xylene	40.0	34.2		ug/Kg		85	77 - 120
o-Xylene	40.0	34.3		ug/Kg		86	78 - 118
Styrene	40.0	42.0		ug/Kg		105	80 - 120
Tetrachloroethene	40.0	34.2		ug/Kg		85	71 - 121
Toluene	40.0	35.7		ug/Kg		89	76 - 120
trans-1,2-Dichloroethene	40.0	33.9		ug/Kg		85	75 - 122
trans-1,3-Dichloropropene	40.0	28.5		ug/Kg		71	68 - 133
Trichloroethene	40.0	32.5		ug/Kg		81	69 - 118
Trichlorofluoromethane	40.0	35.2		ug/Kg		88	32 - 149
Vinyl chloride	40.0	28.9		ug/Kg		72	64 - 134
Xylenes, Total	80.0	68.5		ug/Kg		86	78 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	76		73 - 135
4-Bromofluorobenzene (Surr)	73		60 - 124
Dibromofluoromethane (Surr)	71		69 - 126
Toluene-d8 (Surr)	75		67 - 134

Lab Sample ID: LCSD 180-467514/31

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	40.0	38.3		ug/Kg		96	72 - 134	17	20
1,1,2,2-Tetrachloroethane	40.0	39.4		ug/Kg		98	36 - 170	19	23
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	19.9	*-	ug/Kg		50	59 - 135	26	28
1,1,2-Trichloroethane	40.0	39.7		ug/Kg		99	66 - 128	19	21
1,1-Dichloroethane	40.0	39.0		ug/Kg		97	73 - 124	15	20
1,1-Dichloroethene	40.0	36.9		ug/Kg		92	55 - 136	15	21
1,2-Dibromo-3-Chloropropane	40.0	31.5		ug/Kg		79	30 - 163	25	34
1,2-Dichlorobenzene	40.0	39.6		ug/Kg		99	76 - 120	13	20
1,2-Dichloroethane	40.0	41.2		ug/Kg		103	64 - 140	17	20
1,2-Dichloropropane	40.0	37.0		ug/Kg		92	77 - 119	14	20
1,2,4-Trichlorobenzene	40.0	37.5		ug/Kg		94	22 - 170	12	29
1,3-Dichlorobenzene	40.0	38.1		ug/Kg		95	77 - 121	11	20
1,4-Dichlorobenzene	40.0	38.4		ug/Kg		96	79 - 120	13	20
2-Butanone (MEK)	40.0	36.0		ug/Kg		90	39 - 157	17	33
2-Hexanone	40.0	34.8		ug/Kg		87	42 - 152	22	30
4-Methyl-2-pentanone (MIBK)	40.0	37.1	*1	ug/Kg		93	51 - 147	28	27
Acetone	40.0	34.7	*1	ug/Kg		87	23 - 170	42	35
Benzene	40.0	38.9		ug/Kg		97	77 - 120	13	20
Bromoform	40.0	32.2		ug/Kg		81	37 - 147	16	23
Bromomethane	40.0	41.4	*1	ug/Kg		103	47 - 149	34	25
Carbon disulfide	40.0	34.8		ug/Kg		87	40 - 156	15	25
Carbon tetrachloride	40.0	37.7		ug/Kg		94	73 - 130	16	21
Chlorobenzene	40.0	38.0		ug/Kg		95	79 - 122	14	20
Chlorodibromomethane	40.0	34.3		ug/Kg		86	60 - 134	15	40

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-467514/31

Matrix: Solid

Analysis Batch: 467514

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	40.0	39.2		ug/Kg		98	73 - 126	12	20
Chloromethane	40.0	29.0		ug/Kg		73	46 - 151	18	33
Chloroethane	40.0	88.5	E *+	ug/Kg		221	37 - 159	0	25
cis-1,2-Dichloroethene	40.0	38.4		ug/Kg		96	77 - 118	15	20
cis-1,3-Dichloropropene	40.0	35.7		ug/Kg		89	73 - 127	14	20
Dichlorobromomethane	40.0	35.5		ug/Kg		89	75 - 123	13	20
Dichlorodifluoromethane	40.0	23.2		ug/Kg		58	26 - 149	17	24
Ethylbenzene	40.0	38.9		ug/Kg		97	79 - 119	14	20
1,2-Dibromoethane	40.0	38.4		ug/Kg		96	59 - 137	18	20
Cyclohexane	40.0	33.7		ug/Kg		84	63 - 143	12	25
Isopropylbenzene	40.0	37.2		ug/Kg		93	70 - 125	15	21
Methyl acetate	80.0	78.4		ug/Kg		98	20 - 170	19	33
Methyl tert-butyl ether	40.0	38.3		ug/Kg		96	58 - 132	19	24
Methylcyclohexane	40.0	37.0		ug/Kg		92	70 - 125	16	22
Methylene Chloride	40.0	38.8		ug/Kg		97	67 - 131	7	32
m-Xylene & p-Xylene	40.0	39.1		ug/Kg		98	77 - 120	13	20
o-Xylene	40.0	39.9		ug/Kg		100	78 - 118	15	20
Styrene	40.0	49.1	*+	ug/Kg		123	80 - 120	16	20
Tetrachloroethene	40.0	39.2		ug/Kg		98	71 - 121	14	21
Toluene	40.0	40.9		ug/Kg		102	76 - 120	14	20
trans-1,2-Dichloroethene	40.0	39.6		ug/Kg		99	75 - 122	16	20
trans-1,3-Dichloropropene	40.0	34.0		ug/Kg		85	68 - 133	18	20
Trichloroethene	40.0	37.8		ug/Kg		95	69 - 118	15	20
Trichlorofluoromethane	40.0	36.2		ug/Kg		91	32 - 149	3	39
Vinyl chloride	40.0	33.9		ug/Kg		85	64 - 134	16	23
Xylenes, Total	80.0	79.0		ug/Kg		99	78 - 118	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		73 - 135
4-Bromofluorobenzene (Surr)	88		60 - 124
Dibromofluoromethane (Surr)	85		69 - 126
Toluene-d8 (Surr)	89		67 - 134

Lab Sample ID: MB 180-467886/7

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	1.7	ug/Kg			05/08/24 11:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	1.5	ug/Kg			05/08/24 11:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.0	ug/Kg			05/08/24 11:08	1
1,1,2-Trichloroethane	ND		5.0	0.99	ug/Kg			05/08/24 11:08	1
1,1-Dichloroethane	ND		5.0	1.6	ug/Kg			05/08/24 11:08	1
1,1-Dichloroethene	ND		5.0	2.3	ug/Kg			05/08/24 11:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	3.2	ug/Kg			05/08/24 11:08	1
1,2-Dichlorobenzene	ND		5.0	1.7	ug/Kg			05/08/24 11:08	1
1,2-Dichloroethane	ND		5.0	1.4	ug/Kg			05/08/24 11:08	1
1,2-Dichloropropane	ND		5.0	1.3	ug/Kg			05/08/24 11:08	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-467886/7

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/Kg			05/08/24 11:08	1
1,3-Dichlorobenzene	ND		5.0	3.1	ug/Kg			05/08/24 11:08	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg			05/08/24 11:08	1
2-Butanone (MEK)	ND		25	2.5	ug/Kg			05/08/24 11:08	1
2-Hexanone	ND		25	1.6	ug/Kg			05/08/24 11:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/Kg			05/08/24 11:08	1
Acetone	ND		25	3.9	ug/Kg			05/08/24 11:08	1
Benzene	ND		5.0	1.4	ug/Kg			05/08/24 11:08	1
Bromoform	ND		5.0	2.5	ug/Kg			05/08/24 11:08	1
Bromomethane	ND		5.0	2.3	ug/Kg			05/08/24 11:08	1
Carbon disulfide	ND		5.0	4.0	ug/Kg			05/08/24 11:08	1
Carbon tetrachloride	ND		5.0	2.0	ug/Kg			05/08/24 11:08	1
Chlorobenzene	ND		5.0	1.3	ug/Kg			05/08/24 11:08	1
Chlorodibromomethane	ND		5.0	2.5	ug/Kg			05/08/24 11:08	1
Chloroform	ND		5.0	3.4	ug/Kg			05/08/24 11:08	1
Chloromethane	ND		5.0	2.0	ug/Kg			05/08/24 11:08	1
Chloroethane	ND		5.0	2.9	ug/Kg			05/08/24 11:08	1
cis-1,2-Dichloroethene	ND		5.0	1.5	ug/Kg			05/08/24 11:08	1
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			05/08/24 11:08	1
Dichlorobromomethane	ND		5.0	2.3	ug/Kg			05/08/24 11:08	1
Dichlorodifluoromethane	ND		5.0	2.5	ug/Kg			05/08/24 11:08	1
Ethylbenzene	ND		5.0	1.9	ug/Kg			05/08/24 11:08	1
1,2-Dibromoethane	ND		5.0	1.4	ug/Kg			05/08/24 11:08	1
Cyclohexane	ND		5.0	2.4	ug/Kg			05/08/24 11:08	1
Isopropylbenzene	ND		5.0	2.6	ug/Kg			05/08/24 11:08	1
Methyl acetate	ND		25	7.4	ug/Kg			05/08/24 11:08	1
Methyl tert-butyl ether	ND		5.0	1.5	ug/Kg			05/08/24 11:08	1
Methylcyclohexane	ND		5.0	2.4	ug/Kg			05/08/24 11:08	1
Methylene Chloride	ND		5.0	4.5	ug/Kg			05/08/24 11:08	1
Styrene	ND		5.0	1.5	ug/Kg			05/08/24 11:08	1
Tetrachloroethene	ND		5.0	2.0	ug/Kg			05/08/24 11:08	1
Toluene	ND		5.0	1.4	ug/Kg			05/08/24 11:08	1
trans-1,2-Dichloroethene	ND		5.0	1.8	ug/Kg			05/08/24 11:08	1
trans-1,3-Dichloropropene	ND		5.0	2.3	ug/Kg			05/08/24 11:08	1
Trichloroethene	ND		5.0	1.6	ug/Kg			05/08/24 11:08	1
Trichlorofluoromethane	ND		5.0	4.2	ug/Kg			05/08/24 11:08	1
Vinyl chloride	ND		5.0	3.6	ug/Kg			05/08/24 11:08	1
Xylenes, Total	ND		10	7.2	ug/Kg			05/08/24 11:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	131		73 - 135		05/08/24 11:08	1
4-Bromofluorobenzene (Surr)	109		60 - 124		05/08/24 11:08	1
Dibromofluoromethane (Surr)	112		69 - 126		05/08/24 11:08	1
Toluene-d8 (Surr)	109		67 - 134		05/08/24 11:08	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-467886/3

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	40.0	39.9		ug/Kg		100	72 - 134
1,1,2,2-Tetrachloroethane	40.0	54.8		ug/Kg		137	36 - 170
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	51.1		ug/Kg		128	59 - 135
1,1,2-Trichloroethane	40.0	45.2		ug/Kg		113	66 - 128
1,1-Dichloroethane	40.0	41.6		ug/Kg		104	73 - 124
1,1-Dichloroethene	40.0	42.4		ug/Kg		106	55 - 136
1,2-Dibromo-3-Chloropropane	40.0	41.4		ug/Kg		104	30 - 163
1,2-Dichlorobenzene	40.0	39.1		ug/Kg		98	76 - 120
1,2-Dichloroethane	40.0	48.0		ug/Kg		120	64 - 140
1,2-Dichloropropane	40.0	37.5		ug/Kg		94	77 - 119
1,2,4-Trichlorobenzene	40.0	39.0		ug/Kg		98	22 - 170
1,3-Dichlorobenzene	40.0	34.7		ug/Kg		87	77 - 121
1,4-Dichlorobenzene	40.0	35.5		ug/Kg		89	79 - 120
2-Butanone (MEK)	40.0	46.5		ug/Kg		116	39 - 157
2-Hexanone	40.0	39.8		ug/Kg		99	42 - 152
4-Methyl-2-pentanone (MIBK)	40.0	47.7		ug/Kg		119	51 - 147
Acetone	40.0	49.0		ug/Kg		123	23 - 170
Benzene	40.0	38.2		ug/Kg		96	77 - 120
Bromoform	40.0	44.2		ug/Kg		110	37 - 147
Bromomethane	40.0	76.1	*+	ug/Kg		190	47 - 149
Carbon disulfide	40.0	35.3		ug/Kg		88	40 - 156
Carbon tetrachloride	40.0	38.8		ug/Kg		97	73 - 130
Chlorobenzene	40.0	35.8		ug/Kg		89	79 - 122
Chlorodibromomethane	40.0	41.0		ug/Kg		103	60 - 134
Chloroform	40.0	43.2		ug/Kg		108	73 - 126
Chloromethane	40.0	49.3		ug/Kg		123	46 - 151
Chloroethane	40.0	86.6	E *+	ug/Kg		217	37 - 159
cis-1,2-Dichloroethene	40.0	40.3		ug/Kg		101	77 - 118
cis-1,3-Dichloropropene	40.0	32.2		ug/Kg		80	73 - 127
Dichlorobromomethane	40.0	37.5		ug/Kg		94	75 - 123
Dichlorodifluoromethane	40.0	50.2		ug/Kg		126	26 - 149
Ethylbenzene	40.0	35.9		ug/Kg		90	79 - 119
1,2-Dibromoethane	40.0	42.8		ug/Kg		107	59 - 137
Cyclohexane	40.0	39.1		ug/Kg		98	63 - 143
Isopropylbenzene	40.0	38.1		ug/Kg		95	70 - 125
Methyl acetate	80.0	114		ug/Kg		143	20 - 170
Methyl tert-butyl ether	40.0	52.7		ug/Kg		132	58 - 132
Methylcyclohexane	40.0	37.0		ug/Kg		92	70 - 125
Methylene Chloride	40.0	52.6	*+	ug/Kg		132	67 - 131
m-Xylene & p-Xylene	40.0	36.4		ug/Kg		91	77 - 120
o-Xylene	40.0	40.1		ug/Kg		100	78 - 118
Styrene	40.0	52.1	*+	ug/Kg		130	80 - 120
Tetrachloroethene	40.0	39.1		ug/Kg		98	71 - 121
Toluene	40.0	39.2		ug/Kg		98	76 - 120
trans-1,2-Dichloroethene	40.0	39.6		ug/Kg		99	75 - 122
trans-1,3-Dichloropropene	40.0	32.8		ug/Kg		82	68 - 133
Trichloroethene	40.0	34.2		ug/Kg		86	69 - 118
Trichlorofluoromethane	40.0	56.4		ug/Kg		141	32 - 149

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-467886/3

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	40.0	54.9	*+	ug/Kg		137	64 - 134
Xylenes, Total	80.0	76.5		ug/Kg		96	78 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	121		73 - 135
4-Bromofluorobenzene (Surr)	102		60 - 124
Dibromofluoromethane (Surr)	109		69 - 126
Toluene-d8 (Surr)	103		67 - 134

Lab Sample ID: LCSD 180-467886/4

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	40.0	41.0		ug/Kg		103	72 - 134	3	20
1,1,2,2-Tetrachloroethane	40.0	74.4	*+ *1	ug/Kg		186	36 - 170	30	23
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	55.3	*+	ug/Kg		138	59 - 135	8	28
1,1,2-Trichloroethane	40.0	55.2	*+	ug/Kg		138	66 - 128	20	21
1,1-Dichloroethane	40.0	40.9		ug/Kg		102	73 - 124	2	20
1,1-Dichloroethene	40.0	44.3		ug/Kg		111	55 - 136	4	21
1,2-Dibromo-3-Chloropropane	40.0	61.4	*1	ug/Kg		153	30 - 163	39	34
1,2-Dichlorobenzene	40.0	44.5		ug/Kg		111	76 - 120	13	20
1,2-Dichloroethane	40.0	55.6		ug/Kg		139	64 - 140	15	20
1,2-Dichloropropane	40.0	38.9		ug/Kg		97	77 - 119	4	20
1,2,4-Trichlorobenzene	40.0	46.3		ug/Kg		116	22 - 170	17	29
1,3-Dichlorobenzene	40.0	36.9		ug/Kg		92	77 - 121	6	20
1,4-Dichlorobenzene	40.0	37.5		ug/Kg		94	79 - 120	6	20
2-Butanone (MEK)	40.0	90.8	*+ *1	ug/Kg		227	39 - 157	65	33
2-Hexanone	40.0	60.6	*1	ug/Kg		151	42 - 152	41	30
4-Methyl-2-pentanone (MIBK)	40.0	73.0	*+ *1	ug/Kg		183	51 - 147	42	27
Acetone	40.0	95.0	*+ *1	ug/Kg		237	23 - 170	64	35
Benzene	40.0	39.8		ug/Kg		99	77 - 120	4	20
Bromoform	40.0	53.4		ug/Kg		133	37 - 147	19	23
Bromomethane	40.0	66.8	*+	ug/Kg		167	47 - 149	13	25
Carbon disulfide	40.0	34.5		ug/Kg		86	40 - 156	2	25
Carbon tetrachloride	40.0	40.7		ug/Kg		102	73 - 130	5	21
Chlorobenzene	40.0	37.6		ug/Kg		94	79 - 122	5	20
Chlorodibromomethane	40.0	45.4		ug/Kg		114	60 - 134	10	40
Chloroform	40.0	43.4		ug/Kg		108	73 - 126	0	20
Chloromethane	40.0	45.7		ug/Kg		114	46 - 151	7	33
Chloroethane	40.0	63.5	E *1	ug/Kg		159	37 - 159	31	25
cis-1,2-Dichloroethene	40.0	41.2		ug/Kg		103	77 - 118	2	20
cis-1,3-Dichloropropene	40.0	38.2		ug/Kg		95	73 - 127	17	20
Dichlorobromomethane	40.0	40.0		ug/Kg		100	75 - 123	6	20
Dichlorodifluoromethane	40.0	53.0		ug/Kg		132	26 - 149	5	24
Ethylbenzene	40.0	37.2		ug/Kg		93	79 - 119	3	20
1,2-Dibromoethane	40.0	55.3	*+ *1	ug/Kg		138	59 - 137	26	20
Cyclohexane	40.0	42.5		ug/Kg		106	63 - 143	8	25

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-467886/4

Matrix: Solid

Analysis Batch: 467886

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Isopropylbenzene	40.0	39.2		ug/Kg		98	70 - 125	3	21
Methyl acetate	80.0	189	*+ *1	ug/Kg		236	20 - 170	49	33
Methyl tert-butyl ether	40.0	65.6	*+	ug/Kg		164	58 - 132	22	24
Methylcyclohexane	40.0	40.1		ug/Kg		100	70 - 125	8	22
Methylene Chloride	40.0	52.9	*+	ug/Kg		132	67 - 131	1	32
m-Xylene & p-Xylene	40.0	37.1		ug/Kg		93	77 - 120	2	20
o-Xylene	40.0	41.8		ug/Kg		104	78 - 118	4	20
Styrene	40.0	58.3	*+	ug/Kg		146	80 - 120	11	20
Tetrachloroethene	40.0	39.0		ug/Kg		98	71 - 121	0	21
Toluene	40.0	39.7		ug/Kg		99	76 - 120	1	20
trans-1,2-Dichloroethene	40.0	40.8		ug/Kg		102	75 - 122	3	20
trans-1,3-Dichloropropene	40.0	38.8		ug/Kg		97	68 - 133	17	20
Trichloroethene	40.0	37.5		ug/Kg		94	69 - 118	9	20
Trichlorofluoromethane	40.0	42.6		ug/Kg		107	32 - 149	28	39
Vinyl chloride	40.0	53.6		ug/Kg		134	64 - 134	2	23
Xylenes, Total	80.0	78.9		ug/Kg		99	78 - 118	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	152	S1+	73 - 135
4-Bromofluorobenzene (Surr)	110		60 - 124
Dibromofluoromethane (Surr)	119		69 - 126
Toluene-d8 (Surr)	105		67 - 134

Lab Sample ID: MB 180-467887/7

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			05/08/24 10:31	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			05/08/24 10:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			05/08/24 10:31	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			05/08/24 10:31	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			05/08/24 10:31	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			05/08/24 10:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			05/08/24 10:31	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			05/08/24 10:31	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			05/08/24 10:31	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			05/08/24 10:31	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			05/08/24 10:31	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			05/08/24 10:31	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			05/08/24 10:31	1
2-Butanone (MEK)	ND		25	13	ug/L			05/08/24 10:31	1
2-Hexanone	ND		25	16	ug/L			05/08/24 10:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			05/08/24 10:31	1
Acetone	ND		25	17	ug/L			05/08/24 10:31	1
Benzene	ND		5.0	3.0	ug/L			05/08/24 10:31	1
Bromoform	ND		5.0	4.9	ug/L			05/08/24 10:31	1
Bromomethane	ND		5.0	4.4	ug/L			05/08/24 10:31	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-467887/7

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	4.4	ug/L			05/08/24 10:31	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			05/08/24 10:31	1
Chlorobenzene	ND		5.0	2.5	ug/L			05/08/24 10:31	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			05/08/24 10:31	1
Chloroform	ND		5.0	3.0	ug/L			05/08/24 10:31	1
Chloromethane	ND		5.0	4.5	ug/L			05/08/24 10:31	1
Chloroethane	ND		5.0	4.5	ug/L			05/08/24 10:31	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			05/08/24 10:31	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			05/08/24 10:31	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			05/08/24 10:31	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			05/08/24 10:31	1
Ethylbenzene	ND		5.0	2.5	ug/L			05/08/24 10:31	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			05/08/24 10:31	1
Cyclohexane	ND		5.0	3.2	ug/L			05/08/24 10:31	1
Isopropylbenzene	ND		5.0	1.7	ug/L			05/08/24 10:31	1
Methyl acetate	ND		25	8.4	ug/L			05/08/24 10:31	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			05/08/24 10:31	1
Methylcyclohexane	ND		5.0	3.0	ug/L			05/08/24 10:31	1
Methylene Chloride	ND		5.0	4.4	ug/L			05/08/24 10:31	1
Styrene	ND		5.0	2.4	ug/L			05/08/24 10:31	1
Tetrachloroethene	ND		5.0	2.3	ug/L			05/08/24 10:31	1
Toluene	ND		5.0	2.3	ug/L			05/08/24 10:31	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			05/08/24 10:31	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			05/08/24 10:31	1
Trichloroethene	ND		5.0	3.4	ug/L			05/08/24 10:31	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			05/08/24 10:31	1
Vinyl chloride	ND		5.0	2.0	ug/L			05/08/24 10:31	1
Xylenes, Total	ND		10	4.5	ug/L			05/08/24 10:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		52 - 151		05/08/24 10:31	1
4-Bromofluorobenzene (Surr)	80		49 - 118		05/08/24 10:31	1
Dibromofluoromethane (Surr)	84		60 - 132		05/08/24 10:31	1
Toluene-d8 (Surr)	95		53 - 124		05/08/24 10:31	1

Lab Sample ID: LCS 180-467887/4

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	64 - 133
1,1,2,2-Tetrachloroethane	10.0	12.5		ug/L		125	47 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ug/L		108	48 - 134
1,1,2-Trichloroethane	10.0	11.7		ug/L		117	59 - 137
1,1-Dichloroethane	10.0	10.1		ug/L		101	59 - 125
1,1-Dichloroethene	10.0	10.8		ug/L		108	49 - 132
1,2-Dibromo-3-Chloropropane	10.0	6.35		ug/L		63	10 - 170
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	68 - 116

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-467887/4

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	10.0	10.1		ug/L		101	57 - 149
1,2-Dichloropropane	10.0	9.93		ug/L		99	65 - 129
1,2,4-Trichlorobenzene	10.0	5.73		ug/L		57	15 - 169
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	70 - 119
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	74 - 117
2-Butanone (MEK)	10.0	ND		ug/L		95	35 - 158
2-Hexanone	10.0	ND		ug/L		100	38 - 157
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		103	29 - 167
Acetone	10.0	ND		ug/L		87	29 - 163
Benzene	10.0	10.6		ug/L		106	68 - 122
Bromoform	10.0	9.29		ug/L		93	31 - 164
Bromomethane	10.0	13.8		ug/L		138	20 - 170
Carbon disulfide	10.0	8.39		ug/L		84	32 - 139
Carbon tetrachloride	10.0	9.55		ug/L		95	60 - 135
Chlorobenzene	10.0	11.1		ug/L		111	72 - 123
Chlorodibromomethane	10.0	9.24		ug/L		92	51 - 144
Chloroform	10.0	10.7		ug/L		107	62 - 121
Chloromethane	10.0	10.8		ug/L		108	37 - 170
Chloroethane	10.0	13.7		ug/L		137	10 - 170
cis-1,2-Dichloroethene	10.0	9.94		ug/L		99	64 - 122
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	53 - 140
Dichlorobromomethane	10.0	9.05		ug/L		91	63 - 132
Dichlorodifluoromethane	10.0	9.57		ug/L		96	21 - 165
Ethylbenzene	10.0	11.7		ug/L		117	66 - 122
1,2-Dibromoethane	10.0	11.5		ug/L		115	55 - 146
Cyclohexane	10.0	9.78		ug/L		98	50 - 161
Isopropylbenzene	10.0	10.5		ug/L		105	54 - 130
Methyl acetate	20.0	20.3	J	ug/L		102	10 - 170
Methyl tert-butyl ether	10.0	11.4		ug/L		114	36 - 141
Methylcyclohexane	10.0	9.89		ug/L		99	60 - 127
Methylene Chloride	10.0	10.5		ug/L		105	51 - 137
m-Xylene & p-Xylene	10.0	11.5		ug/L		115	61 - 128
o-Xylene	10.0	11.4		ug/L		114	64 - 120
Styrene	10.0	11.5		ug/L		115	68 - 127
Tetrachloroethene	10.0	9.52		ug/L		95	60 - 129
Toluene	10.0	11.6		ug/L		116	67 - 128
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105	62 - 126
trans-1,3-Dichloropropene	10.0	12.0		ug/L		120	57 - 137
Trichloroethene	10.0	8.73		ug/L		87	67 - 121
Trichlorofluoromethane	10.0	11.3		ug/L		113	32 - 157
Vinyl chloride	10.0	12.4		ug/L		124	47 - 147
Xylenes, Total	20.0	22.9		ug/L		115	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		52 - 151
4-Bromofluorobenzene (Surr)	108		49 - 118
Dibromofluoromethane (Surr)	94		60 - 132
Toluene-d8 (Surr)	110		53 - 124

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-467887/5

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.87		ug/L		99	64 - 133	6	22
1,1,2,2-Tetrachloroethane	10.0	11.1		ug/L		111	47 - 147	11	35
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	48 - 134	6	28
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	59 - 137	8	29
1,1-Dichloroethane	10.0	9.90		ug/L		99	59 - 125	2	20
1,1-Dichloroethene	10.0	10.4		ug/L		104	49 - 132	3	23
1,2-Dibromo-3-Chloropropane	10.0	6.15		ug/L		62	10 - 170	3	35
1,2-Dichlorobenzene	10.0	10.7		ug/L		107	68 - 116	3	20
1,2-Dichloroethane	10.0	9.60		ug/L		96	57 - 149	5	27
1,2-Dichloropropane	10.0	9.76		ug/L		98	65 - 129	2	23
1,2,4-Trichlorobenzene	10.0	6.11		ug/L		61	15 - 169	6	35
1,3-Dichlorobenzene	10.0	10.5		ug/L		105	70 - 119	4	18
1,4-Dichlorobenzene	10.0	10.6		ug/L		106	74 - 117	5	17
2-Butanone (MEK)	10.0	ND		ug/L		91	35 - 158	4	35
2-Hexanone	10.0	ND		ug/L		94	38 - 157	6	35
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		95	29 - 167	8	35
Acetone	10.0	ND		ug/L		74	29 - 163	16	35
Benzene	10.0	10.4		ug/L		104	68 - 122	2	21
Bromoform	10.0	8.81		ug/L		88	31 - 164	5	35
Bromomethane	10.0	12.7		ug/L		127	20 - 170	8	30
Carbon disulfide	10.0	8.20		ug/L		82	32 - 139	2	25
Carbon tetrachloride	10.0	9.06		ug/L		91	60 - 135	5	25
Chlorobenzene	10.0	10.7		ug/L		107	72 - 123	4	19
Chlorodibromomethane	10.0	8.68		ug/L		87	51 - 144	6	25
Chloroform	10.0	10.4		ug/L		104	62 - 121	2	22
Chloromethane	10.0	10.2		ug/L		102	37 - 170	6	28
Chloroethane	10.0	12.7		ug/L		127	10 - 170	8	29
cis-1,2-Dichloroethene	10.0	9.75		ug/L		98	64 - 122	2	22
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	53 - 140	1	26
Dichlorobromomethane	10.0	8.85		ug/L		88	63 - 132	2	24
Dichlorodifluoromethane	10.0	8.91		ug/L		89	21 - 165	7	26
Ethylbenzene	10.0	10.7		ug/L		107	66 - 122	9	22
1,2-Dibromoethane	10.0	10.7		ug/L		107	55 - 146	7	30
Cyclohexane	10.0	9.04		ug/L		90	50 - 161	8	28
Isopropylbenzene	10.0	9.75		ug/L		98	54 - 130	7	22
Methyl acetate	20.0	19.1	J	ug/L		96	10 - 170	6	35
Methyl tert-butyl ether	10.0	11.1		ug/L		111	36 - 141	2	35
Methylcyclohexane	10.0	10.0		ug/L		100	60 - 127	1	26
Methylene Chloride	10.0	9.73		ug/L		97	51 - 137	8	35
m-Xylene & p-Xylene	10.0	10.9		ug/L		109	61 - 128	6	21
o-Xylene	10.0	10.8		ug/L		108	64 - 120	5	23
Styrene	10.0	10.8		ug/L		108	68 - 127	7	22
Tetrachloroethene	10.0	8.85		ug/L		88	60 - 129	7	22
Toluene	10.0	10.9		ug/L		109	67 - 128	6	22
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	62 - 126	1	23
trans-1,3-Dichloropropene	10.0	11.1		ug/L		111	57 - 137	8	25
Trichloroethene	10.0	8.67		ug/L		87	67 - 121	1	23
Trichlorofluoromethane	10.0	10.9		ug/L		109	32 - 157	4	35

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-467887/5

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	10.0	11.4		ug/L		114	47 - 147	8	25
Xylenes, Total	20.0	21.7		ug/L		109	64 - 123	5	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	117		52 - 151
4-Bromofluorobenzene (Surr)	131	S1+	49 - 118
Dibromofluoromethane (Surr)	115		60 - 132
Toluene-d8 (Surr)	129	S1+	53 - 124

Lab Sample ID: MB 180-468442/1-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	84	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,1,2,2-Tetrachloroethane	ND		250	76	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	100	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,1,2-Trichloroethane	ND		250	50	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,1-Dichloroethane	ND		250	80	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,1-Dichloroethene	ND		250	110	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2-Dibromo-3-Chloropropane	ND		250	160	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2-Dichlorobenzene	ND		250	84	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2-Dichloroethane	ND		250	72	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2-Dichloropropane	ND		250	67	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2,4-Trichlorobenzene	ND		250	130	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,3-Dichlorobenzene	ND		250	150	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,4-Dichlorobenzene	ND		250	75	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
2-Butanone (MEK)	ND		1300	130	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
2-Hexanone	ND		1300	79	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		1300	92	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Acetone	ND		1300	200	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Benzene	ND		250	71	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Bromoform	ND		250	130	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Bromomethane	ND		250	110	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Carbon disulfide	ND		250	200	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Carbon tetrachloride	ND		250	100	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Chlorobenzene	ND		250	65	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Chlorodibromomethane	ND		250	120	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Chloroform	ND		250	170	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Chloromethane	ND		250	99	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Chloroethane	ND		250	150	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
cis-1,2-Dichloroethene	ND		250	76	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
cis-1,3-Dichloropropene	ND		250	110	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Dichlorobromomethane	ND		250	120	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Dichlorodifluoromethane	ND		250	130	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Ethylbenzene	ND		250	93	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
1,2-Dibromoethane	ND		250	69	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Cyclohexane	ND		250	120	ug/Kg		05/13/24 07:11	05/13/24 12:24	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-468442/1-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		250	130	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Methyl acetate	ND		1300	370	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Methyl tert-butyl ether	ND		250	74	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Methylcyclohexane	ND		250	120	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Methylene Chloride	ND		250	230	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Styrene	ND		250	75	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Tetrachloroethene	ND		250	100	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Toluene	ND		250	72	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
trans-1,2-Dichloroethene	ND		250	88	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
trans-1,3-Dichloropropene	ND		250	110	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Trichloroethene	ND		250	79	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Trichlorofluoromethane	ND		250	210	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Vinyl chloride	ND		250	180	ug/Kg		05/13/24 07:11	05/13/24 12:24	1
Xylenes, Total	ND		500	360	ug/Kg		05/13/24 07:11	05/13/24 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		49 - 147	05/13/24 07:11	05/13/24 12:24	1
4-Bromofluorobenzene (Surr)	86		54 - 119	05/13/24 07:11	05/13/24 12:24	1
Dibromofluoromethane (Surr)	88		57 - 126	05/13/24 07:11	05/13/24 12:24	1
Toluene-d8 (Surr)	96		55 - 118	05/13/24 07:11	05/13/24 12:24	1

Lab Sample ID: LCS 180-468442/2-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	500	457		ug/Kg		91	65 - 137
1,1,2,2-Tetrachloroethane	500	619		ug/Kg		124	44 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	500	441		ug/Kg		88	49 - 130
1,1,2-Trichloroethane	500	598		ug/Kg		120	56 - 142
1,1-Dichloroethane	500	491		ug/Kg		98	59 - 124
1,1-Dichloroethene	500	464		ug/Kg		93	53 - 129
1,2-Dibromo-3-Chloropropane	500	361		ug/Kg		72	22 - 141
1,2-Dichlorobenzene	500	517		ug/Kg		103	66 - 116
1,2-Dichloroethane	500	546		ug/Kg		109	49 - 162
1,2-Dichloropropane	500	506		ug/Kg		101	65 - 126
1,2,4-Trichlorobenzene	500	319		ug/Kg		64	29 - 133
1,3-Dichlorobenzene	500	487		ug/Kg		97	75 - 116
1,4-Dichlorobenzene	500	498		ug/Kg		100	75 - 118
2-Butanone (MEK)	1000	937	J	ug/Kg		94	31 - 152
2-Hexanone	1000	824	J	ug/Kg		82	50 - 143
4-Methyl-2-pentanone (MIBK)	1000	569	J	ug/Kg		57	45 - 154
Acetone	1000	1210	J	ug/Kg		121	27 - 150
Benzene	500	501		ug/Kg		100	72 - 122
Bromoform	500	485		ug/Kg		97	32 - 164
Bromomethane	500	639		ug/Kg		128	31 - 170
Carbon disulfide	500	371		ug/Kg		74	25 - 152
Carbon tetrachloride	500	417		ug/Kg		83	66 - 138

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-468442/2-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	500	516		ug/Kg		103	78 - 124
Chlorodibromomethane	500	472		ug/Kg		94	56 - 143
Chloroform	500	523		ug/Kg		105	64 - 123
Chloromethane	500	339		ug/Kg		68	52 - 160
Chloroethane	500	536		ug/Kg		107	26 - 158
cis-1,2-Dichloroethene	500	489		ug/Kg		98	71 - 118
cis-1,3-Dichloropropene	500	578		ug/Kg		116	66 - 134
Dichlorobromomethane	500	470		ug/Kg		94	62 - 137
Dichlorodifluoromethane	500	285		ug/Kg		57	40 - 148
Ethylbenzene	500	498		ug/Kg		100	76 - 119
1,2-Dibromoethane	500	591		ug/Kg		118	51 - 156
Cyclohexane	500	403		ug/Kg		81	55 - 170
Isopropylbenzene	500	454		ug/Kg		91	57 - 133
Methyl acetate	1000	1190	J	ug/Kg		119	10 - 170
Methyl tert-butyl ether	500	640		ug/Kg		128	28 - 147
Methylcyclohexane	500	444		ug/Kg		89	68 - 120
Methylene Chloride	500	516		ug/Kg		103	64 - 132
m-Xylene & p-Xylene	500	506		ug/Kg		101	71 - 118
o-Xylene	500	513		ug/Kg		103	73 - 119
Styrene	500	543		ug/Kg		109	74 - 126
Tetrachloroethene	500	393		ug/Kg		79	68 - 121
Toluene	500	517		ug/Kg		103	69 - 128
trans-1,2-Dichloroethene	500	478		ug/Kg		96	67 - 123
trans-1,3-Dichloropropene	500	633		ug/Kg		127	60 - 143
Trichloroethene	500	402		ug/Kg		80	69 - 121
Trichlorofluoromethane	500	ND		ug/Kg		36	15 - 170
Vinyl chloride	500	406		ug/Kg		81	59 - 135
Xylenes, Total	1000	1020		ug/Kg		102	73 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		49 - 147
4-Bromofluorobenzene (Surr)	108		54 - 119
Dibromofluoromethane (Surr)	99		57 - 126
Toluene-d8 (Surr)	106		55 - 118

Lab Sample ID: LCSD 180-468442/3-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 468442

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	500	525		ug/Kg		105	65 - 137	14	40
1,1,2,2-Tetrachloroethane	500	620		ug/Kg		124	44 - 146	0	40
1,1,2-Trichloro-1,2,2-trifluoroethane	500	513		ug/Kg		103	49 - 130	15	40
1,1,2-Trichloroethane	500	589		ug/Kg		118	56 - 142	2	40
1,1-Dichloroethane	500	511		ug/Kg		102	59 - 124	4	40
1,1-Dichloroethene	500	530		ug/Kg		106	53 - 129	13	40
1,2-Dibromo-3-Chloropropane	500	341		ug/Kg		68	22 - 141	6	40
1,2-Dichlorobenzene	500	529		ug/Kg		106	66 - 116	2	40

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-468442/3-A

Matrix: Solid

Analysis Batch: 468365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 468442

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane	500	532		ug/Kg		106	49 - 162	3	40
1,2-Dichloropropane	500	507		ug/Kg		101	65 - 126	0	40
1,2,4-Trichlorobenzene	500	325		ug/Kg		65	29 - 133	2	40
1,3-Dichlorobenzene	500	502		ug/Kg		100	75 - 116	3	40
1,4-Dichlorobenzene	500	513		ug/Kg		103	75 - 118	3	40
2-Butanone (MEK)	1000	817	J	ug/Kg		82	31 - 152	14	40
2-Hexanone	1000	777	J	ug/Kg		78	50 - 143	6	40
4-Methyl-2-pentanone (MIBK)	1000	562	J	ug/Kg		56	45 - 154	1	40
Acetone	1000	1100	J	ug/Kg		110	27 - 150	10	40
Benzene	500	524		ug/Kg		105	72 - 122	4	40
Bromoform	500	463		ug/Kg		93	32 - 164	5	40
Bromomethane	500	540		ug/Kg		108	31 - 170	17	40
Carbon disulfide	500	420		ug/Kg		84	25 - 152	12	40
Carbon tetrachloride	500	468		ug/Kg		94	66 - 138	12	40
Chlorobenzene	500	535		ug/Kg		107	78 - 124	4	40
Chlorodibromomethane	500	478		ug/Kg		96	56 - 143	1	40
Chloroform	500	547		ug/Kg		109	64 - 123	4	40
Chloromethane	500	357		ug/Kg		71	52 - 160	5	40
Chloroethane	500	591		ug/Kg		118	26 - 158	10	40
cis-1,2-Dichloroethene	500	506		ug/Kg		101	71 - 118	3	40
cis-1,3-Dichloropropene	500	596		ug/Kg		119	66 - 134	3	40
Dichlorobromomethane	500	479		ug/Kg		96	62 - 137	2	40
Dichlorodifluoromethane	500	324		ug/Kg		65	40 - 148	13	40
Ethylbenzene	500	547		ug/Kg		109	76 - 119	9	40
1,2-Dibromoethane	500	580		ug/Kg		116	51 - 156	2	40
Cyclohexane	500	462		ug/Kg		92	55 - 170	14	40
Isopropylbenzene	500	483		ug/Kg		97	57 - 133	6	40
Methyl acetate	1000	1140	J	ug/Kg		114	10 - 170	4	40
Methyl tert-butyl ether	500	621		ug/Kg		124	28 - 147	3	40
Methylcyclohexane	500	489		ug/Kg		98	68 - 120	10	40
Methylene Chloride	500	525		ug/Kg		105	64 - 132	2	40
m-Xylene & p-Xylene	500	546		ug/Kg		109	71 - 118	8	40
o-Xylene	500	549		ug/Kg		110	73 - 119	7	40
Styrene	500	554		ug/Kg		111	74 - 126	2	40
Tetrachloroethene	500	456		ug/Kg		91	68 - 121	15	40
Toluene	500	548		ug/Kg		110	69 - 128	6	40
trans-1,2-Dichloroethene	500	529		ug/Kg		106	67 - 123	10	40
trans-1,3-Dichloropropene	500	625		ug/Kg		125	60 - 143	1	40
Trichloroethene	500	424		ug/Kg		85	69 - 121	5	40
Trichlorofluoromethane	500	217	J	ug/Kg		43	15 - 170	19	40
Vinyl chloride	500	484		ug/Kg		97	59 - 135	17	40
Xylenes, Total	1000	1100		ug/Kg		110	73 - 118	7	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		49 - 147
4-Bromofluorobenzene (Surr)	113		54 - 119
Dibromofluoromethane (Surr)	99		57 - 126
Toluene-d8 (Surr)	111		55 - 118

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-467048/1-A

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Method Blank

Prep Type: SPLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	60	ug/L			05/08/24 15:49	1
1,1,2,2-Tetrachloroethane	ND		100	60	ug/L			05/08/24 15:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	86	ug/L			05/08/24 15:49	1
1,1,2-Trichloroethane	ND		100	45	ug/L			05/08/24 15:49	1
1,1-Dichloroethane	ND		100	63	ug/L			05/08/24 15:49	1
1,1-Dichloroethene	ND		100	55	ug/L			05/08/24 15:49	1
1,2-Dibromo-3-Chloropropane	ND		100	89	ug/L			05/08/24 15:49	1
1,2-Dichlorobenzene	ND		100	36	ug/L			05/08/24 15:49	1
1,2-Dichloroethane	ND		100	57	ug/L			05/08/24 15:49	1
1,2-Dichloropropane	ND		100	66	ug/L			05/08/24 15:49	1
1,2,4-Trichlorobenzene	ND		100	77	ug/L			05/08/24 15:49	1
1,3-Dichlorobenzene	ND		100	50	ug/L			05/08/24 15:49	1
1,4-Dichlorobenzene	ND		100	54	ug/L			05/08/24 15:49	1
2-Butanone (MEK)	ND		500	260	ug/L			05/08/24 15:49	1
2-Hexanone	ND		500	330	ug/L			05/08/24 15:49	1
4-Methyl-2-pentanone (MIBK)	ND		500	310	ug/L			05/08/24 15:49	1
Acetone	ND		500	340	ug/L			05/08/24 15:49	1
Benzene	ND		100	60	ug/L			05/08/24 15:49	1
Bromoform	ND		100	98	ug/L			05/08/24 15:49	1
Bromomethane	ND		100	89	ug/L			05/08/24 15:49	1
Carbon disulfide	ND		100	88	ug/L			05/08/24 15:49	1
Carbon tetrachloride	ND		100	88	ug/L			05/08/24 15:49	1
Chlorobenzene	ND		100	50	ug/L			05/08/24 15:49	1
Chlorodibromomethane	ND		100	84	ug/L			05/08/24 15:49	1
Chloroform	ND		100	60	ug/L			05/08/24 15:49	1
Chloromethane	ND		100	90	ug/L			05/08/24 15:49	1
Chloroethane	ND		100	90	ug/L			05/08/24 15:49	1
cis-1,2-Dichloroethene	ND		100	71	ug/L			05/08/24 15:49	1
cis-1,3-Dichloropropene	ND		100	59	ug/L			05/08/24 15:49	1
Dichlorobromomethane	ND		100	64	ug/L			05/08/24 15:49	1
Dichlorodifluoromethane	ND		100	83	ug/L			05/08/24 15:49	1
Ethylbenzene	ND		100	51	ug/L			05/08/24 15:49	1
1,2-Dibromoethane	ND		100	50	ug/L			05/08/24 15:49	1
Cyclohexane	ND		100	63	ug/L			05/08/24 15:49	1
Isopropylbenzene	ND		100	34	ug/L			05/08/24 15:49	1
Methyl acetate	ND		500	170	ug/L			05/08/24 15:49	1
Methyl tert-butyl ether	ND		100	59	ug/L			05/08/24 15:49	1
Methylcyclohexane	ND		100	61	ug/L			05/08/24 15:49	1
Methylene Chloride	ND		100	89	ug/L			05/08/24 15:49	1
Styrene	ND		100	47	ug/L			05/08/24 15:49	1
Tetrachloroethene	ND		100	47	ug/L			05/08/24 15:49	1
Toluene	ND		100	46	ug/L			05/08/24 15:49	1
trans-1,2-Dichloroethene	ND		100	67	ug/L			05/08/24 15:49	1
trans-1,3-Dichloropropene	ND		100	58	ug/L			05/08/24 15:49	1
Trichloroethene	ND		100	69	ug/L			05/08/24 15:49	1
Trichlorofluoromethane	ND		100	87	ug/L			05/08/24 15:49	1
Vinyl chloride	ND		100	41	ug/L			05/08/24 15:49	1
Xylenes, Total	ND		200	89	ug/L			05/08/24 15:49	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-467048/1-A

Matrix: Solid

Analysis Batch: 467887

Client Sample ID: Method Blank

Prep Type: SPLP

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		52 - 151		05/08/24 15:49	1
4-Bromofluorobenzene (Surr)	80		49 - 118		05/08/24 15:49	1
Dibromofluoromethane (Surr)	96		60 - 132		05/08/24 15:49	1
Toluene-d8 (Surr)	102		53 - 124		05/08/24 15:49	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-467520/1-A

Matrix: Solid

Analysis Batch: 467554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,2'-oxybis[1-chloropropane]	ND		67	25	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4,5-Trichlorophenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4,6-Trichlorophenol	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4-Dichlorophenol	ND		67	26	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4-Dimethylphenol	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4-Dinitrophenol	ND		3300	2100	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,4-Dinitrotoluene	ND		330	200	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2,6-Dinitrotoluene	ND		330	130	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Chloronaphthalene	ND		67	15	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Chlorophenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Methylnaphthalene	ND		67	16	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Methylphenol	ND		330	96	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Nitroaniline	ND		1700	150	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
2-Nitrophenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
3,3'-Dichlorobenzidine	ND		330	310	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
3-Nitroaniline	ND		1700	85	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4,6-Dinitro-2-methylphenol	ND		1700	580	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Bromophenyl phenyl ether	ND		330	140	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Chloro-3-methylphenol	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Chloroaniline	ND		330	88	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Chlorophenyl phenyl ether	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Methylphenol, 3 & 4	ND		330	98	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Nitroaniline	ND		1700	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
4-Nitrophenol	ND		1700	230	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Acenaphthene	ND		67	19	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Acenaphthylene	ND		67	15	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Acetophenone	ND		670	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Anthracene	ND		67	17	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Atrazine	ND		670	150	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzaldehyde	ND		670	41	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzo[a]anthracene	ND		67	30	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzo[a]pyrene	ND		67	29	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzo[b]fluoranthene	ND		67	16	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzo[g,h,i]perylene	ND		67	14	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Benzo[k]fluoranthene	ND		67	20	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Bis(2-chloroethoxy)methane	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-467520/1-A

Matrix: Solid

Analysis Batch: 467554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		67	21	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Bis(2-ethylhexyl) phthalate	ND		3300	360	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Butyl benzyl phthalate	ND		1700	230	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Caprolactam	ND		1700	220	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Carbazole	ND		67	16	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Chrysene	ND		67	37	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Dibenz(a,h)anthracene	ND		67	43	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Dibenzofuran	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Diethyl phthalate	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Dimethyl phthalate	ND		670	370	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Di-n-butyl phthalate	ND		3300	690	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Di-n-octyl phthalate	ND		330	190	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Fluoranthene	ND		67	18	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Fluorene	ND		67	13	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Hexachlorobenzene	ND		67	24	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Hexachlorobutadiene	ND		67	20	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Hexachlorocyclopentadiene	ND		330	90	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Hexachloroethane	ND		330	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Indeno[1,2,3-cd]pyrene	ND		67	33	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Isophorone	ND		330	130	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Naphthalene	ND		67	13	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Nitrobenzene	ND		670	120	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
N-Nitrosodi-n-propylamine	ND		67	23	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
N-Nitrosodiphenylamine	ND		330	110	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Pentachlorophenol	ND		1700	540	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Phenanthrene	ND		67	18	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Phenol	ND		330	100	ug/Kg		05/05/24 12:25	05/06/24 08:28	1
Pyrene	ND		67	24	ug/Kg		05/05/24 12:25	05/06/24 08:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	65		34 - 108	05/05/24 12:25	05/06/24 08:28	1
2-Fluorobiphenyl	68		44 - 105	05/05/24 12:25	05/06/24 08:28	1
2-Fluorophenol (Surr)	79		48 - 105	05/05/24 12:25	05/06/24 08:28	1
Nitrobenzene-d5 (Surr)	87		46 - 105	05/05/24 12:25	05/06/24 08:28	1
Phenol-d5 (Surr)	77		46 - 105	05/05/24 12:25	05/06/24 08:28	1
Terphenyl-d14 (Surr)	72		39 - 105	05/05/24 12:25	05/06/24 08:28	1

Lab Sample ID: LCS 180-467520/2-A

Matrix: Solid

Analysis Batch: 467554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	6670	4990		ug/Kg		75	50 - 100
2,2'-oxybis[1-chloropropane]	6670	7390		ug/Kg		111	30 - 113
2,4,5-Trichlorophenol	6670	5660		ug/Kg		85	50 - 104
2,4,6-Trichlorophenol	6670	5630		ug/Kg		84	50 - 105
2,4-Dichlorophenol	6670	5540		ug/Kg		83	53 - 101
2,4-Dimethylphenol	6670	5010		ug/Kg		75	51 - 101

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-467520/2-A

Matrix: Solid

Analysis Batch: 467554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrophenol	13300	10300		ug/Kg		77	33 - 101
2,4-Dinitrotoluene	6670	6330		ug/Kg		95	54 - 104
2,6-Dinitrotoluene	6670	6010		ug/Kg		90	51 - 106
2-Chloronaphthalene	6670	5100		ug/Kg		77	51 - 100
2-Chlorophenol	6670	5300		ug/Kg		79	51 - 100
2-Methylnaphthalene	6670	5370		ug/Kg		81	53 - 100
2-Methylphenol	6670	5300		ug/Kg		80	50 - 101
2-Nitroaniline	6670	7220		ug/Kg		108	42 - 123
2-Nitrophenol	6670	5920		ug/Kg		89	55 - 107
3,3'-Dichlorobenzidine	6670	5430		ug/Kg		82	43 - 100
3-Nitroaniline	6670	6010		ug/Kg		90	50 - 103
4,6-Dinitro-2-methylphenol	13300	11900		ug/Kg		89	51 - 100
4-Bromophenyl phenyl ether	6670	4570		ug/Kg		68	52 - 101
4-Chloro-3-methylphenol	6670	5670		ug/Kg		85	49 - 106
4-Chloroaniline	6670	5510		ug/Kg		83	47 - 100
4-Chlorophenyl phenyl ether	6670	5440		ug/Kg		82	52 - 100
Methylphenol, 3 & 4	6670	5440		ug/Kg		82	50 - 103
4-Nitroaniline	6670	6130		ug/Kg		92	52 - 103
4-Nitrophenol	13300	12800		ug/Kg		96	30 - 134
Acenaphthene	6670	4980		ug/Kg		75	50 - 100
Acenaphthylene	6670	5030		ug/Kg		75	52 - 100
Acetophenone	6670	5270		ug/Kg		79	48 - 100
Anthracene	6670	4920		ug/Kg		74	53 - 100
Atrazine	6670	5420		ug/Kg		81	49 - 103
Benzaldehyde	6670	6800		ug/Kg		102	23 - 105
Benzo[a]anthracene	6670	5440		ug/Kg		82	51 - 100
Benzo[a]pyrene	6670	5090		ug/Kg		76	51 - 100
Benzo[b]fluoranthene	6670	4830		ug/Kg		72	48 - 100
Benzo[g,h,i]perylene	6670	4870		ug/Kg		73	48 - 105
Benzo[k]fluoranthene	6670	4780		ug/Kg		72	19 - 100
Bis(2-chloroethoxy)methane	6670	5720		ug/Kg		86	49 - 100
Bis(2-chloroethyl)ether	6670	5290		ug/Kg		79	48 - 100
Bis(2-ethylhexyl) phthalate	6670	5980		ug/Kg		90	53 - 107
Butyl benzyl phthalate	6670	6090		ug/Kg		91	52 - 107
Carbazole	6670	5060		ug/Kg		76	53 - 100
Chrysene	6670	5190		ug/Kg		78	50 - 100
Dibenz(a,h)anthracene	6670	5150		ug/Kg		77	50 - 107
Dibenzofuran	6670	5270		ug/Kg		79	52 - 100
Diethyl phthalate	6670	5270		ug/Kg		79	48 - 104
Dimethyl phthalate	6670	5320		ug/Kg		80	53 - 100
Di-n-butyl phthalate	6670	5380		ug/Kg		81	57 - 102
Di-n-octyl phthalate	6670	5120		ug/Kg		77	41 - 106
Fluoranthene	6670	5330		ug/Kg		80	55 - 100
Fluorene	6670	5250		ug/Kg		79	52 - 100
Hexachlorobenzene	6670	4660		ug/Kg		70	49 - 100
Hexachlorobutadiene	6670	5530		ug/Kg		83	38 - 107
Hexachlorocyclopentadiene	6670	4130		ug/Kg		62	33 - 117
Hexachloroethane	6670	4960		ug/Kg		74	47 - 100
Indeno[1,2,3-cd]pyrene	6670	5360		ug/Kg		80	51 - 103

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-467520/2-A

Matrix: Solid

Analysis Batch: 467554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isophorone	6670	6170		ug/Kg		93	48 - 105
Naphthalene	6670	5220		ug/Kg		78	51 - 100
Nitrobenzene	6670	6280		ug/Kg		94	44 - 108
N-Nitrosodi-n-propylamine	6670	6170		ug/Kg		93	45 - 107
N-Nitrosodiphenylamine	6670	5180		ug/Kg		78	52 - 100
Pentachlorophenol	13300	10100		ug/Kg		76	42 - 110
Phenanthrene	6670	5020		ug/Kg		75	53 - 100
Phenol	6670	5540		ug/Kg		83	49 - 100
Pyrene	6670	5270		ug/Kg		79	52 - 100

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	72		34 - 108
2-Fluorobiphenyl	74		44 - 105
2-Fluorophenol (Surr)	81		48 - 105
Nitrobenzene-d5 (Surr)	94		46 - 105
Phenol-d5 (Surr)	80		46 - 105
Terphenyl-d14 (Surr)	61		39 - 105

Lab Sample ID: MB 180-467805/1-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4-Dinitrophenol	ND		100	33	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		05/08/24 14:42	05/13/24 07:54	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Chlorophenol	ND		10	2.3	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Methylphenol	ND		10	5.6	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Nitroaniline	ND		50	5.5	ug/L		05/08/24 14:42	05/13/24 07:54	1
2-Nitrophenol	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		05/08/24 14:42	05/13/24 07:54	1
3-Nitroaniline	ND		50	4.4	ug/L		05/08/24 14:42	05/13/24 07:54	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Chloroaniline	ND		10	3.8	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		05/08/24 14:42	05/13/24 07:54	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Nitroaniline	ND		50	3.6	ug/L		05/08/24 14:42	05/13/24 07:54	1
4-Nitrophenol	ND		50	9.4	ug/L		05/08/24 14:42	05/13/24 07:54	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-467805/1-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 07:54	1
Acenaphthylene	ND		1.9	0.65	ug/L		05/08/24 14:42	05/13/24 07:54	1
Acetophenone	ND		10	1.6	ug/L		05/08/24 14:42	05/13/24 07:54	1
Anthracene	ND		1.9	0.49	ug/L		05/08/24 14:42	05/13/24 07:54	1
Atrazine	ND		10	6.3	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzaldehyde	ND		10	5.4	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 07:54	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		05/08/24 14:42	05/13/24 07:54	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		05/08/24 14:42	05/13/24 07:54	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		05/08/24 14:42	05/13/24 07:54	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		05/08/24 14:42	05/13/24 07:54	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		05/08/24 14:42	05/13/24 07:54	1
Caprolactam	ND		50	14	ug/L		05/08/24 14:42	05/13/24 07:54	1
Carbazole	ND		1.9	0.51	ug/L		05/08/24 14:42	05/13/24 07:54	1
Chrysene	ND		1.9	0.81	ug/L		05/08/24 14:42	05/13/24 07:54	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		05/08/24 14:42	05/13/24 07:54	1
Dibenzofuran	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
Diethyl phthalate	ND		10	5.7	ug/L		05/08/24 14:42	05/13/24 07:54	1
Dimethyl phthalate	ND		20	2.0	ug/L		05/08/24 14:42	05/13/24 07:54	1
Di-n-butyl phthalate	ND		100	49	ug/L		05/08/24 14:42	05/13/24 07:54	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
Fluoranthene	ND		1.9	0.60	ug/L		05/08/24 14:42	05/13/24 07:54	1
Fluorene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 07:54	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		05/08/24 14:42	05/13/24 07:54	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		05/08/24 14:42	05/13/24 07:54	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/24 14:42	05/13/24 07:54	1
Hexachloroethane	ND		10	1.3	ug/L		05/08/24 14:42	05/13/24 07:54	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		05/08/24 14:42	05/13/24 07:54	1
Isophorone	ND		10	1.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
Naphthalene	ND		1.9	0.59	ug/L		05/08/24 14:42	05/13/24 07:54	1
Nitrobenzene	ND		20	5.0	ug/L		05/08/24 14:42	05/13/24 07:54	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		05/08/24 14:42	05/13/24 07:54	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		05/08/24 14:42	05/13/24 07:54	1
Pentachlorophenol	ND		50	8.5	ug/L		05/08/24 14:42	05/13/24 07:54	1
Phenanthrene	ND		1.9	1.6	ug/L		05/08/24 14:42	05/13/24 07:54	1
Phenol	ND		10	4.9	ug/L		05/08/24 14:42	05/13/24 07:54	1
Pyrene	ND		1.9	0.54	ug/L		05/08/24 14:42	05/13/24 07:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	58		39 - 121	05/08/24 14:42	05/13/24 07:54	1
2-Fluorobiphenyl	61		45 - 105	05/08/24 14:42	05/13/24 07:54	1
2-Fluorophenol (Surr)	64		38 - 105	05/08/24 14:42	05/13/24 07:54	1
Nitrobenzene-d5 (Surr)	63		45 - 106	05/08/24 14:42	05/13/24 07:54	1
Phenol-d5 (Surr)	65		38 - 105	05/08/24 14:42	05/13/24 07:54	1
Terphenyl-d14 (Surr)	63		28 - 125	05/08/24 14:42	05/13/24 07:54	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-467805/2-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	200	128		ug/L		64	50 - 100
2,2'-oxybis[1-chloropropane]	200	139		ug/L		70	24 - 111
2,4,5-Trichlorophenol	200	141		ug/L		70	54 - 100
2,4,6-Trichlorophenol	200	134		ug/L		67	54 - 100
2,4-Dichlorophenol	200	147		ug/L		74	54 - 100
2,4-Dimethylphenol	200	120		ug/L		60	52 - 100
2,4-Dinitrophenol	400	300		ug/L		75	32 - 100
2,4-Dinitrotoluene	200	165		ug/L		82	56 - 101
2,6-Dinitrotoluene	200	147		ug/L		74	54 - 103
2-Chloronaphthalene	200	152		ug/L		76	51 - 100
2-Chlorophenol	200	144		ug/L		72	52 - 100
2-Methylnaphthalene	200	144		ug/L		72	53 - 100
2-Methylphenol	200	142		ug/L		71	50 - 100
2-Nitroaniline	200	141		ug/L		71	50 - 102
2-Nitrophenol	200	142		ug/L		71	54 - 100
3,3'-Dichlorobenzidine	200	155		ug/L		78	41 - 100
3-Nitroaniline	200	143		ug/L		71	53 - 100
4,6-Dinitro-2-methylphenol	400	299		ug/L		75	49 - 100
4-Bromophenyl phenyl ether	200	131		ug/L		65	50 - 100
4-Chloro-3-methylphenol	200	147		ug/L		74	46 - 107
4-Chloroaniline	200	139		ug/L		69	48 - 100
4-Chlorophenyl phenyl ether	200	136		ug/L		68	52 - 100
Methylphenol, 3 & 4	200	153		ug/L		76	51 - 100
4-Nitroaniline	200	157		ug/L		78	54 - 100
4-Nitrophenol	400	314		ug/L		79	39 - 117
Acenaphthene	200	132		ug/L		66	51 - 100
Acenaphthylene	200	135		ug/L		68	53 - 100
Acetophenone	200	141		ug/L		71	47 - 100
Anthracene	200	134		ug/L		67	53 - 100
Atrazine	200	133		ug/L		66	47 - 100
Benzaldehyde	200	62.1		ug/L		31	10 - 129
Benzo[a]anthracene	200	134		ug/L		67	49 - 100
Benzo[a]pyrene	200	144		ug/L		72	48 - 100
Benzo[b]fluoranthene	200	141		ug/L		70	47 - 100
Benzo[g,h,i]perylene	200	131		ug/L		66	49 - 100
Benzo[k]fluoranthene	200	132		ug/L		66	46 - 100
Bis(2-chloroethoxy)methane	200	133		ug/L		66	49 - 100
Bis(2-chloroethyl)ether	200	129		ug/L		64	46 - 100
Bis(2-ethylhexyl) phthalate	200	143		ug/L		72	51 - 101
Butyl benzyl phthalate	200	142		ug/L		71	51 - 101
Carbazole	200	142		ug/L		71	54 - 100
Chrysene	200	142		ug/L		71	49 - 100
Dibenz(a,h)anthracene	200	137		ug/L		68	50 - 102
Dibenzofuran	200	136		ug/L		68	53 - 100
Diethyl phthalate	200	144		ug/L		72	53 - 100
Dimethyl phthalate	200	141		ug/L		70	54 - 100
Di-n-butyl phthalate	200	148		ug/L		74	56 - 100
Di-n-octyl phthalate	200	119		ug/L		59	39 - 100

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-467805/2-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	200	149		ug/L		75	55 - 100
Fluorene	200	139		ug/L		69	53 - 100
Hexachlorobenzene	200	139		ug/L		69	46 - 100
Hexachlorobutadiene	200	141		ug/L		71	42 - 100
Hexachlorocyclopentadiene	200	102		ug/L		51	41 - 100
Hexachloroethane	200	138		ug/L		69	49 - 100
Indeno[1,2,3-cd]pyrene	200	141		ug/L		71	50 - 100
Isophorone	200	147		ug/L		74	50 - 100
Naphthalene	200	139		ug/L		69	53 - 100
Nitrobenzene	200	138		ug/L		69	50 - 100
N-Nitrosodi-n-propylamine	200	142		ug/L		71	46 - 100
N-Nitrosodiphenylamine	200	131		ug/L		65	50 - 100
Pentachlorophenol	400	302		ug/L		75	37 - 100
Phenanthrene	200	134		ug/L		67	52 - 100
Phenol	200	138		ug/L		69	47 - 100
Pyrene	200	130		ug/L		65	50 - 100

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	66		39 - 121
2-Fluorobiphenyl	61		45 - 105
2-Fluorophenol (Surr)	68		38 - 105
Nitrobenzene-d5 (Surr)	65		45 - 106
Phenol-d5 (Surr)	69		38 - 105
Terphenyl-d14 (Surr)	51		28 - 125

Lab Sample ID: LCSD 180-467805/3-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 467805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	200	138		ug/L		69	50 - 100	8	15
2,2'-oxybis[1-chloropropane]	200	140		ug/L		70	24 - 111	0	15
2,4,5-Trichlorophenol	200	147		ug/L		74	54 - 100	4	15
2,4,6-Trichlorophenol	200	148		ug/L		74	54 - 100	10	15
2,4-Dichlorophenol	200	147		ug/L		73	54 - 100	0	15
2,4-Dimethylphenol	200	125		ug/L		63	52 - 100	4	15
2,4-Dinitrophenol	400	335		ug/L		84	32 - 100	11	15
2,4-Dinitrotoluene	200	175		ug/L		87	56 - 101	6	15
2,6-Dinitrotoluene	200	155		ug/L		77	54 - 103	5	15
2-Chloronaphthalene	200	142		ug/L		71	51 - 100	7	15
2-Chlorophenol	200	145		ug/L		73	52 - 100	1	15
2-Methylnaphthalene	200	147		ug/L		73	53 - 100	1	15
2-Methylphenol	200	141		ug/L		71	50 - 100	1	15
2-Nitroaniline	200	158		ug/L		79	50 - 102	11	15
2-Nitrophenol	200	147		ug/L		73	54 - 100	3	15
3,3'-Dichlorobenzidine	200	166		ug/L		83	41 - 100	7	15
3-Nitroaniline	200	157		ug/L		79	53 - 100	10	15
4,6-Dinitro-2-methylphenol	400	311		ug/L		78	49 - 100	4	15

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-467805/3-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 467805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Bromophenyl phenyl ether	200	134		ug/L		67	50 - 100	3	15
4-Chloro-3-methylphenol	200	152		ug/L		76	46 - 107	3	15
4-Chloroaniline	200	136		ug/L		68	48 - 100	2	15
4-Chlorophenyl phenyl ether	200	148		ug/L		74	52 - 100	9	15
Methylphenol, 3 & 4	200	152		ug/L		76	51 - 100	1	15
4-Nitroaniline	200	170		ug/L		85	54 - 100	8	15
4-Nitrophenol	400	344		ug/L		86	39 - 117	9	15
Acenaphthene	200	141		ug/L		71	51 - 100	6	15
Acenaphthylene	200	147		ug/L		74	53 - 100	8	15
Acetophenone	200	139		ug/L		69	47 - 100	2	15
Anthracene	200	140		ug/L		70	53 - 100	4	15
Atrazine	200	140		ug/L		70	47 - 100	5	16
Benzaldehyde	200	60.4		ug/L		30	10 - 129	3	15
Benzo[a]anthracene	200	140		ug/L		70	49 - 100	4	15
Benzo[a]pyrene	200	141		ug/L		71	48 - 100	2	15
Benzo[b]fluoranthene	200	130		ug/L		65	47 - 100	8	15
Benzo[g,h,i]perylene	200	134		ug/L		67	49 - 100	2	15
Benzo[k]fluoranthene	200	132		ug/L		66	46 - 100	0	15
Bis(2-chloroethoxy)methane	200	138		ug/L		69	49 - 100	4	15
Bis(2-chloroethyl)ether	200	125		ug/L		63	46 - 100	3	15
Bis(2-ethylhexyl) phthalate	200	153		ug/L		76	51 - 101	6	15
Butyl benzyl phthalate	200	154		ug/L		77	51 - 101	8	15
Carbazole	200	150		ug/L		75	54 - 100	5	15
Chrysene	200	146		ug/L		73	49 - 100	3	15
Dibenz(a,h)anthracene	200	138		ug/L		69	50 - 102	1	15
Dibenzofuran	200	144		ug/L		72	53 - 100	5	15
Diethyl phthalate	200	154		ug/L		77	53 - 100	6	15
Dimethyl phthalate	200	153		ug/L		77	54 - 100	9	15
Di-n-butyl phthalate	200	151		ug/L		76	56 - 100	2	15
Di-n-octyl phthalate	200	121		ug/L		61	39 - 100	2	15
Fluoranthene	200	152		ug/L		76	55 - 100	2	15
Fluorene	200	151		ug/L		75	53 - 100	8	15
Hexachlorobenzene	200	147		ug/L		74	46 - 100	6	15
Hexachlorobutadiene	200	136		ug/L		68	42 - 100	4	15
Hexachlorocyclopentadiene	200	109		ug/L		55	41 - 100	7	15
Hexachloroethane	200	136		ug/L		68	49 - 100	2	15
Indeno[1,2,3-cd]pyrene	200	146		ug/L		73	50 - 100	3	15
Isophorone	200	153		ug/L		77	50 - 100	4	15
Naphthalene	200	142		ug/L		71	53 - 100	2	15
Nitrobenzene	200	142		ug/L		71	50 - 100	3	15
N-Nitrosodi-n-propylamine	200	142		ug/L		71	46 - 100	0	15
N-Nitrosodiphenylamine	200	139		ug/L		70	50 - 100	6	15
Pentachlorophenol	400	309		ug/L		77	37 - 100	2	15
Phenanthrene	200	138		ug/L		69	52 - 100	3	15
Phenol	200	139		ug/L		70	47 - 100	1	15
Pyrene	200	138		ug/L		69	50 - 100	6	15

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-467805/3-A

Matrix: Solid

Analysis Batch: 468356

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 467805

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	72		39 - 121
2-Fluorobiphenyl	66		45 - 105
2-Fluorophenol (Surr)	63		38 - 105
Nitrobenzene-d5 (Surr)	67		45 - 106
Phenol-d5 (Surr)	67		38 - 105
Terphenyl-d14 (Surr)	55		28 - 125

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 410-505557/1-A

Matrix: Solid

Analysis Batch: 506654

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 505557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		8.0	2.0	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.64	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.30	ng/L		05/13/24 17:01	05/15/24 20:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.57	ng/L		05/13/24 17:01	05/15/24 20:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.0	2.0	ng/L		05/13/24 17:01	05/15/24 20:12	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	109		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C4 PFBA	106		5 - 130	05/13/24 17:01	05/15/24 20:12	1
13C9 PFNA	109		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C5 PFHxA	107		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C6 PFDA	109		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C3 PFBS	104		40 - 135	05/13/24 17:01	05/15/24 20:12	1
13C3 PFHxS	95.7		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C8 PFOS	101		40 - 130	05/13/24 17:01	05/15/24 20:12	1
13C3 HFPO-DA	112		40 - 130	05/13/24 17:01	05/15/24 20:12	1

Lab Sample ID: LCS 410-505557/2-A

Matrix: Solid

Analysis Batch: 506654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 505557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	100	94.0		ng/L		94	70 - 140
Perfluorooctanoic acid (PFOA)	25.0	22.9		ng/L		91	70 - 150
Perfluorohexanoic acid (PFHxA)	25.0	22.4		ng/L		89	70 - 145
Perfluorononanoic acid (PFNA)	25.0	22.0		ng/L		88	70 - 150
Perfluorooctanesulfonic acid (PFOS)	23.2	22.2		ng/L		96	55 - 150
Perfluorodecanoic acid (PFDA)	25.0	22.0		ng/L		88	70 - 140
Perfluorobutanesulfonic acid (PFBS)	22.1	21.0		ng/L		95	60 - 145

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-505557/2-A

Matrix: Solid

Analysis Batch: 506654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 505557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanesulfonic acid (PFHxS)	22.8	23.9		ng/L		105	65 - 145
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	100	95.3		ng/L		95	70 - 140
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C8 PFOA	104		40 - 130				
13C4 PFBA	98.0		5 - 130				
13C9 PFNA	101		40 - 130				
13C5 PFHxA	103		40 - 130				
13C6 PFDA	101		40 - 130				
13C3 PFBS	98.2		40 - 135				
13C3 PFHxS	88.7		40 - 130				
13C8 PFOS	96.7		40 - 130				
13C3 HFPO-DA	105		40 - 130				

Lab Sample ID: LLCS 410-505557/3-A

Matrix: Solid

Analysis Batch: 506654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 505557

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	16.0	16.9		ng/L		106	70 - 140
Perfluorooctanoic acid (PFOA)	4.00	4.51		ng/L		113	70 - 150
Perfluorohexanoic acid (PFHxA)	4.00	4.19		ng/L		105	70 - 145
Perfluorononanoic acid (PFNA)	4.00	4.15		ng/L		104	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	4.13		ng/L		111	55 - 150
Perfluorodecanoic acid (PFDA)	4.00	3.90		ng/L		97	70 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.44		ng/L		126	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.11		ng/L		113	65 - 145
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	16.0	19.5		ng/L		122	70 - 140
Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits				
13C8 PFOA	106		40 - 130				
13C4 PFBA	105		5 - 130				
13C9 PFNA	114		40 - 130				
13C5 PFHxA	109		40 - 130				
13C6 PFDA	102		40 - 130				
13C3 PFBS	97.3		40 - 135				
13C3 PFHxS	98.0		40 - 130				
13C8 PFOS	102		40 - 130				
13C3 HFPO-DA	101		40 - 130				

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-506816/1-A

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 506816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.80	0.10	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.051	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.059	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.050	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.051	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.050	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.050	ng/g		05/16/24 05:54	05/22/24 13:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.050	ng/g		05/16/24 05:54	05/22/24 13:16	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.80	0.051	ng/g		05/16/24 05:54	05/22/24 13:16	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C4 PFBA	0.649	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C9 PFNA	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C5 PFHxA	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C6 PFDA	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C3 PFBS	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C3 PFHxS	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C8 PFOS	0.242	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1
13C3 HFPO-DA	0.000	*5-	20 - 150	05/16/24 05:54	05/22/24 13:16	1

Lab Sample ID: LCS 410-506816/2-A

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 506816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	10.0	8.87		ng/g		89	40 - 150
Perfluorooctanoic acid (PFOA)	2.50	2.27		ng/g		91	40 - 150
Perfluorohexanoic acid (PFHxA)	2.50	2.12		ng/g		85	40 - 150
Perfluorononanoic acid (PFNA)	2.50	2.27		ng/g		91	40 - 150
Perfluorooctanesulfonic acid (PFOS)	2.32	2.17		ng/g		94	40 - 150
Perfluorodecanoic acid (PFDA)	2.50	1.95		ng/g		78	40 - 150
Perfluorobutanesulfonic acid (PFBS)	2.21	2.99		ng/g		135	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.28	2.40		ng/g		105	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	10.0	9.41		ng/g		94	40 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 PFOA	11.6	*5-	20 - 150
13C4 PFBA	6.77	*5-	20 - 150
13C9 PFNA	14.0	*5-	20 - 150
13C5 PFHxA	8.17	*5-	20 - 150
13C6 PFDA	16.0	*5-	20 - 150
13C3 PFBS	1.96	*5-	20 - 150
13C3 PFHxS	3.03	*5-	20 - 150
13C8 PFOS	4.60	*5-	20 - 150

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-506816/2-A

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 506816

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 HFPO-DA	12.7	*5-	20 - 150

Lab Sample ID: LLCS 410-506816/3-A

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 506816

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	1.60	ND	*-	ng/g		0	40 - 150
Perfluorooctanoic acid (PFOA)	0.400	0.861	I *+	ng/g		215	40 - 150
Perfluorohexanoic acid (PFHxA)	0.400	ND	*-	ng/g		0	40 - 150
Perfluorononanoic acid (PFNA)	0.400	ND	*-	ng/g		0	40 - 150
Perfluorooctanesulfonic acid (PFOS)	0.371	ND	*-	ng/g		0	40 - 150
Perfluorodecanoic acid (PFDA)	0.400	0.407		ng/g		102	40 - 150
Perfluorobutanesulfonic acid (PFBS)	0.354	ND	*-	ng/g		0	40 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.364	ND	*-	ng/g		0	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.60	2.25	I	ng/g		140	40 - 150

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C8 PFOA	3.44	*5-	20 - 150
13C4 PFBA	1.91	*5-	20 - 150
13C9 PFNA	4.99	*5-	20 - 150
13C5 PFHxA	2.14	*5-	20 - 150
13C6 PFDA	6.36	*5-	20 - 150
13C3 PFBS	0.000	*5-	20 - 150
13C3 PFHxS	0.139	*5-	20 - 150
13C8 PFOS	0.363	*5-	20 - 150
13C3 HFPO-DA	4.21	*5-	20 - 150

Lab Sample ID: MB 410-516108/1-A

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 516108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		8.0	2.0	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.64	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.30	ng/L		06/11/24 14:23	06/13/24 23:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.57	ng/L		06/11/24 14:23	06/13/24 23:16	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.0	2.0	ng/L		06/11/24 14:23	06/13/24 23:16	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	93.9		40 - 130	06/11/24 14:23	06/13/24 23:16	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-516108/1-A

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 516108

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	90.5		5 - 130	06/11/24 14:23	06/13/24 23:16	1
13C9 PFNA	79.7		40 - 130	06/11/24 14:23	06/13/24 23:16	1
13C5 PFHxA	97.6		40 - 130	06/11/24 14:23	06/13/24 23:16	1
13C6 PFDA	85.3		40 - 130	06/11/24 14:23	06/13/24 23:16	1
13C3 PFBS	91.5		40 - 135	06/11/24 14:23	06/13/24 23:16	1
13C3 PFHxS	95.3		40 - 130	06/11/24 14:23	06/13/24 23:16	1
13C8 PFOS	91.6		40 - 130	06/11/24 14:23	06/13/24 23:16	1
13C3 HFPO-DA	90.4		40 - 130	06/11/24 14:23	06/13/24 23:16	1

Lab Sample ID: LCS 410-516108/2-A

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	100	85.7		ng/L		86	70 - 140
Perfluorooctanoic acid (PFOA)	25.0	22.8		ng/L		91	70 - 150
Perfluorohexanoic acid (PFHxA)	25.0	21.8		ng/L		87	70 - 145
Perfluorononanoic acid (PFNA)	25.0	22.8		ng/L		91	70 - 150
Perfluorooctanesulfonic acid (PFOS)	23.2	21.0		ng/L		91	55 - 150
Perfluorodecanoic acid (PFDA)	25.0	23.9		ng/L		96	70 - 140
Perfluorobutanesulfonic acid (PFBS)	22.1	18.3		ng/L		83	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	22.8	20.8		ng/L		91	65 - 145
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	100	87.0		ng/L		87	70 - 140

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C8 PFOA	106		40 - 130
13C4 PFBA	94.9		5 - 130
13C9 PFNA	87.8		40 - 130
13C5 PFHxA	112		40 - 130
13C6 PFDA	90.3		40 - 130
13C3 PFBS	107		40 - 135
13C3 PFHxS	107		40 - 130
13C8 PFOS	106		40 - 130
13C3 HFPO-DA	99.9		40 - 130

Lab Sample ID: LLCS 410-516108/3-A

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516108

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	16.0	14.5		ng/L		90	70 - 140
Perfluorooctanoic acid (PFOA)	4.00	3.98		ng/L		100	70 - 150
Perfluorohexanoic acid (PFHxA)	4.00	3.64		ng/L		91	70 - 145
Perfluorononanoic acid (PFNA)	4.00	3.87		ng/L		97	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	3.80		ng/L		102	55 - 150

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-516108/3-A

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516108

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanoic acid (PFDA)	4.00	4.21		ng/L		105	70 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	3.25		ng/L		92	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	3.64	3.32		ng/L		91	65 - 145
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	16.0	15.3		ng/L		95	70 - 140

Isotope Dilution	LLCS		Limits
	%Recovery	Qualifier	
13C8 PFOA	110		40 - 130
13C4 PFBA	101		5 - 130
13C9 PFNA	92.3		40 - 130
13C5 PFHxA	112		40 - 130
13C6 PFDA	93.4		40 - 130
13C3 PFBS	113		40 - 135
13C3 PFHxS	116		40 - 130
13C8 PFOS	103		40 - 130
13C3 HFPO-DA	98.1		40 - 130

Lab Sample ID: LB 410-501738/1-C

Matrix: Solid

Analysis Batch: 506654

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 505557

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		8.2	2.0	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorooctanoic acid (PFOA)	2.23	B	2.0	0.65	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.51	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.51	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.51	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.51	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.31	ng/L		05/13/24 17:01	05/15/24 21:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.58	ng/L		05/13/24 17:01	05/15/24 21:00	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	62.5	B	8.2	2.0	ng/L		05/13/24 17:01	05/15/24 21:00	1

Isotope Dilution	LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 PFOA	102		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C4 PFBA	105		5 - 130	05/13/24 17:01	05/15/24 21:00	1
13C9 PFNA	112		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C5 PFHxA	107		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C6 PFDA	107		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C3 PFBS	106		40 - 135	05/13/24 17:01	05/15/24 21:00	1
13C3 PFHxS	96.0		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C8 PFOS	103		40 - 130	05/13/24 17:01	05/15/24 21:00	1
13C3 HFPO-DA	108		40 - 130	05/13/24 17:01	05/15/24 21:00	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LB 410-509044/1-C

Matrix: Solid

Analysis Batch: 517233

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 516108

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.73	J B	8.4	2.1	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorooctanoic acid (PFOA)	ND		2.1	0.67	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorohexanoic acid (PFHxA)	ND		2.1	0.53	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorononanoic acid (PFNA)	ND		2.1	0.53	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.1	0.53	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorodecanoic acid (PFDA)	ND		2.1	0.53	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.1	0.32	ng/L		06/11/24 14:23	06/13/24 23:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.1	0.60	ng/L		06/11/24 14:23	06/13/24 23:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.4	2.1	ng/L		06/11/24 14:23	06/13/24 23:57	1

Isotope Dilution	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	96.9		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C4 PFBA	100		5 - 130	06/11/24 14:23	06/13/24 23:57	1
13C9 PFNA	83.4		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C5 PFHxA	109		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C6 PFDA	91.9		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C3 PFBS	114		40 - 135	06/11/24 14:23	06/13/24 23:57	1
13C3 PFHxS	107		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C8 PFOS	107		40 - 130	06/11/24 14:23	06/13/24 23:57	1
13C3 HFPO-DA	101		40 - 130	06/11/24 14:23	06/13/24 23:57	1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Lab Sample ID: 180-173221-3 MS

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: COMP-4

Prep Type: Total/NA

Prep Batch: 506816

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA) - RA	ND	FL *-	8.61	ND	FL	ng/g		0	40 - 150
Perfluorooctanoic acid (PFOA) - RA	ND	FL *+	2.15	ND	FL	ng/g		0	40 - 150
Perfluorohexanoic acid (PFHxA) - RA	ND	FL *-	2.15	ND	FL	ng/g		0	40 - 150
Perfluorononanoic acid (PFNA) - RA	17	4 *-	2.15	14.0	4	ng/g		-132	40 - 150
Perfluorooctanesulfonic acid (PFOS) - RA	ND	FL *-	2.00	ND	FL	ng/g		0	40 - 150
Perfluorodecanoic acid (PFDA) - RA	ND	FL	2.15	ND	FL	ng/g		0	40 - 150
Perfluorobutanesulfonic acid (PFBS) - RA	ND	FL ! *-	1.90	ND	FL	ng/g		0	40 - 150
Perfluorohexanesulfonic acid (PFHxS) - RA	ND	F2 FH ! *-	1.96	6.86	FH	ng/g		351	40 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) - RA	ND	! FL	8.61	12.7		ng/g		148	40 - 150

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C8 PFOA - RA	0.182	*5-	20 - 150
13C4 PFBA - RA	0.666	*5-	20 - 150

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA (Continued)

Lab Sample ID: 180-173221-3 MS

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: COMP-4

Prep Type: Total/NA

Prep Batch: 506816

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C9 PFNA - RA	0.405	*5-	20 - 150
13C5 PFHxA - RA	0.224	*5-	20 - 150
13C6 PFDA - RA	0.427	*5-	20 - 150
13C3 PFBS - RA	0.000	*5-	20 - 150
13C3 PFHxS - RA	0.113	*5-	20 - 150
13C8 PFOS - RA	0.132	*5-	20 - 150
13C3 HFPO-DA - RA	0.215	*5-	20 - 150

Lab Sample ID: 180-173221-3 MSD

Matrix: Solid

Analysis Batch: 509273

Client Sample ID: COMP-4

Prep Type: Total/NA

Prep Batch: 506816

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA) - RA	ND	FL *-	8.64	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorooctanoic acid (PFOA) - RA	ND	FL *+	2.16	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorohexanoic acid (PFHxA) - RA	ND	FL *-	2.16	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorononanoic acid (PFNA) - RA	17	4 *-	2.16	ND	4	ng/g		0	40 - 150	NC	30
Perfluorooctanesulfonic acid (PFOS) - RA	ND	FL *-	2.00	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorodecanoic acid (PFDA) - RA	ND	FL	2.16	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorobutanesulfonic acid (PFBS) - RA	ND	FL ! *-	1.91	ND	FL	ng/g		0	40 - 150	NC	30
Perfluorohexanesulfonic acid (PFHxS) - RA	ND	F2 FH ! *-	1.96	23.8	FH F2	ng/g		1210	40 - 150	110	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) - RA	ND	! FL	8.64	ND	FL	ng/g		0	40 - 150	NC	30

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
13C8 PFOA - RA	0.140	*5-	20 - 150
13C4 PFBA - RA	0.819	*5-	20 - 150
13C9 PFNA - RA	0.000	*5-	20 - 150
13C5 PFHxA - RA	0.103	*5-	20 - 150
13C6 PFDA - RA	0.000	*5-	20 - 150
13C3 PFBS - RA	0.000	*5-	20 - 150
13C3 PFHxS - RA	0.041	*5-	20 - 150
13C8 PFOS - RA	0.057	*5-	20 - 150
13C3 HFPO-DA - RA	0.148	*5-	20 - 150

Method: EPA 6010D - Metals (ICP)

Lab Sample ID: MB 180-467731/1-A

Matrix: Solid

Analysis Batch: 468041

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467731

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Silver	ND		0.37	0.078	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Aluminum	ND		15	7.0	mg/Kg		05/07/24 10:00	05/08/24 23:55	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 180-467731/1-A
Matrix: Solid
Analysis Batch: 468041

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 467731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.75	0.47	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Antimony	ND		0.75	0.23	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Barium	ND		15	2.7	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Beryllium	ND		0.30	0.081	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Cadmium	ND		0.37	0.055	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Calcium	ND		370	48	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Cobalt	ND		3.7	0.53	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Copper	ND		1.9	1.1	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Iron	ND		30	21	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Lead	ND		7.5	4.7	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Magnesium	ND		370	41	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Manganese	ND		1.1	0.85	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Nickel	ND		3.0	0.38	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Potassium	ND		370	64	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Selenium	ND		0.75	0.34	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Sodium	ND		370	38	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Vanadium	ND		3.7	0.59	mg/Kg		05/07/24 10:00	05/08/24 23:55	1
Zinc	ND		7.5	3.4	mg/Kg		05/07/24 10:00	05/08/24 23:55	1

Lab Sample ID: MB 180-467731/1-A
Matrix: Solid
Analysis Batch: 470034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 467731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.5	0.21	mg/Kg		05/07/24 10:00	05/28/24 16:31	1

Lab Sample ID: LCS 180-467731/2-A
Matrix: Solid
Analysis Batch: 468041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 467731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	18.1	18.0		mg/Kg		99	80 - 120
Aluminum	362	349		mg/Kg		96	80 - 120
Arsenic	72.5	71.3		mg/Kg		98	80 - 120
Antimony	18.1	18.2		mg/Kg		101	80 - 120
Barium	72.5	68.7		mg/Kg		95	80 - 120
Beryllium	36.2	36.3		mg/Kg		100	80 - 120
Cadmium	36.2	34.7		mg/Kg		96	80 - 120
Calcium	1810	1720		mg/Kg		95	80 - 120
Cobalt	36.2	34.1		mg/Kg		94	80 - 120
Copper	36.2	37.0		mg/Kg		102	80 - 120
Iron	362	345		mg/Kg		95	80 - 120
Lead	36.2	35.8		mg/Kg		99	80 - 120
Magnesium	1810	1620		mg/Kg		89	80 - 120
Manganese	36.2	33.7		mg/Kg		93	80 - 120
Nickel	36.2	35.1		mg/Kg		97	80 - 120
Potassium	1810	1710		mg/Kg		94	80 - 120
Selenium	72.5	75.8		mg/Kg		105	80 - 120
Sodium	1810	1650		mg/Kg		91	80 - 120

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-467731/2-A
Matrix: Solid
Analysis Batch: 468041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 467731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium	36.2	36.1		mg/Kg		100	80 - 120
Zinc	18.1	17.1		mg/Kg		95	80 - 120

Lab Sample ID: LCS 180-467731/2-A
Matrix: Solid
Analysis Batch: 470034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 467731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	72.5	73.1		mg/Kg		101	80 - 120

Lab Sample ID: MB 180-468172/1-A
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	110	ug/L		05/11/24 07:04	05/13/24 18:44	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/13/24 18:44	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/13/24 18:44	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/13/24 18:44	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/13/24 18:44	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/13/24 18:44	1
Calcium	ND		5000	640	ug/L		05/11/24 07:04	05/13/24 18:44	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/13/24 18:44	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/13/24 18:44	1
Iron	ND		100	72	ug/L		05/11/24 07:04	05/13/24 18:44	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/13/24 18:44	1
Magnesium	ND		5000	690	ug/L		05/11/24 07:04	05/13/24 18:44	1
Manganese	ND		15	2.4	ug/L		05/11/24 07:04	05/13/24 18:44	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/13/24 18:44	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/13/24 18:44	1
Sodium	ND		5000	800	ug/L		05/11/24 07:04	05/13/24 18:44	1
Thallium	ND		20	3.0	ug/L		05/11/24 07:04	05/13/24 18:44	1
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/13/24 18:44	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/13/24 18:44	1

Lab Sample ID: MB 180-468172/1-A
Matrix: Solid
Analysis Batch: 468957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/16/24 15:30	1
Copper	ND		25	2.2	ug/L		05/11/24 07:04	05/16/24 15:30	1
Nickel	ND		40	3.5	ug/L		05/11/24 07:04	05/16/24 15:30	1

Lab Sample ID: LCS 180-468172/2-A
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	4830		ug/L		97	80 - 120

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-468172/2-A
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1000	987		ug/L		99	80 - 120
Antimony	250	247		ug/L		99	80 - 120
Barium	1000	1030		ug/L		103	80 - 120
Beryllium	500	491		ug/L		98	80 - 120
Cadmium	500	486		ug/L		97	80 - 120
Calcium	25000	24700		ug/L		99	80 - 120
Chromium	500	479		ug/L		96	80 - 120
Cobalt	500	477		ug/L		95	80 - 120
Iron	5000	4720		ug/L		94	80 - 120
Lead	500	479		ug/L		96	80 - 120
Magnesium	25000	23900		ug/L		95	80 - 120
Manganese	500	486		ug/L		97	80 - 120
Potassium	25000	25700		ug/L		103	80 - 120
Selenium	1000	988		ug/L		99	80 - 120
Sodium	25000	26300		ug/L		105	80 - 120
Thallium	1000	948		ug/L		95	80 - 120
Vanadium	500	483		ug/L		97	80 - 120
Zinc	250	243		ug/L		97	80 - 120

Lab Sample ID: LCS 180-468172/2-A
Matrix: Solid
Analysis Batch: 468957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	250	241		ug/L		96	80 - 120
Copper	500	506		ug/L		101	80 - 120
Nickel	500	480		ug/L		96	80 - 120

Lab Sample ID: LB 180-467035/1-C
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 468172

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	110	ug/L		05/11/24 07:04	05/13/24 18:54	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/13/24 18:54	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/13/24 18:54	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/13/24 18:54	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/13/24 18:54	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/13/24 18:54	1
Calcium	ND		5000	640	ug/L		05/11/24 07:04	05/13/24 18:54	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/13/24 18:54	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/13/24 18:54	1
Iron	ND		100	72	ug/L		05/11/24 07:04	05/13/24 18:54	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/13/24 18:54	1
Magnesium	ND		5000	690	ug/L		05/11/24 07:04	05/13/24 18:54	1
Manganese	ND		15	2.4	ug/L		05/11/24 07:04	05/13/24 18:54	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/13/24 18:54	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/13/24 18:54	1
Thallium	ND		20	3.0	ug/L		05/11/24 07:04	05/13/24 18:54	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LB 180-467035/1-C
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 468172

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/13/24 18:54	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/13/24 18:54	1

Lab Sample ID: LB 180-467035/1-C
Matrix: Solid
Analysis Batch: 468653

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 468172

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/14/24 14:42	1
Aluminum	ND		200	110	ug/L		05/11/24 07:04	05/14/24 14:42	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/14/24 14:42	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/14/24 14:42	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/14/24 14:42	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/14/24 14:42	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/14/24 14:42	1
Calcium	ND		5000	640	ug/L		05/11/24 07:04	05/14/24 14:42	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/14/24 14:42	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/14/24 14:42	1
Copper	ND		25	2.2	ug/L		05/11/24 07:04	05/14/24 14:42	1
Iron	ND		100	72	ug/L		05/11/24 07:04	05/14/24 14:42	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/14/24 14:42	1
Magnesium	ND		5000	690	ug/L		05/11/24 07:04	05/14/24 14:42	1
Manganese	ND		15	2.4	ug/L		05/11/24 07:04	05/14/24 14:42	1
Nickel	ND		40	3.5	ug/L		05/11/24 07:04	05/14/24 14:42	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/14/24 14:42	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/14/24 14:42	1
Sodium	1730	J B	5000	800	ug/L		05/11/24 07:04	05/14/24 14:42	1
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/14/24 14:42	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/14/24 14:42	1

Lab Sample ID: LB 180-467035/1-C
Matrix: Solid
Analysis Batch: 468957

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 468172

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		05/11/24 07:04	05/16/24 15:40	1
Aluminum	ND		200	110	ug/L		05/11/24 07:04	05/16/24 15:40	1
Arsenic	ND		10	8.3	ug/L		05/11/24 07:04	05/16/24 15:40	1
Antimony	ND		10	6.2	ug/L		05/11/24 07:04	05/16/24 15:40	1
Barium	ND		200	27	ug/L		05/11/24 07:04	05/16/24 15:40	1
Beryllium	ND		4.0	1.5	ug/L		05/11/24 07:04	05/16/24 15:40	1
Cadmium	ND		5.0	0.30	ug/L		05/11/24 07:04	05/16/24 15:40	1
Calcium	ND		5000	640	ug/L		05/11/24 07:04	05/16/24 15:40	1
Chromium	ND		5.0	3.1	ug/L		05/11/24 07:04	05/16/24 15:40	1
Cobalt	ND		50	3.4	ug/L		05/11/24 07:04	05/16/24 15:40	1
Copper	ND		25	2.2	ug/L		05/11/24 07:04	05/16/24 15:40	1
Iron	ND		100	72	ug/L		05/11/24 07:04	05/16/24 15:40	1
Lead	ND		10	4.4	ug/L		05/11/24 07:04	05/16/24 15:40	1
Magnesium	ND		5000	690	ug/L		05/11/24 07:04	05/16/24 15:40	1

Eurofins Pittsburgh

QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LB 180-467035/1-C
Matrix: Solid
Analysis Batch: 468957

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 468172

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		15	2.4	ug/L		05/11/24 07:04	05/16/24 15:40	1
Nickel	ND		40	3.5	ug/L		05/11/24 07:04	05/16/24 15:40	1
Potassium	ND		5000	2600	ug/L		05/11/24 07:04	05/16/24 15:40	1
Selenium	ND		10	3.7	ug/L		05/11/24 07:04	05/16/24 15:40	1
Vanadium	ND		50	5.3	ug/L		05/11/24 07:04	05/16/24 15:40	1
Zinc	ND		50	42	ug/L		05/11/24 07:04	05/16/24 15:40	1

Lab Sample ID: 180-173221-2 MS
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: COMP-3
Prep Type: SPLP East
Prep Batch: 468172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5000	4980		ug/L		100	75 - 125
Arsenic	ND		1000	995		ug/L		100	75 - 125
Antimony	ND		250	247		ug/L		99	75 - 125
Barium	ND		1000	1050		ug/L		105	75 - 125
Beryllium	ND		500	491		ug/L		98	75 - 125
Cadmium	ND		500	485		ug/L		97	75 - 125
Calcium	ND		25000	27300		ug/L		109	75 - 125
Chromium	ND		500	479		ug/L		96	75 - 125
Cobalt	ND		500	477		ug/L		95	75 - 125
Iron	ND		5000	4840		ug/L		97	75 - 125
Lead	ND		500	482		ug/L		96	75 - 125
Magnesium	ND		25000	25000		ug/L		100	75 - 125
Manganese	27	FH	500	657	FH	ug/L		126	75 - 125
Potassium	ND		25000	27800		ug/L		111	75 - 125
Selenium	ND		1000	989		ug/L		99	75 - 125
Sodium	ND	B	25000	28300		ug/L		113	75 - 125
Thallium	ND		1000	941		ug/L		94	75 - 125
Vanadium	ND		500	485		ug/L		97	75 - 125
Zinc	ND		250	244		ug/L		98	75 - 125

Lab Sample ID: 180-173221-2 MS
Matrix: Solid
Analysis Batch: 468957

Client Sample ID: COMP-3
Prep Type: SPLP East
Prep Batch: 468172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		250	238		ug/L		95	75 - 125
Copper	ND		500	500		ug/L		100	75 - 125
Nickel	ND		500	474		ug/L		95	75 - 125

Lab Sample ID: 180-173221-2 MSD
Matrix: Solid
Analysis Batch: 468483

Client Sample ID: COMP-3
Prep Type: SPLP East
Prep Batch: 468172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5000	4840		ug/L		97	75 - 125	3	20
Arsenic	ND		1000	998		ug/L		100	75 - 125	0	20
Antimony	ND		250	250		ug/L		100	75 - 125	1	20

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: 180-173221-2 MSD

Matrix: Solid

Analysis Batch: 468483

Client Sample ID: COMP-3

Prep Type: SPLP East

Prep Batch: 468172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	ND		1000	1030		ug/L		103	75 - 125	2	20
Beryllium	ND		500	490		ug/L		98	75 - 125	0	20
Cadmium	ND		500	485		ug/L		97	75 - 125	0	20
Calcium	ND		25000	26700		ug/L		107	75 - 125	2	20
Chromium	ND		500	471		ug/L		94	75 - 125	2	20
Cobalt	ND		500	477		ug/L		95	75 - 125	0	20
Iron	ND		5000	4780		ug/L		96	75 - 125	1	20
Lead	ND		500	484		ug/L		97	75 - 125	0	20
Magnesium	ND		25000	24800		ug/L		99	75 - 125	1	20
Manganese	27	FH	500	649		ug/L		124	75 - 125	1	20
Potassium	ND		25000	27500		ug/L		110	75 - 125	1	20
Selenium	ND		1000	995		ug/L		99	75 - 125	1	20
Sodium	ND	B	25000	28000		ug/L		112	75 - 125	1	20
Thallium	ND		1000	942		ug/L		94	75 - 125	0	20
Vanadium	ND		500	483		ug/L		97	75 - 125	0	20
Zinc	ND		250	245		ug/L		98	75 - 125	0	20

Lab Sample ID: 180-173221-2 MSD

Matrix: Solid

Analysis Batch: 468957

Client Sample ID: COMP-3

Prep Type: SPLP East

Prep Batch: 468172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		250	238		ug/L		95	75 - 125	0	20
Copper	ND		500	499		ug/L		100	75 - 125	0	20
Nickel	ND		500	475		ug/L		95	75 - 125	0	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-467404/1-A

Matrix: Solid

Analysis Batch: 467649

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 467404

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:09	1

Lab Sample ID: LCS 180-467404/2-A

Matrix: Solid

Analysis Batch: 467649

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 467404

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.34		ug/L		94	80 - 120

Lab Sample ID: LB 180-467035/1-B

Matrix: Solid

Analysis Batch: 467649

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 467404

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:28	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 180-467038/1-F
Matrix: Solid
Analysis Batch: 467649

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 467404

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		05/03/24 10:03	05/06/24 12:11	1

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-468100/1-A
Matrix: Solid
Analysis Batch: 468255

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		05/09/24 14:35	05/10/24 10:55	1

Lab Sample ID: LCS 180-468100/2-A
Matrix: Solid
Analysis Batch: 468255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.417	0.376		mg/Kg		90	80 - 120

QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

GC/MS VOA

Leach Batch: 467048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP	Solid	EPA 1312	
180-173221-2	COMP-3	SPLP	Solid	EPA 1312	
180-173221-3	COMP-4	SPLP	Solid	EPA 1312	
LB 180-467048/1-A	Method Blank	SPLP	Solid	EPA 1312	

Analysis Batch: 467514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-2	COMP-3	Total/NA	Solid	EPA 8260D	467518
180-173221-3	COMP-4	Total/NA	Solid	EPA 8260D	467518
MB 180-467514/7	Method Blank	Total/NA	Solid	EPA 8260D	
LCS 180-467514/32	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-467514/31	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	

Prep Batch: 467518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	5035	
180-173221-2	COMP-3	Total/NA	Solid	5035	
180-173221-3	COMP-4	Total/NA	Solid	5035	

Analysis Batch: 467886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 8260D	467518
MB 180-467886/7	Method Blank	Total/NA	Solid	EPA 8260D	
LCS 180-467886/3	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-467886/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	

Analysis Batch: 467887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP	Solid	EPA 8260D	467048
180-173221-2	COMP-3	SPLP	Solid	EPA 8260D	467048
180-173221-3	COMP-4	SPLP	Solid	EPA 8260D	467048
LB 180-467048/1-A	Method Blank	SPLP	Solid	EPA 8260D	467048
MB 180-467887/7	Method Blank	Total/NA	Solid	EPA 8260D	
LCS 180-467887/4	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-467887/5	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	

Analysis Batch: 468365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-2	COMP-3	Total/NA	Solid	EPA 8260D	468442
180-173221-2 - DL	COMP-3	Total/NA	Solid	EPA 8260D	468442
MB 180-468442/1-A	Method Blank	Total/NA	Solid	EPA 8260D	468442
LCS 180-468442/2-A	Lab Control Sample	Total/NA	Solid	EPA 8260D	468442
LCSD 180-468442/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	468442

Prep Batch: 468442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-2 - DL	COMP-3	Total/NA	Solid	5035	
180-173221-2	COMP-3	Total/NA	Solid	5035	
MB 180-468442/1-A	Method Blank	Total/NA	Solid	5035	
LCS 180-468442/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 180-468442/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

GC/MS Semi VOA

Leach Batch: 467035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 1312	
180-173221-2	COMP-3	SPLP East	Solid	EPA 1312	
180-173221-3	COMP-4	SPLP East	Solid	EPA 1312	

Prep Batch: 467520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	3541	
180-173221-2	COMP-3	Total/NA	Solid	3541	
180-173221-3	COMP-4	Total/NA	Solid	3541	
MB 180-467520/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-467520/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 467554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 8270E	467520
180-173221-2	COMP-3	Total/NA	Solid	EPA 8270E	467520
180-173221-3	COMP-4	Total/NA	Solid	EPA 8270E	467520
MB 180-467520/1-A	Method Blank	Total/NA	Solid	EPA 8270E	467520
LCS 180-467520/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	467520

Prep Batch: 467805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	3520C	467035
180-173221-2	COMP-3	SPLP East	Solid	3520C	467035
180-173221-3	COMP-4	SPLP East	Solid	3520C	467035
MB 180-467805/1-A	Method Blank	Total/NA	Solid	3520C	
LCS 180-467805/2-A	Lab Control Sample	Total/NA	Solid	3520C	
LCSD 180-467805/3-A	Lab Control Sample Dup	Total/NA	Solid	3520C	

Analysis Batch: 468356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 8270E	467805
180-173221-2	COMP-3	SPLP East	Solid	EPA 8270E	467805
180-173221-3	COMP-4	SPLP East	Solid	EPA 8270E	467805
MB 180-467805/1-A	Method Blank	Total/NA	Solid	EPA 8270E	467805
LCS 180-467805/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	467805
LCSD 180-467805/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	467805

LCMS

Leach Batch: 501738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - DL	COMP-4	SPLP East	Solid	1312	
180-173221-3	COMP-4	SPLP East	Solid	1312	
LB 410-501738/1-C	Method Blank	SPLP East	Solid	1312	

Prep Batch: 505557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3	COMP-4	SPLP East	Solid	1633	501738
180-173221-3 - DL	COMP-4	SPLP East	Solid	1633	501738
LB 410-501738/1-C	Method Blank	SPLP East	Solid	1633	501738

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QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

LCMS (Continued)

Prep Batch: 505557 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-505557/1-A	Method Blank	Total/NA	Solid	1633	
LCS 410-505557/2-A	Lab Control Sample	Total/NA	Solid	1633	
LLCS 410-505557/3-A	Lab Control Sample	Total/NA	Solid	1633	

Analysis Batch: 506654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3	COMP-4	SPLP East	Solid	Draft-4 1633	505557
LB 410-501738/1-C	Method Blank	SPLP East	Solid	Draft-4 1633	505557
MB 410-505557/1-A	Method Blank	Total/NA	Solid	Draft-4 1633	505557
LCS 410-505557/2-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	505557
LLCS 410-505557/3-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	505557

Prep Batch: 506813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3	COMP-4	Total/NA	Solid	1633 Shake	

Prep Batch: 506816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - RA	COMP-4	Total/NA	Solid	1633 Shake	
MB 410-506816/1-A	Method Blank	Total/NA	Solid	1633 Shake	
LCS 410-506816/2-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
LLCS 410-506816/3-A	Lab Control Sample	Total/NA	Solid	1633 Shake	
180-173221-3 MS - RA	COMP-4	Total/NA	Solid	1633 Shake	
180-173221-3 MSD - RA	COMP-4	Total/NA	Solid	1633 Shake	

Analysis Batch: 506953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - DL	COMP-4	SPLP East	Solid	Draft-4 1633	505557

Analysis Batch: 507383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3	COMP-4	Total/NA	Solid	Draft-4 1633	506813

Leach Batch: 509044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - RE	COMP-4	SPLP East	Solid	1312	
LB 410-509044/1-C	Method Blank	SPLP East	Solid	1312	

Analysis Batch: 509273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - RA	COMP-4	Total/NA	Solid	Draft-4 1633	506816
MB 410-506816/1-A	Method Blank	Total/NA	Solid	Draft-4 1633	506816
LCS 410-506816/2-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	506816
LLCS 410-506816/3-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	506816
180-173221-3 MS - RA	COMP-4	Total/NA	Solid	Draft-4 1633	506816
180-173221-3 MSD - RA	COMP-4	Total/NA	Solid	Draft-4 1633	506816

Prep Batch: 516108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - RE	COMP-4	SPLP East	Solid	1633	509044
LB 410-509044/1-C	Method Blank	SPLP East	Solid	1633	509044

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QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

LCMS (Continued)

Prep Batch: 516108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-516108/1-A	Method Blank	Total/NA	Solid	1633	
LCS 410-516108/2-A	Lab Control Sample	Total/NA	Solid	1633	
LLCS 410-516108/3-A	Lab Control Sample	Total/NA	Solid	1633	

Analysis Batch: 517233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3 - RE	COMP-4	SPLP East	Solid	Draft-4 1633	516108
LB 410-509044/1-C	Method Blank	SPLP East	Solid	Draft-4 1633	516108
MB 410-516108/1-A	Method Blank	Total/NA	Solid	Draft-4 1633	516108
LCS 410-516108/2-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	516108
LLCS 410-516108/3-A	Lab Control Sample	Total/NA	Solid	Draft-4 1633	516108

Metals

Leach Batch: 467035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 1312	
180-173221-2	COMP-3	SPLP East	Solid	EPA 1312	
180-173221-3	COMP-4	SPLP East	Solid	EPA 1312	
LB 180-467035/1-B	Method Blank	SPLP East	Solid	EPA 1312	
LB 180-467035/1-C	Method Blank	SPLP East	Solid	EPA 1312	
180-173221-2 MS	COMP-3	SPLP East	Solid	EPA 1312	
180-173221-2 MSD	COMP-3	SPLP East	Solid	EPA 1312	

Leach Batch: 467038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-467038/1-F	Method Blank	SPLP East	Solid	EPA 1311	

Prep Batch: 467404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	7470A	467035
180-173221-2	COMP-3	SPLP East	Solid	7470A	467035
180-173221-3	COMP-4	SPLP East	Solid	7470A	467035
LB 180-467035/1-B	Method Blank	SPLP East	Solid	7470A	467035
LB 180-467038/1-F	Method Blank	SPLP East	Solid	7470A	467038
MB 180-467404/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 180-467404/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 467649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 7470A	467404
180-173221-2	COMP-3	SPLP East	Solid	EPA 7470A	467404
180-173221-3	COMP-4	SPLP East	Solid	EPA 7470A	467404
LB 180-467035/1-B	Method Blank	SPLP East	Solid	EPA 7470A	467404
LB 180-467038/1-F	Method Blank	SPLP East	Solid	EPA 7470A	467404
MB 180-467404/1-A	Method Blank	Total/NA	Solid	EPA 7470A	467404
LCS 180-467404/2-A	Lab Control Sample	Total/NA	Solid	EPA 7470A	467404

Prep Batch: 467731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	3050B	

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QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Metals (Continued)

Prep Batch: 467731 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-2	COMP-3	Total/NA	Solid	3050B	
180-173221-3	COMP-4	Total/NA	Solid	3050B	
MB 180-467731/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-467731/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 468041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 6010D	467731
180-173221-2	COMP-3	Total/NA	Solid	EPA 6010D	467731
180-173221-3	COMP-4	Total/NA	Solid	EPA 6010D	467731
MB 180-467731/1-A	Method Blank	Total/NA	Solid	EPA 6010D	467731
LCS 180-467731/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	467731

Prep Batch: 468100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	7471B	
180-173221-2	COMP-3	Total/NA	Solid	7471B	
180-173221-3	COMP-4	Total/NA	Solid	7471B	
MB 180-468100/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-468100/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 468172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	3010A	467035
180-173221-2	COMP-3	SPLP East	Solid	3010A	467035
180-173221-3	COMP-4	SPLP East	Solid	3010A	467035
LB 180-467035/1-C	Method Blank	SPLP East	Solid	3010A	467035
MB 180-468172/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-468172/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-173221-2 MS	COMP-3	SPLP East	Solid	3010A	467035
180-173221-2 MSD	COMP-3	SPLP East	Solid	3010A	467035

Analysis Batch: 468255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 7471B	468100
180-173221-2	COMP-3	Total/NA	Solid	EPA 7471B	468100
180-173221-3	COMP-4	Total/NA	Solid	EPA 7471B	468100
MB 180-468100/1-A	Method Blank	Total/NA	Solid	EPA 7471B	468100
LCS 180-468100/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	468100

Analysis Batch: 468380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 6010D	467731
180-173221-2	COMP-3	Total/NA	Solid	EPA 6010D	467731

Analysis Batch: 468483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 6010D	468172
180-173221-2	COMP-3	SPLP East	Solid	EPA 6010D	468172
180-173221-3	COMP-4	SPLP East	Solid	EPA 6010D	468172
LB 180-467035/1-C	Method Blank	SPLP East	Solid	EPA 6010D	468172

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QC Association Summary

Client: ENTACT, LLC
Project/Site: Staten Island ISS Bench

Job ID: 180-173221-1

Metals (Continued)

Analysis Batch: 468483 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-468172/1-A	Method Blank	Total/NA	Solid	EPA 6010D	468172
LCS 180-468172/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	468172
180-173221-2 MS	COMP-3	SPLP East	Solid	EPA 6010D	468172
180-173221-2 MSD	COMP-3	SPLP East	Solid	EPA 6010D	468172

Analysis Batch: 468653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-3	COMP-4	SPLP East	Solid	EPA 6010D	468172
LB 180-467035/1-C	Method Blank	SPLP East	Solid	EPA 6010D	468172

Analysis Batch: 468957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	SPLP East	Solid	EPA 6010D	468172
180-173221-2	COMP-3	SPLP East	Solid	EPA 6010D	468172
180-173221-3	COMP-4	SPLP East	Solid	EPA 6010D	468172
LB 180-467035/1-C	Method Blank	SPLP East	Solid	EPA 6010D	468172
MB 180-468172/1-A	Method Blank	Total/NA	Solid	EPA 6010D	468172
LCS 180-468172/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	468172
180-173221-2 MS	COMP-3	SPLP East	Solid	EPA 6010D	468172
180-173221-2 MSD	COMP-3	SPLP East	Solid	EPA 6010D	468172

Analysis Batch: 470034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	EPA 6010D	467731
180-173221-2	COMP-3	Total/NA	Solid	EPA 6010D	467731
180-173221-3	COMP-4	Total/NA	Solid	EPA 6010D	467731
MB 180-467731/1-A	Method Blank	Total/NA	Solid	EPA 6010D	467731
LCS 180-467731/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	467731

General Chemistry

Analysis Batch: 466987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-173221-1	COMP-2 (ISS-2)	Total/NA	Solid	2540G	
180-173221-2	COMP-3	Total/NA	Solid	2540G	
180-173221-3	COMP-4	Total/NA	Solid	2540G	

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Login Sample Receipt Checklist

Client: ENTACT, LLC

Job Number: 180-173221-1

Login Number: 173221

List Number: 1

Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ENTACT, LLC

Job Number: 180-173221-1

Login Number: 173221

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 05/02/24 02:20 PM

Creator: Santiago, Nathaniel

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Jule Carr
ENTACT, LLC
2873 Hardies Road
Suite 3
Gibsonia, Pennsylvania 15044

Generated 6/14/2024 5:45:54 PM

JOB DESCRIPTION

NorthPoint Staten Island

JOB NUMBER

180-174649-1

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



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Authorized for release by
Debra Bowen, Project Manager I
Debra.Bowen@et.eurofinsus.com
(412)963-2445



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Case Narrative

Client: ENTACT, LLC
Project: NorthPoint Staten Island

Job ID: 180-174649-1

Job ID: 180-174649-1

Eurofins Pittsburgh

Job Narrative 180-174649-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/28/2024 12:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions

The samples were received at the laboratory without a sample collection time documented on the chain of custody:

GC/MS VOA

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-471237 was outside the method criteria for the following analyte(s): Carbon disulfide, Carbon tetrachloride, 1,2,4-Trichlorobenzene, Dichloro-difluoromethane, Tetrachloroethene and Trichloroethene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in 180-471237 was outside the method criteria for the following analyte(s): trans-1,3-Dichloropropene, 1,1,2,2-Tetrachloroethane, Methyl acetate and Methyl tert-butyl ether. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The following samples were diluted to bring the concentration of target analytes within the calibration range: MIX-ISS3-7.5PC (180-174649-5), MIX-ISS3-7.5-2PC1SL (180-174649-6) and MIX-ISS3-10-3PC1SL (180-174649-7). Elevated reporting limits (RLs) are provided.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-471394 was outside the method criteria for the following analyte(s): Dibromofluoromethane. This surrogate was biased low in the CCV but was within the method criteria for all associated samples; therefore, the data were reported.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-471394 was outside the method criteria for the following analyte(s): Dichloro-difluoromethane, Acetone and 1,2,4-Trichlorobenzene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in 180-471394 was outside the method criteria for the following analyte(s): Methyl acetate, trans-1,3-Dichloropropene, 1,1,2,2-Tetrachloroethane, Methyl tert-butyl ether, 1,1,2-Trichloroethane, 1,2-Dibromoethane and cis-1,3-Dichloropropene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270E - SPLP East: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 470796.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Case Narrative

Client: ENTACT, LLC
Project: NorthPoint Staten Island

Job ID: 180-174649-1

Job ID: 180-174649-1 (Continued)

Eurofins Pittsburgh

Metals

Method 6010D - SPLP East: The method blank for preparation batch 180-470117 and 180-470318 and analytical batch 180-470530 contained Calcium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Pittsburgh

Definitions/Glossary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Analyte was found in the blank.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
EPA 7470A	7470A	Solid	Mercury

Sample Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-174649-1	MIX-ISS2-7.5PC	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-2	MIX-ISS2-7.5-2PC1S1	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-3	MIX-ISS2-10-3PC1SL	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-4	MIX-ISS2-10-1PC1SL	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-5	MIX-ISS3-7.5PC	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-6	MIX-ISS3-7.5-2PC1SL	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-7	MIX-ISS3-10-3PC1SL	Solid	05/28/24 00:00	05/28/24 12:58
180-174649-8	MIX-ISS3-10-1PC1SL	Solid	05/28/24 00:00	05/28/24 12:58

Method Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method	Method Description	Protocol	Laboratory
EPA 8260D	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 6010D	Metals (ICP)	SW846	EET PIT
EPA 7470A	Mercury (CVAA)	SW846	EET PIT
3010A	Preparation, Total Metals	SW846	EET PIT
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PIT
5030C	Purge and Trap	SW846	EET PIT
7470A	Preparation, Mercury	SW846	EET PIT
EPA 1312	SPLP Extraction	SW846	EET PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5PC

Lab Sample ID: 180-174649-1

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.06 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 12:30	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.02 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 12:09	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.02 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 16:25	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.02 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		10			470698	06/05/24 12:27	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.02 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:09	MTW	EET PIT
Instrument ID: HGZ										

Client Sample ID: MIX-ISS2-7.5-2PC1S1

Lab Sample ID: 180-174649-2

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.09 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 12:51	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.30 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 12:31	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.30 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 16:46	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.30 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:10	MTW	EET PIT
Instrument ID: HGZ										

Lab Chronicle

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-3PC1SL

Lab Sample ID: 180-174649-3

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.16 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 13:11	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.61 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 12:53	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.61 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 16:52	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.61 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:11	MTW	EET PIT
Instrument ID: HGZ										

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.00 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 13:32	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.49 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 13:15	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.49 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 16:57	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.49 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:12	MTW	EET PIT
Instrument ID: HGZ										

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.01 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 13:53	PJJ	EET PIT
Instrument ID: CHHP11										

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312	DL		25.01 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D	DL	30	5 mL	5 mL	471394	06/13/24 14:15	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.14 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 13:38	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.14 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 17:13	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.14 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:13	MTW	EET PIT
Instrument ID: HGZ										

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.06 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 14:13	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	DL		25.06 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D	DL	20	5 mL	5 mL	471394	06/13/24 14:35	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.37 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 14:00	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.37 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 17:18	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.37 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:14	MTW	EET PIT
Instrument ID: HGZ										

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-3PC1SL

Lab Sample ID: 180-174649-7

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.13 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 14:34	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	DL		25.13 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D	DL	15	5 mL	5 mL	471394	06/13/24 14:56	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.04 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 14:22	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.04 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 17:24	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.04 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:15	MTW	EET PIT
Instrument ID: HGZ										

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.04 g	500 mL	470123	05/30/24 07:28	MTM	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	471237	06/12/24 14:55	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			100.16 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3520C			250 mL	2.5 mL	470796	06/06/24 12:37	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	471252	06/12/24 14:44	VVP	EET PIT
Instrument ID: CHMSD7										
SPLP East	Leach	EPA 1312			100.16 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	3010A			25 mL	25 mL	470318	06/01/24 08:18	SJM	EET PIT
SPLP East	Analysis	EPA 6010D		1			470530	06/03/24 17:29	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			100.16 g	2000 mL	470117	05/30/24 06:57	MTM	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	470463	06/04/24 06:50	RJR	EET PIT
SPLP East	Analysis	EPA 7470A		1			470589	06/04/24 13:16	MTW	EET PIT
Instrument ID: HGZ										

* This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

- Analyst References:**
- Lab: EET PIT
 - Batch Type: Leach
 - MTM = Matthew McGhee
 - Batch Type: Prep
 - BJT = Bill Trout
 - RJR = Ron Rosenbaum
 - SJM = Shannon Mueller
 - Batch Type: Analysis
 - MRG = Mismel Garcia
 - MTW = Michael Wesoloski
 - PJJ = Patrick Journet
 - VVP = Vincent Piccolino

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5PC

Lab Sample ID: 180-174649-1

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 12:30	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 12:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 12:30	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 12:30	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 12:30	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 12:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 12:30	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 12:30	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 12:30	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 12:30	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 12:30	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 12:30	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 12:30	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 12:30	1
2-Hexanone	ND		25	16	ug/L			06/12/24 12:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 12:30	1
Acetone	ND		25	17	ug/L			06/12/24 12:30	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 12:30	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 12:30	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 12:30	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 12:30	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 12:30	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 12:30	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 12:30	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 12:30	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 12:30	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 12:30	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 12:30	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 12:30	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 12:30	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 12:30	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/12/24 12:30	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 12:30	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 12:30	1
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 12:30	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 12:30	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 12:30	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 12:30	1
Methylene Chloride	4.4	J	5.0	4.4	ug/L			06/12/24 12:30	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 12:30	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 12:30	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 12:30	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 12:30	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 12:30	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 12:30	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 12:30	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 12:30	1
Xylenes, Total	ND		10	4.5	ug/L			06/12/24 12:30	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5PC

Lab Sample ID: 180-174649-1

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	69		52 - 151		06/12/24 12:30	1
4-Bromofluorobenzene (Surr)	67		49 - 118		06/12/24 12:30	1
Dibromofluoromethane (Surr)	64		60 - 132		06/12/24 12:30	1
Toluene-d8 (Surr)	78		53 - 124		06/12/24 12:30	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 12:09	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Methylnaphthalene	13		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 12:09	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 12:09	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 12:09	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:09	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 12:09	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 12:09	1
Acenaphthene	2.0		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:09	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:09	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 12:09	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 12:09	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:09	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 12:09	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 12:09	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 12:09	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 12:09	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 12:09	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 12:09	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:09	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 12:09	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5PC

Lab Sample ID: 180-174649-1

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 12:09	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 12:09	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 12:09	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 12:09	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 12:09	1
Fluorene	2.9		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:09	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 12:09	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:09	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 12:09	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 12:09	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 12:09	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
Naphthalene	1.3	J	1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:09	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 12:09	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 12:09	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 12:09	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 12:09	1
Phenanthrene	4.0		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 12:09	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 12:09	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 12:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		39 - 121	06/06/24 12:37	06/12/24 12:09	1
2-Fluorobiphenyl	93		45 - 105	06/06/24 12:37	06/12/24 12:09	1
2-Fluorophenol (Surr)	66		38 - 105	06/06/24 12:37	06/12/24 12:09	1
Nitrobenzene-d5 (Surr)	81		45 - 106	06/06/24 12:37	06/12/24 12:09	1
Phenol-d5 (Surr)	65		38 - 105	06/06/24 12:37	06/12/24 12:09	1
Terphenyl-d14 (Surr)	51		28 - 125	06/06/24 12:37	06/12/24 12:09	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:25	1
Aluminum	1400		200	110	ug/L		06/01/24 08:18	06/03/24 16:25	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:25	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:25	1
Barium	410	B	200	27	ug/L		06/01/24 08:18	06/03/24 16:25	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:25	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:25	1
Calcium	430000	4 B	50000	6400	ug/L		06/01/24 08:18	06/05/24 12:27	10
Chromium	7.1		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:25	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:25	1
Copper	7.2	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 16:25	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:25	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:25	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:25	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:25	1
Nickel	ND		40	3.5	ug/L		06/01/24 08:18	06/03/24 16:25	1
Potassium	10000		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:25	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5PC

Lab Sample ID: 180-174649-1

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 16:25	1
Sodium	2100	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 16:25	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:25	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:25	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:25	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:09	1

Client Sample ID: MIX-ISS2-7.5-2PC1S1

Lab Sample ID: 180-174649-2

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 12:51	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 12:51	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 12:51	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 12:51	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 12:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 12:51	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 12:51	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 12:51	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 12:51	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 12:51	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 12:51	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 12:51	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 12:51	1
2-Hexanone	ND		25	16	ug/L			06/12/24 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 12:51	1
Acetone	ND		25	17	ug/L			06/12/24 12:51	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 12:51	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 12:51	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 12:51	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 12:51	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 12:51	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 12:51	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 12:51	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 12:51	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 12:51	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 12:51	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 12:51	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 12:51	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 12:51	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 12:51	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/12/24 12:51	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 12:51	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 12:51	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5-2PC1S1

Lab Sample ID: 180-174649-2

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 12:51	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 12:51	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 12:51	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 12:51	1
Methylene Chloride	11		5.0	4.4	ug/L			06/12/24 12:51	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 12:51	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 12:51	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 12:51	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 12:51	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 12:51	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 12:51	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 12:51	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 12:51	1
Xylenes, Total	ND		10	4.5	ug/L			06/12/24 12:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		52 - 151		06/12/24 12:51	1
4-Bromofluorobenzene (Surr)	77		49 - 118		06/12/24 12:51	1
Dibromofluoromethane (Surr)	69		60 - 132		06/12/24 12:51	1
Toluene-d8 (Surr)	84		53 - 124		06/12/24 12:51	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 12:31	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Methylnaphthalene	17		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 12:31	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 12:31	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 12:31	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:31	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 12:31	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 12:31	1
Acenaphthene	2.9		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:31	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:31	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5-2PC1S1

Lab Sample ID: 180-174649-2

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 12:31	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 12:31	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:31	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 12:31	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 12:31	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 12:31	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 12:31	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 12:31	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 12:31	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:31	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 12:31	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 12:31	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 12:31	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 12:31	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 12:31	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 12:31	1
Fluorene	4.4		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:31	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 12:31	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:31	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 12:31	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 12:31	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 12:31	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
Naphthalene	2.6		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:31	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 12:31	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 12:31	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 12:31	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 12:31	1
Phenanthrene	4.9		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 12:31	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 12:31	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	113		39 - 121	06/06/24 12:37	06/12/24 12:31	1
2-Fluorobiphenyl	104		45 - 105	06/06/24 12:37	06/12/24 12:31	1
2-Fluorophenol (Surr)	86		38 - 105	06/06/24 12:37	06/12/24 12:31	1
Nitrobenzene-d5 (Surr)	96		45 - 106	06/06/24 12:37	06/12/24 12:31	1
Phenol-d5 (Surr)	91		38 - 105	06/06/24 12:37	06/12/24 12:31	1
Terphenyl-d14 (Surr)	100		28 - 125	06/06/24 12:37	06/12/24 12:31	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:46	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-7.5-2PC1S1

Lab Sample ID: 180-174649-2

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4300		200	110	ug/L		06/01/24 08:18	06/03/24 16:46	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:46	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:46	1
Barium	440	B	200	27	ug/L		06/01/24 08:18	06/03/24 16:46	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:46	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:46	1
Calcium	240000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 16:46	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:46	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:46	1
Copper	11	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 16:46	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:46	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:46	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:46	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:46	1
Nickel	6.2	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 16:46	1
Potassium	8800		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:46	1
Selenium	4.5	J	10	3.7	ug/L		06/01/24 08:18	06/03/24 16:46	1
Sodium	3200	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 16:46	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:46	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:46	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:46	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:10	1

Client Sample ID: MIX-ISS2-10-3PC1SL

Lab Sample ID: 180-174649-3

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 13:11	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 13:11	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 13:11	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 13:11	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 13:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 13:11	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 13:11	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 13:11	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 13:11	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 13:11	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:11	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 13:11	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 13:11	1
2-Hexanone	ND		25	16	ug/L			06/12/24 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 13:11	1
Acetone	ND		25	17	ug/L			06/12/24 13:11	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 13:11	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-3PC1SL

Lab Sample ID: 180-174649-3

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.0	4.9	ug/L			06/12/24 13:11	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 13:11	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 13:11	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 13:11	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:11	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 13:11	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 13:11	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 13:11	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 13:11	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 13:11	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 13:11	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 13:11	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 13:11	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/12/24 13:11	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 13:11	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 13:11	1
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 13:11	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 13:11	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 13:11	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 13:11	1
Methylene Chloride	5.1		5.0	4.4	ug/L			06/12/24 13:11	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 13:11	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 13:11	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 13:11	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 13:11	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 13:11	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 13:11	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 13:11	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 13:11	1
Xylenes, Total	ND		10	4.5	ug/L			06/12/24 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		52 - 151		06/12/24 13:11	1
4-Bromofluorobenzene (Surr)	75		49 - 118		06/12/24 13:11	1
Dibromofluoromethane (Surr)	69		60 - 132		06/12/24 13:11	1
Toluene-d8 (Surr)	82		53 - 124		06/12/24 13:11	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 12:53	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 12:53	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:53	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 12:53	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-3PC1SL

Lab Sample ID: 180-174649-3

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	18		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 12:53	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 12:53	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 12:53	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 12:53	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 12:53	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 12:53	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 12:53	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 12:53	1
Acenaphthene	2.8		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:53	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 12:53	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 12:53	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 12:53	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:53	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 12:53	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 12:53	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 12:53	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 12:53	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 12:53	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 12:53	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 12:53	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 12:53	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 12:53	1
Dibenzofuran	2.7 J		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 12:53	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 12:53	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 12:53	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 12:53	1
Fluorene	4.3		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:53	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 12:53	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 12:53	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 12:53	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 12:53	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 12:53	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
Naphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 12:53	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 12:53	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 12:53	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-3PC1SL

Lab Sample ID: 180-174649-3

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 12:53	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 12:53	1
Phenanthrene	5.3		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 12:53	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 12:53	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	110		39 - 121				06/06/24 12:37	06/12/24 12:53	1
2-Fluorobiphenyl	100		45 - 105				06/06/24 12:37	06/12/24 12:53	1
2-Fluorophenol (Surr)	84		38 - 105				06/06/24 12:37	06/12/24 12:53	1
Nitrobenzene-d5 (Surr)	90		45 - 106				06/06/24 12:37	06/12/24 12:53	1
Phenol-d5 (Surr)	88		38 - 105				06/06/24 12:37	06/12/24 12:53	1
Terphenyl-d14 (Surr)	99		28 - 125				06/06/24 12:37	06/12/24 12:53	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:52	1
Aluminum	3000		200	110	ug/L		06/01/24 08:18	06/03/24 16:52	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:52	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:52	1
Barium	620	B	200	27	ug/L		06/01/24 08:18	06/03/24 16:52	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:52	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:52	1
Calcium	300000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 16:52	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:52	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:52	1
Copper	8.4	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 16:52	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:52	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:52	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:52	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:52	1
Nickel	9.2	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 16:52	1
Potassium	12000		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:52	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 16:52	1
Sodium	4000	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 16:52	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:52	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:52	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:52	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:11	1

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 13:32	1
1,1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 13:32	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 13:32	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 13:32	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 13:32	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 13:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 13:32	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 13:32	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 13:32	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 13:32	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 13:32	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:32	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 13:32	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 13:32	1
2-Hexanone	ND		25	16	ug/L			06/12/24 13:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 13:32	1
Acetone	ND		25	17	ug/L			06/12/24 13:32	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 13:32	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 13:32	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 13:32	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 13:32	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 13:32	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:32	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 13:32	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 13:32	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 13:32	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 13:32	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 13:32	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 13:32	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 13:32	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 13:32	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/12/24 13:32	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 13:32	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 13:32	1
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 13:32	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 13:32	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 13:32	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 13:32	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/12/24 13:32	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 13:32	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 13:32	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 13:32	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 13:32	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 13:32	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 13:32	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 13:32	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 13:32	1
Xylenes, Total	ND		10	4.5	ug/L			06/12/24 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		52 - 151		06/12/24 13:32	1
4-Bromofluorobenzene (Surr)	77		49 - 118		06/12/24 13:32	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	71		60 - 132		06/12/24 13:32	1
Toluene-d8 (Surr)	87		53 - 124		06/12/24 13:32	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 13:15	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Methylnaphthalene	12		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 13:15	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 13:15	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 13:15	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 13:15	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 13:15	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 13:15	1
Acenaphthene	2.1		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 13:15	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 13:15	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 13:15	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 13:15	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:15	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 13:15	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 13:15	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 13:15	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 13:15	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 13:15	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 13:15	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 13:15	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 13:15	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 13:15	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	2.0	J	10	1.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 13:15	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 13:15	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 13:15	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 13:15	1
Fluorene	3.5		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:15	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 13:15	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:15	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 13:15	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 13:15	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 13:15	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
Naphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 13:15	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 13:15	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 13:15	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 13:15	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 13:15	1
Phenanthrene	4.3		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 13:15	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 13:15	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 13:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	105		39 - 121	06/06/24 12:37	06/12/24 13:15	1
2-Fluorobiphenyl	94		45 - 105	06/06/24 12:37	06/12/24 13:15	1
2-Fluorophenol (Surr)	81		38 - 105	06/06/24 12:37	06/12/24 13:15	1
Nitrobenzene-d5 (Surr)	87		45 - 106	06/06/24 12:37	06/12/24 13:15	1
Phenol-d5 (Surr)	86		38 - 105	06/06/24 12:37	06/12/24 13:15	1
Terphenyl-d14 (Surr)	98		28 - 125	06/06/24 12:37	06/12/24 13:15	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:57	1
Aluminum	6000		200	110	ug/L		06/01/24 08:18	06/03/24 16:57	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:57	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:57	1
Barium	590	B	200	27	ug/L		06/01/24 08:18	06/03/24 16:57	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:57	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:57	1
Calcium	230000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 16:57	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:57	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:57	1
Copper	9.8	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 16:57	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:57	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:57	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:57	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:57	1
Nickel	7.8	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 16:57	1
Potassium	11000		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:57	1
Selenium	4.7	J	10	3.7	ug/L		06/01/24 08:18	06/03/24 16:57	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS2-10-1PC1SL

Lab Sample ID: 180-174649-4

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	4700	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 16:57	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:57	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:57	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:57	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:12	1

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 13:53	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 13:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 13:53	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 13:53	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 13:53	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 13:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 13:53	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 13:53	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 13:53	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 13:53	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 13:53	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:53	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 13:53	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 13:53	1
2-Hexanone	ND		25	16	ug/L			06/12/24 13:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 13:53	1
Acetone	ND		25	17	ug/L			06/12/24 13:53	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 13:53	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 13:53	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 13:53	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 13:53	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 13:53	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 13:53	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 13:53	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 13:53	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 13:53	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 13:53	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 13:53	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 13:53	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 13:53	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 13:53	1
Ethylbenzene	37		5.0	2.5	ug/L			06/12/24 13:53	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 13:53	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 13:53	1
Isopropylbenzene	3.1	J	5.0	1.7	ug/L			06/12/24 13:53	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 13:53	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 13:53	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 13:53	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/12/24 13:53	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 13:53	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 13:53	1
Toluene	4.1	J	5.0	2.3	ug/L			06/12/24 13:53	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 13:53	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 13:53	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 13:53	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 13:53	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		52 - 151		06/12/24 13:53	1
4-Bromofluorobenzene (Surr)	84		49 - 118		06/12/24 13:53	1
Dibromofluoromethane (Surr)	67		60 - 132		06/12/24 13:53	1
Toluene-d8 (Surr)	89		53 - 124		06/12/24 13:53	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	280	J	300	130	ug/L			06/13/24 14:15	30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		52 - 151		06/13/24 14:15	30
4-Bromofluorobenzene (Surr)	90		49 - 118		06/13/24 14:15	30
Dibromofluoromethane (Surr)	85	^c	60 - 132		06/13/24 14:15	30
Toluene-d8 (Surr)	94		53 - 124		06/13/24 14:15	30

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 13:38	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Methylnaphthalene	14		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 13:38	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 13:38	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 13:38	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 13:38	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 13:38	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 13:38	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 13:38	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 13:38	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 13:38	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 13:38	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 13:38	1
Acenaphthene	0.66	J	1.9	0.65	ug/L		06/06/24 12:37	06/12/24 13:38	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 13:38	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 13:38	1
Anthracene	0.67	J	1.9	0.49	ug/L		06/06/24 12:37	06/12/24 13:38	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:38	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 13:38	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 13:38	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 13:38	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 13:38	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 13:38	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 13:38	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 13:38	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 13:38	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 13:38	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 13:38	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 13:38	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 13:38	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 13:38	1
Fluorene	1.0	J	1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:38	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 13:38	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 13:38	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 13:38	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 13:38	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 13:38	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
Naphthalene	22		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 13:38	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 13:38	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 13:38	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 13:38	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 13:38	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 13:38	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 13:38	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	110		39 - 121	06/06/24 12:37	06/12/24 13:38	1
2-Fluorobiphenyl	95		45 - 105	06/06/24 12:37	06/12/24 13:38	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5PC

Lab Sample ID: 180-174649-5

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	71		38 - 105	06/06/24 12:37	06/12/24 13:38	1
Nitrobenzene-d5 (Surr)	86		45 - 106	06/06/24 12:37	06/12/24 13:38	1
Phenol-d5 (Surr)	84		38 - 105	06/06/24 12:37	06/12/24 13:38	1
Terphenyl-d14 (Surr)	99		28 - 125	06/06/24 12:37	06/12/24 13:38	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 17:13	1
Aluminum	3400		200	110	ug/L		06/01/24 08:18	06/03/24 17:13	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 17:13	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 17:13	1
Barium	330	B	200	27	ug/L		06/01/24 08:18	06/03/24 17:13	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 17:13	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 17:13	1
Calcium	250000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 17:13	1
Chromium	3.2	J	5.0	3.1	ug/L		06/01/24 08:18	06/03/24 17:13	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 17:13	1
Copper	8.7	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 17:13	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 17:13	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 17:13	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 17:13	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 17:13	1
Nickel	10	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 17:13	1
Potassium	11000		5000	2600	ug/L		06/01/24 08:18	06/03/24 17:13	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 17:13	1
Sodium	3500	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 17:13	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 17:13	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 17:13	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 17:13	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:13	1

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 14:13	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 14:13	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 14:13	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 14:13	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 14:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 14:13	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 14:13	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 14:13	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 14:13	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 14:13	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:13	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 14:13	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 14:13	1
2-Hexanone	ND		25	16	ug/L			06/12/24 14:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 14:13	1
Acetone	ND		25	17	ug/L			06/12/24 14:13	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 14:13	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 14:13	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 14:13	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 14:13	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 14:13	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:13	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 14:13	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 14:13	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 14:13	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 14:13	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 14:13	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 14:13	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 14:13	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 14:13	1
Ethylbenzene	21		5.0	2.5	ug/L			06/12/24 14:13	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 14:13	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 14:13	1
Isopropylbenzene	2.1	J	5.0	1.7	ug/L			06/12/24 14:13	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 14:13	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 14:13	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 14:13	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/12/24 14:13	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 14:13	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 14:13	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 14:13	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 14:13	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 14:13	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 14:13	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 14:13	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		52 - 151		06/12/24 14:13	1
4-Bromofluorobenzene (Surr)	87		49 - 118		06/12/24 14:13	1
Dibromofluoromethane (Surr)	69		60 - 132		06/12/24 14:13	1
Toluene-d8 (Surr)	86		53 - 124		06/12/24 14:13	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	200		200	89	ug/L			06/13/24 14:35	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		52 - 151		06/13/24 14:35	20

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		49 - 118		06/13/24 14:35	20
Dibromofluoromethane (Surr)	89	^c	60 - 132		06/13/24 14:35	20
Toluene-d8 (Surr)	100		53 - 124		06/13/24 14:35	20

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 14:00	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Methylnaphthalene	18		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 14:00	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 14:00	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 14:00	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:00	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 14:00	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 14:00	1
Acenaphthene	0.82	J	1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:00	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:00	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 14:00	1
Anthracene	0.56	J	1.9	0.49	ug/L		06/06/24 12:37	06/12/24 14:00	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:00	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 14:00	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 14:00	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 14:00	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 14:00	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 14:00	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 14:00	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:00	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 14:00	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 14:00	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 14:00	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 14:00	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 14:00	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 14:00	1
Fluorene	0.86	J	1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:00	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 14:00	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:00	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 14:00	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 14:00	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 14:00	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
Naphthalene	25		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:00	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 14:00	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 14:00	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 14:00	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 14:00	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 14:00	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 14:00	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	108		39 - 121	06/06/24 12:37	06/12/24 14:00	1
2-Fluorobiphenyl	98		45 - 105	06/06/24 12:37	06/12/24 14:00	1
2-Fluorophenol (Surr)	86		38 - 105	06/06/24 12:37	06/12/24 14:00	1
Nitrobenzene-d5 (Surr)	92		45 - 106	06/06/24 12:37	06/12/24 14:00	1
Phenol-d5 (Surr)	90		38 - 105	06/06/24 12:37	06/12/24 14:00	1
Terphenyl-d14 (Surr)	92		28 - 125	06/06/24 12:37	06/12/24 14:00	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 17:18	1
Aluminum	7000		200	110	ug/L		06/01/24 08:18	06/03/24 17:18	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 17:18	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 17:18	1
Barium	240	B	200	27	ug/L		06/01/24 08:18	06/03/24 17:18	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 17:18	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 17:18	1
Calcium	170000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 17:18	1
Chromium	6.8		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 17:18	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 17:18	1
Copper	11	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 17:18	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 17:18	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 17:18	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 17:18	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 17:18	1
Nickel	ND		40	3.5	ug/L		06/01/24 08:18	06/03/24 17:18	1
Potassium	8200		5000	2600	ug/L		06/01/24 08:18	06/03/24 17:18	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-7.5-2PC1SL

Lab Sample ID: 180-174649-6

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 17:18	1
Sodium	4200	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 17:18	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 17:18	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 17:18	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 17:18	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:14	1

Client Sample ID: MIX-ISS3-10-3PC1SL

Lab Sample ID: 180-174649-7

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 14:34	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 14:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 14:34	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 14:34	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 14:34	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 14:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 14:34	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 14:34	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 14:34	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 14:34	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 14:34	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:34	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 14:34	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 14:34	1
2-Hexanone	ND		25	16	ug/L			06/12/24 14:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 14:34	1
Acetone	ND		25	17	ug/L			06/12/24 14:34	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 14:34	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 14:34	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 14:34	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 14:34	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 14:34	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:34	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 14:34	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 14:34	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 14:34	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 14:34	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 14:34	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 14:34	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 14:34	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 14:34	1
Ethylbenzene	18		5.0	2.5	ug/L			06/12/24 14:34	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 14:34	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 14:34	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-3PC1SL

Lab Sample ID: 180-174649-7

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 14:34	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 14:34	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 14:34	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 14:34	1
Methylene Chloride	8.2		5.0	4.4	ug/L			06/12/24 14:34	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 14:34	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 14:34	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 14:34	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 14:34	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 14:34	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 14:34	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 14:34	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		52 - 151		06/12/24 14:34	1
4-Bromofluorobenzene (Surr)	88		49 - 118		06/12/24 14:34	1
Dibromofluoromethane (Surr)	70		60 - 132		06/12/24 14:34	1
Toluene-d8 (Surr)	88		53 - 124		06/12/24 14:34	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	220		150	67	ug/L			06/13/24 14:56	15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		52 - 151		06/13/24 14:56	15
4-Bromofluorobenzene (Surr)	84		49 - 118		06/13/24 14:56	15
Dibromofluoromethane (Surr)	79	^c	60 - 132		06/13/24 14:56	15
Toluene-d8 (Surr)	88		53 - 124		06/13/24 14:56	15

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 14:22	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Methylnaphthalene	11		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 14:22	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 14:22	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 14:22	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 14:22	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-3PC1SL

Lab Sample ID: 180-174649-7

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 14:22	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 14:22	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 14:22	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:22	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 14:22	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 14:22	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 14:22	1
Acenaphthene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:22	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:22	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 14:22	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 14:22	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:22	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 14:22	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 14:22	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 14:22	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 14:22	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 14:22	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 14:22	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:22	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 14:22	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 14:22	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 14:22	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 14:22	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 14:22	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 14:22	1
Fluorene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:22	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 14:22	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:22	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 14:22	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 14:22	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 14:22	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
Naphthalene	15		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:22	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 14:22	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 14:22	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 14:22	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 14:22	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 14:22	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 14:22	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	106		39 - 121	06/06/24 12:37	06/12/24 14:22	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-3PC1SL

Lab Sample ID: 180-174649-7

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		45 - 105	06/06/24 12:37	06/12/24 14:22	1
2-Fluorophenol (Surr)	78		38 - 105	06/06/24 12:37	06/12/24 14:22	1
Nitrobenzene-d5 (Surr)	83		45 - 106	06/06/24 12:37	06/12/24 14:22	1
Phenol-d5 (Surr)	86		38 - 105	06/06/24 12:37	06/12/24 14:22	1
Terphenyl-d14 (Surr)	89		28 - 125	06/06/24 12:37	06/12/24 14:22	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 17:24	1
Aluminum	3900		200	110	ug/L		06/01/24 08:18	06/03/24 17:24	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 17:24	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 17:24	1
Barium	460	B	200	27	ug/L		06/01/24 08:18	06/03/24 17:24	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 17:24	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 17:24	1
Calcium	250000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 17:24	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 17:24	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 17:24	1
Copper	7.4	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 17:24	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 17:24	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 17:24	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 17:24	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 17:24	1
Nickel	6.2	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 17:24	1
Potassium	12000		5000	2600	ug/L		06/01/24 08:18	06/03/24 17:24	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 17:24	1
Sodium	4000	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 17:24	1
Thallium	3.4	J	20	3.0	ug/L		06/01/24 08:18	06/03/24 17:24	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 17:24	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 17:24	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:15	1

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 14:55	1
1,1,2,2-Tetrachloroethane	ND	^c	5.0	3.0	ug/L			06/12/24 14:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 14:55	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 14:55	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 14:55	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 14:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 14:55	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 14:55	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 14:55	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 14:55	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			06/12/24 14:55	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:55	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 14:55	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 14:55	1
2-Hexanone	ND		25	16	ug/L			06/12/24 14:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 14:55	1
Acetone	ND		25	17	ug/L			06/12/24 14:55	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 14:55	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 14:55	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 14:55	1
Carbon disulfide	ND	^c	5.0	4.4	ug/L			06/12/24 14:55	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			06/12/24 14:55	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 14:55	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 14:55	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 14:55	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 14:55	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 14:55	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 14:55	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 14:55	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 14:55	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			06/12/24 14:55	1
Ethylbenzene	6.2		5.0	2.5	ug/L			06/12/24 14:55	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 14:55	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 14:55	1
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 14:55	1
Methyl acetate	ND	^c	25	8.4	ug/L			06/12/24 14:55	1
Methyl tert-butyl ether	ND	^c	5.0	3.0	ug/L			06/12/24 14:55	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 14:55	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/12/24 14:55	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 14:55	1
Tetrachloroethene	ND	^c	5.0	2.3	ug/L			06/12/24 14:55	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 14:55	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 14:55	1
trans-1,3-Dichloropropene	ND	^c	5.0	2.9	ug/L			06/12/24 14:55	1
Trichloroethene	ND	^c	5.0	3.4	ug/L			06/12/24 14:55	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 14:55	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 14:55	1
Xylenes, Total	37		10	4.5	ug/L			06/12/24 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		52 - 151		06/12/24 14:55	1
4-Bromofluorobenzene (Surr)	90		49 - 118		06/12/24 14:55	1
Dibromofluoromethane (Surr)	72		60 - 132		06/12/24 14:55	1
Toluene-d8 (Surr)	86		53 - 124		06/12/24 14:55	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 14:44	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 14:44	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Methylnaphthalene	14		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 14:44	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 14:44	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 14:44	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 14:44	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 14:44	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 14:44	1
Acenaphthene	0.80	J	1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:44	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 14:44	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 14:44	1
Anthracene	0.58	J	1.9	0.49	ug/L		06/06/24 12:37	06/12/24 14:44	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:44	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 14:44	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 14:44	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 14:44	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 14:44	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 14:44	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 14:44	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 14:44	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 14:44	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 14:44	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 14:44	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 14:44	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 14:44	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 14:44	1
Fluorene	0.79	J	1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:44	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 14:44	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 14:44	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 14:44	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 14:44	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 14:44	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
Naphthalene	17		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 14:44	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 14:44	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 14:44	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 14:44	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 14:44	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 14:44	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 14:44	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	106		39 - 121	06/06/24 12:37	06/12/24 14:44	1
2-Fluorobiphenyl	99		45 - 105	06/06/24 12:37	06/12/24 14:44	1
2-Fluorophenol (Surr)	84		38 - 105	06/06/24 12:37	06/12/24 14:44	1
Nitrobenzene-d5 (Surr)	92		45 - 106	06/06/24 12:37	06/12/24 14:44	1
Phenol-d5 (Surr)	88		38 - 105	06/06/24 12:37	06/12/24 14:44	1
Terphenyl-d14 (Surr)	97		28 - 125	06/06/24 12:37	06/12/24 14:44	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 17:29	1
Aluminum	6600		200	110	ug/L		06/01/24 08:18	06/03/24 17:29	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 17:29	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 17:29	1
Barium	460	B	200	27	ug/L		06/01/24 08:18	06/03/24 17:29	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 17:29	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 17:29	1
Calcium	210000	B	5000	640	ug/L		06/01/24 08:18	06/03/24 17:29	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 17:29	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 17:29	1
Copper	5.6	J	25	2.2	ug/L		06/01/24 08:18	06/03/24 17:29	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 17:29	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 17:29	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 17:29	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 17:29	1
Nickel	4.2	J	40	3.5	ug/L		06/01/24 08:18	06/03/24 17:29	1
Potassium	9900		5000	2600	ug/L		06/01/24 08:18	06/03/24 17:29	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 17:29	1
Sodium	6000	B	5000	800	ug/L		06/01/24 08:18	06/03/24 17:29	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 17:29	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 17:29	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 17:29	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Client Sample ID: MIX-ISS3-10-1PC1SL

Lab Sample ID: 180-174649-8

Date Collected: 05/28/24 00:00

Matrix: Solid

Date Received: 05/28/24 12:58

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	!	0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:16	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCS 180-471237/7

Matrix: Solid

Analysis Batch: 471237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	10.0	9.22		ug/L		92	64 - 133
1,1,2,2-Tetrachloroethane	10.0	12.7		ug/L		127	47 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.69		ug/L		87	48 - 134
1,1,2-Trichloroethane	10.0	11.9		ug/L		119	59 - 137
1,1-Dichloroethane	10.0	9.37		ug/L		94	59 - 125
1,1-Dichloroethene	10.0	9.17		ug/L		92	49 - 132
1,2-Dibromo-3-Chloropropane	10.0	9.62		ug/L		96	10 - 170
1,2-Dichlorobenzene	10.0	9.94		ug/L		99	68 - 116
1,2-Dichloroethane	10.0	10.1		ug/L		101	57 - 149
1,2-Dichloropropane	10.0	10.1		ug/L		101	65 - 129
1,2,4-Trichlorobenzene	10.0	7.86		ug/L		79	15 - 169
1,3-Dichlorobenzene	10.0	9.75		ug/L		98	70 - 119
1,4-Dichlorobenzene	10.0	9.83		ug/L		98	74 - 117
2-Butanone (MEK)	15.0	ND		ug/L		85	35 - 158
2-Hexanone	15.0	ND		ug/L		93	38 - 157
4-Methyl-2-pentanone (MIBK)	15.0	ND		ug/L		93	29 - 167
Acetone	15.0	ND		ug/L		90	29 - 163
Benzene	10.0	9.83		ug/L		98	68 - 122
Bromoform	10.0	10.0		ug/L		100	31 - 164
Bromomethane	10.0	11.2		ug/L		112	20 - 170
Carbon disulfide	10.0	7.87		ug/L		79	32 - 139
Carbon tetrachloride	10.0	8.03		ug/L		80	60 - 135
Chlorobenzene	10.0	10.2		ug/L		102	72 - 123
Chlorodibromomethane	10.0	9.46		ug/L		95	51 - 144
Chloroform	10.0	9.52		ug/L		95	62 - 121
Chloromethane	10.0	8.73		ug/L		87	37 - 170
Chloroethane	10.0	10.9		ug/L		109	10 - 170
cis-1,2-Dichloroethene	10.0	9.41		ug/L		94	64 - 122
cis-1,3-Dichloropropene	10.0	11.8		ug/L		118	53 - 140
Dichlorobromomethane	10.0	9.28		ug/L		93	63 - 132
Dichlorodifluoromethane	10.0	6.15		ug/L		61	21 - 165
Ethylbenzene	10.0	10.4		ug/L		104	66 - 122
1,2-Dibromoethane	10.0	11.7		ug/L		117	55 - 146
Cyclohexane	10.0	8.61		ug/L		86	50 - 161
Isopropylbenzene	10.0	9.68		ug/L		97	54 - 130
Methyl acetate	20.0	25.7		ug/L		129	10 - 170
Methyl tert-butyl ether	10.0	12.1		ug/L		121	36 - 141
Methylcyclohexane	10.0	8.75		ug/L		87	60 - 127
Methylene Chloride	10.0	9.90		ug/L		99	51 - 137
m-Xylene & p-Xylene	10.0	10.5		ug/L		105	61 - 128
o-Xylene	10.0	10.2		ug/L		102	64 - 120
Styrene	10.0	10.5		ug/L		105	68 - 127
Tetrachloroethene	10.0	8.14		ug/L		81	60 - 129
Toluene	10.0	10.8		ug/L		108	67 - 128
trans-1,2-Dichloroethene	10.0	9.04		ug/L		90	62 - 126
trans-1,3-Dichloropropene	10.0	13.4		ug/L		134	57 - 137
Trichloroethene	10.0	7.96		ug/L		80	67 - 121
Trichlorofluoromethane	10.0	9.85		ug/L		99	32 - 157

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-471237/7

Matrix: Solid

Analysis Batch: 471237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10.0	9.69		ug/L		97	47 - 147
Xylenes, Total	20.0	20.7		ug/L		104	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		52 - 151
4-Bromofluorobenzene (Surr)	99		49 - 118
Dibromofluoromethane (Surr)	81		60 - 132
Toluene-d8 (Surr)	97		53 - 124

Lab Sample ID: MB 180-471394/7

Matrix: Solid

Analysis Batch: 471394

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/13/24 10:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			06/13/24 10:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/13/24 10:48	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/13/24 10:48	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/13/24 10:48	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/13/24 10:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/13/24 10:48	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/13/24 10:48	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/13/24 10:48	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/13/24 10:48	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			06/13/24 10:48	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/13/24 10:48	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/13/24 10:48	1
2-Butanone (MEK)	ND		25	13	ug/L			06/13/24 10:48	1
2-Hexanone	ND		25	16	ug/L			06/13/24 10:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/13/24 10:48	1
Acetone	ND		25	17	ug/L			06/13/24 10:48	1
Benzene	ND		5.0	3.0	ug/L			06/13/24 10:48	1
Bromoform	ND		5.0	4.9	ug/L			06/13/24 10:48	1
Bromomethane	ND		5.0	4.4	ug/L			06/13/24 10:48	1
Carbon disulfide	ND		5.0	4.4	ug/L			06/13/24 10:48	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			06/13/24 10:48	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/13/24 10:48	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/13/24 10:48	1
Chloroform	ND		5.0	3.0	ug/L			06/13/24 10:48	1
Chloromethane	ND		5.0	4.5	ug/L			06/13/24 10:48	1
Chloroethane	ND		5.0	4.5	ug/L			06/13/24 10:48	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/13/24 10:48	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/13/24 10:48	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/13/24 10:48	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			06/13/24 10:48	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/13/24 10:48	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/13/24 10:48	1
Cyclohexane	ND		5.0	3.2	ug/L			06/13/24 10:48	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-471394/7

Matrix: Solid

Analysis Batch: 471394

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	1.7	ug/L			06/13/24 10:48	1
Methyl acetate	ND		25	8.4	ug/L			06/13/24 10:48	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			06/13/24 10:48	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/13/24 10:48	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/13/24 10:48	1
Styrene	ND		5.0	2.4	ug/L			06/13/24 10:48	1
Tetrachloroethene	ND		5.0	2.3	ug/L			06/13/24 10:48	1
Toluene	ND		5.0	2.3	ug/L			06/13/24 10:48	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/13/24 10:48	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			06/13/24 10:48	1
Trichloroethene	ND		5.0	3.4	ug/L			06/13/24 10:48	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/13/24 10:48	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/13/24 10:48	1
Xylenes, Total	ND		10	4.5	ug/L			06/13/24 10:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		52 - 151		06/13/24 10:48	1
4-Bromofluorobenzene (Surr)	78		49 - 118		06/13/24 10:48	1
Dibromofluoromethane (Surr)	75		60 - 132		06/13/24 10:48	1
Toluene-d8 (Surr)	89		53 - 124		06/13/24 10:48	1

Lab Sample ID: LCS 180-471394/4

Matrix: Solid

Analysis Batch: 471394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	64 - 133
1,1,1,2-Tetrachloroethane	10.0	13.3		ug/L		133	47 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.78		ug/L		98	48 - 134
1,1,2-Trichloroethane	10.0	11.9		ug/L		119	59 - 137
1,1-Dichloroethane	10.0	10.4		ug/L		104	59 - 125
1,1-Dichloroethene	10.0	10.8		ug/L		108	49 - 132
1,2-Dibromo-3-Chloropropane	10.0	9.57		ug/L		96	10 - 170
1,2-Dichlorobenzene	10.0	10.7		ug/L		107	68 - 116
1,2-Dichloroethane	10.0	10.5		ug/L		105	57 - 149
1,2-Dichloropropane	10.0	10.7		ug/L		107	65 - 129
1,2,4-Trichlorobenzene	10.0	8.15		ug/L		82	15 - 169
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	70 - 119
1,4-Dichlorobenzene	10.0	10.5		ug/L		105	74 - 117
2-Butanone (MEK)	15.0	13.0	J	ug/L		87	35 - 158
2-Hexanone	15.0	ND		ug/L		93	38 - 157
4-Methyl-2-pentanone (MIBK)	15.0	ND		ug/L		93	29 - 167
Acetone	15.0	ND		ug/L		72	29 - 163
Benzene	10.0	10.7		ug/L		107	68 - 122
Bromoform	10.0	9.89		ug/L		99	31 - 164
Bromomethane	10.0	12.4		ug/L		124	20 - 170
Carbon disulfide	10.0	8.46		ug/L		85	32 - 139
Carbon tetrachloride	10.0	9.05		ug/L		91	60 - 135

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-471394/4

Matrix: Solid

Analysis Batch: 471394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	10.0	10.7		ug/L		107	72 - 123
Chlorodibromomethane	10.0	9.72		ug/L		97	51 - 144
Chloroform	10.0	10.3		ug/L		103	62 - 121
Chloromethane	10.0	9.38		ug/L		94	37 - 170
Chloroethane	10.0	12.5		ug/L		125	10 - 170
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	64 - 122
cis-1,3-Dichloropropene	10.0	12.4		ug/L		124	53 - 140
Dichlorobromomethane	10.0	9.81		ug/L		98	63 - 132
Dichlorodifluoromethane	10.0	6.75		ug/L		67	21 - 165
Ethylbenzene	10.0	11.0		ug/L		110	66 - 122
1,2-Dibromoethane	10.0	11.9		ug/L		119	55 - 146
Cyclohexane	10.0	9.69		ug/L		97	50 - 161
Isopropylbenzene	10.0	10.4		ug/L		104	54 - 130
Methyl acetate	20.0	28.0		ug/L		140	10 - 170
Methyl tert-butyl ether	10.0	12.8		ug/L		128	36 - 141
Methylcyclohexane	10.0	10.0		ug/L		100	60 - 127
Methylene Chloride	10.0	11.7		ug/L		117	51 - 137
m-Xylene & p-Xylene	10.0	11.2		ug/L		112	61 - 128
o-Xylene	10.0	11.1		ug/L		111	64 - 120
Styrene	10.0	11.2		ug/L		112	68 - 127
Tetrachloroethene	10.0	8.70		ug/L		87	60 - 129
Toluene	10.0	11.3		ug/L		113	67 - 128
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	62 - 126
trans-1,3-Dichloropropene	10.0	13.5		ug/L		135	57 - 137
Trichloroethene	10.0	8.58		ug/L		86	67 - 121
Trichlorofluoromethane	10.0	11.0		ug/L		110	32 - 157
Vinyl chloride	10.0	10.9		ug/L		109	47 - 147
Xylenes, Total	20.0	22.3		ug/L		112	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		52 - 151
4-Bromofluorobenzene (Surr)	99		49 - 118
Dibromofluoromethane (Surr)	85		60 - 132
Toluene-d8 (Surr)	99		53 - 124

Lab Sample ID: LB 180-470123/1-A

Matrix: Solid

Analysis Batch: 471237

Client Sample ID: Method Blank

Prep Type: SPLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			06/12/24 10:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			06/12/24 10:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			06/12/24 10:08	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			06/12/24 10:08	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			06/12/24 10:08	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			06/12/24 10:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			06/12/24 10:08	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			06/12/24 10:08	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-470123/1-A

Matrix: Solid

Analysis Batch: 471237

Client Sample ID: Method Blank

Prep Type: SPLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	2.9	ug/L			06/12/24 10:08	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			06/12/24 10:08	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			06/12/24 10:08	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			06/12/24 10:08	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			06/12/24 10:08	1
2-Butanone (MEK)	ND		25	13	ug/L			06/12/24 10:08	1
2-Hexanone	ND		25	16	ug/L			06/12/24 10:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			06/12/24 10:08	1
Acetone	ND		25	17	ug/L			06/12/24 10:08	1
Benzene	ND		5.0	3.0	ug/L			06/12/24 10:08	1
Bromoform	ND		5.0	4.9	ug/L			06/12/24 10:08	1
Bromomethane	ND		5.0	4.4	ug/L			06/12/24 10:08	1
Carbon disulfide	ND		5.0	4.4	ug/L			06/12/24 10:08	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			06/12/24 10:08	1
Chlorobenzene	ND		5.0	2.5	ug/L			06/12/24 10:08	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			06/12/24 10:08	1
Chloroform	ND		5.0	3.0	ug/L			06/12/24 10:08	1
Chloromethane	ND		5.0	4.5	ug/L			06/12/24 10:08	1
Chloroethane	ND		5.0	4.5	ug/L			06/12/24 10:08	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			06/12/24 10:08	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			06/12/24 10:08	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			06/12/24 10:08	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			06/12/24 10:08	1
Ethylbenzene	ND		5.0	2.5	ug/L			06/12/24 10:08	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			06/12/24 10:08	1
Cyclohexane	ND		5.0	3.2	ug/L			06/12/24 10:08	1
Isopropylbenzene	ND		5.0	1.7	ug/L			06/12/24 10:08	1
Methyl acetate	ND		25	8.4	ug/L			06/12/24 10:08	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			06/12/24 10:08	1
Methylcyclohexane	ND		5.0	3.0	ug/L			06/12/24 10:08	1
Methylene Chloride	ND		5.0	4.4	ug/L			06/12/24 10:08	1
Styrene	ND		5.0	2.4	ug/L			06/12/24 10:08	1
Tetrachloroethene	ND		5.0	2.3	ug/L			06/12/24 10:08	1
Toluene	ND		5.0	2.3	ug/L			06/12/24 10:08	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			06/12/24 10:08	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			06/12/24 10:08	1
Trichloroethene	ND		5.0	3.4	ug/L			06/12/24 10:08	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			06/12/24 10:08	1
Vinyl chloride	ND		5.0	2.0	ug/L			06/12/24 10:08	1
Xylenes, Total	ND		10	4.5	ug/L			06/12/24 10:08	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		52 - 151		06/12/24 10:08	1
4-Bromofluorobenzene (Surr)	82		49 - 118		06/12/24 10:08	1
Dibromofluoromethane (Surr)	76		60 - 132		06/12/24 10:08	1
Toluene-d8 (Surr)	89		53 - 124		06/12/24 10:08	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-470796/1-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 09:33	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 09:33	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 09:33	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 09:33	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 09:33	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 09:33	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 09:33	1
Acenaphthene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 09:33	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 09:33	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 09:33	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 09:33	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 09:33	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 09:33	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 09:33	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 09:33	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 09:33	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 09:33	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 09:33	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 09:33	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 09:33	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 09:33	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 09:33	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 09:33	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 09:33	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-470796/1-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 09:33	1
Fluorene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 09:33	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 09:33	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 09:33	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 09:33	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 09:33	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 09:33	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
Naphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 09:33	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 09:33	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 09:33	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 09:33	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 09:33	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 09:33	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 09:33	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 09:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	99		39 - 121	06/06/24 12:37	06/12/24 09:33	1
2-Fluorobiphenyl	92		45 - 105	06/06/24 12:37	06/12/24 09:33	1
2-Fluorophenol (Surr)	89		38 - 105	06/06/24 12:37	06/12/24 09:33	1
Nitrobenzene-d5 (Surr)	88		45 - 106	06/06/24 12:37	06/12/24 09:33	1
Phenol-d5 (Surr)	90		38 - 105	06/06/24 12:37	06/12/24 09:33	1
Terphenyl-d14 (Surr)	88		28 - 125	06/06/24 12:37	06/12/24 09:33	1

Lab Sample ID: LCS 180-470796/2-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	200	154		ug/L		77	50 - 100
2,2'-oxybis[1-chloropropane]	200	155		ug/L		78	24 - 111
2,4,5-Trichlorophenol	200	162		ug/L		81	54 - 100
2,4,6-Trichlorophenol	200	162		ug/L		81	54 - 100
2,4-Dichlorophenol	200	159		ug/L		79	54 - 100
2,4-Dimethylphenol	200	164		ug/L		82	52 - 100
2,4-Dinitrophenol	400	305		ug/L		76	32 - 100
2,4-Dinitrotoluene	200	157		ug/L		78	56 - 101
2,6-Dinitrotoluene	200	162		ug/L		81	54 - 103
2-Chloronaphthalene	200	151		ug/L		76	51 - 100
2-Chlorophenol	200	156		ug/L		78	52 - 100
2-Methylnaphthalene	200	155		ug/L		77	53 - 100
2-Methylphenol	200	157		ug/L		78	50 - 100
2-Nitroaniline	200	158		ug/L		79	50 - 102
2-Nitrophenol	200	165		ug/L		83	54 - 100
3,3'-Dichlorobenzidine	200	156		ug/L		78	41 - 100
3-Nitroaniline	200	157		ug/L		78	53 - 100

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-470796/2-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470796

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
4,6-Dinitro-2-methylphenol	400	304		ug/L		76	49 - 100
4-Bromophenyl phenyl ether	200	159		ug/L		79	50 - 100
4-Chloro-3-methylphenol	200	163		ug/L		82	46 - 107
4-Chloroaniline	200	156		ug/L		78	48 - 100
4-Chlorophenyl phenyl ether	200	163		ug/L		81	52 - 100
Methylphenol, 3 & 4	200	144		ug/L		72	51 - 100
4-Nitroaniline	200	157		ug/L		78	54 - 100
4-Nitrophenol	400	309		ug/L		77	39 - 117
Acenaphthene	200	156		ug/L		78	51 - 100
Acenaphthylene	200	161		ug/L		80	53 - 100
Acetophenone	200	151		ug/L		75	47 - 100
Anthracene	200	149		ug/L		75	53 - 100
Atrazine	200	163		ug/L		81	47 - 100
Benzaldehyde	200	114		ug/L		57	10 - 129
Benzo[a]anthracene	200	154		ug/L		77	49 - 100
Benzo[a]pyrene	200	149		ug/L		75	48 - 100
Benzo[b]fluoranthene	200	150		ug/L		75	47 - 100
Benzo[g,h,i]perylene	200	154		ug/L		77	49 - 100
Benzo[k]fluoranthene	200	143		ug/L		71	46 - 100
Bis(2-chloroethoxy)methane	200	156		ug/L		78	49 - 100
Bis(2-chloroethyl)ether	200	142		ug/L		71	46 - 100
Bis(2-ethylhexyl) phthalate	200	157		ug/L		79	51 - 101
Butyl benzyl phthalate	200	164		ug/L		82	51 - 101
Carbazole	200	153		ug/L		77	54 - 100
Chrysene	200	148		ug/L		74	49 - 100
Dibenz(a,h)anthracene	200	153		ug/L		77	50 - 102
Dibenzofuran	200	158		ug/L		79	53 - 100
Diethyl phthalate	200	162		ug/L		81	53 - 100
Dimethyl phthalate	200	156		ug/L		78	54 - 100
Di-n-butyl phthalate	200	153		ug/L		76	56 - 100
Di-n-octyl phthalate	200	160		ug/L		80	39 - 100
Fluoranthene	200	160		ug/L		80	55 - 100
Fluorene	200	158		ug/L		79	53 - 100
Hexachlorobenzene	200	150		ug/L		75	46 - 100
Hexachlorobutadiene	200	169		ug/L		85	42 - 100
Hexachlorocyclopentadiene	200	162		ug/L		81	41 - 100
Hexachloroethane	200	149		ug/L		75	49 - 100
Indeno[1,2,3-cd]pyrene	200	157		ug/L		78	50 - 100
Isophorone	200	146		ug/L		73	50 - 100
Naphthalene	200	157		ug/L		78	53 - 100
Nitrobenzene	200	144		ug/L		72	50 - 100
N-Nitrosodi-n-propylamine	200	150		ug/L		75	46 - 100
N-Nitrosodiphenylamine	200	150		ug/L		75	50 - 100
Pentachlorophenol	400	292		ug/L		73	37 - 100
Phenanthrene	200	143		ug/L		71	52 - 100
Phenol	200	151		ug/L		76	47 - 100
Pyrene	200	151		ug/L		75	50 - 100

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-470796/2-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470796

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	84		39 - 121
2-Fluorobiphenyl	78		45 - 105
2-Fluorophenol (Surr)	78		38 - 105
Nitrobenzene-d5 (Surr)	74		45 - 106
Phenol-d5 (Surr)	76		38 - 105
Terphenyl-d14 (Surr)	68		28 - 125

Lab Sample ID: LCSD 180-470796/3-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 470796

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	200	151		ug/L		75	50 - 100	2	15
2,2'-oxybis[1-chloropropane]	200	155		ug/L		77	24 - 111	0	15
2,4,5-Trichlorophenol	200	163		ug/L		81	54 - 100	0	15
2,4,6-Trichlorophenol	200	164		ug/L		82	54 - 100	1	15
2,4-Dichlorophenol	200	163		ug/L		81	54 - 100	2	15
2,4-Dimethylphenol	200	162		ug/L		81	52 - 100	1	15
2,4-Dinitrophenol	400	311		ug/L		78	32 - 100	2	15
2,4-Dinitrotoluene	200	163		ug/L		81	56 - 101	4	15
2,6-Dinitrotoluene	200	160		ug/L		80	54 - 103	1	15
2-Chloronaphthalene	200	156		ug/L		78	51 - 100	3	15
2-Chlorophenol	200	156		ug/L		78	52 - 100	0	15
2-Methylnaphthalene	200	151		ug/L		76	53 - 100	2	15
2-Methylphenol	200	157		ug/L		78	50 - 100	0	15
2-Nitroaniline	200	155		ug/L		78	50 - 102	1	15
2-Nitrophenol	200	160		ug/L		80	54 - 100	3	15
3,3'-Dichlorobenzidine	200	159		ug/L		79	41 - 100	2	15
3-Nitroaniline	200	161		ug/L		80	53 - 100	3	15
4,6-Dinitro-2-methylphenol	400	317		ug/L		79	49 - 100	4	15
4-Bromophenyl phenyl ether	200	164		ug/L		82	50 - 100	3	15
4-Chloro-3-methylphenol	200	162		ug/L		81	46 - 107	1	15
4-Chloroaniline	200	158		ug/L		79	48 - 100	2	15
4-Chlorophenyl phenyl ether	200	161		ug/L		80	52 - 100	1	15
Methylphenol, 3 & 4	200	145		ug/L		73	51 - 100	1	15
4-Nitroaniline	200	168		ug/L		84	54 - 100	7	15
4-Nitrophenol	400	315		ug/L		79	39 - 117	2	15
Acenaphthene	200	152		ug/L		76	51 - 100	3	15
Acenaphthylene	200	159		ug/L		80	53 - 100	1	15
Acetophenone	200	157		ug/L		78	47 - 100	4	15
Anthracene	200	154		ug/L		77	53 - 100	3	15
Atrazine	200	168		ug/L		84	47 - 100	3	16
Benzaldehyde	200	116		ug/L		58	10 - 129	2	15
Benzo[a]anthracene	200	162		ug/L		81	49 - 100	5	15
Benzo[a]pyrene	200	159		ug/L		80	48 - 100	6	15
Benzo[b]fluoranthene	200	160		ug/L		80	47 - 100	6	15
Benzo[g,h,i]perylene	200	158		ug/L		79	49 - 100	3	15
Benzo[k]fluoranthene	200	149		ug/L		75	46 - 100	4	15

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-470796/3-A

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 470796

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Bis(2-chloroethoxy)methane	200	150		ug/L		75	49 - 100		4	15
Bis(2-chloroethyl)ether	200	140		ug/L		70	46 - 100		2	15
Bis(2-ethylhexyl) phthalate	200	165		ug/L		82	51 - 101		5	15
Butyl benzyl phthalate	200	170		ug/L		85	51 - 101		3	15
Carbazole	200	154		ug/L		77	54 - 100		1	15
Chrysene	200	150		ug/L		75	49 - 100		1	15
Dibenz(a,h)anthracene	200	164		ug/L		82	50 - 102		7	15
Dibenzofuran	200	157		ug/L		79	53 - 100		1	15
Diethyl phthalate	200	157		ug/L		79	53 - 100		3	15
Dimethyl phthalate	200	157		ug/L		78	54 - 100		1	15
Di-n-butyl phthalate	200	153		ug/L		76	56 - 100		0	15
Di-n-octyl phthalate	200	175		ug/L		87	39 - 100		9	15
Fluoranthene	200	161		ug/L		80	55 - 100		1	15
Fluorene	200	154		ug/L		77	53 - 100		3	15
Hexachlorobenzene	200	158		ug/L		79	46 - 100		5	15
Hexachlorobutadiene	200	173		ug/L		86	42 - 100		2	15
Hexachlorocyclopentadiene	200	158		ug/L		79	41 - 100		3	15
Hexachloroethane	200	151		ug/L		75	49 - 100		1	15
Indeno[1,2,3-cd]pyrene	200	166		ug/L		83	50 - 100		6	15
Isophorone	200	144		ug/L		72	50 - 100		1	15
Naphthalene	200	159		ug/L		79	53 - 100		1	15
Nitrobenzene	200	142		ug/L		71	50 - 100		1	15
N-Nitrosodi-n-propylamine	200	157		ug/L		79	46 - 100		5	15
N-Nitrosodiphenylamine	200	152		ug/L		76	50 - 100		2	15
Pentachlorophenol	400	289		ug/L		72	37 - 100		1	15
Phenanthrene	200	151		ug/L		75	52 - 100		5	15
Phenol	200	151		ug/L		76	47 - 100		0	15
Pyrene	200	158		ug/L		79	50 - 100		4	15

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	83		39 - 121
2-Fluorobiphenyl	76		45 - 105
2-Fluorophenol (Surr)	76		38 - 105
Nitrobenzene-d5 (Surr)	77		45 - 106
Phenol-d5 (Surr)	74		38 - 105
Terphenyl-d14 (Surr)	71		28 - 125

Lab Sample ID: LB 180-470117/1-D

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470796

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1'-Biphenyl	ND		10	1.4	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		06/06/24 12:37	06/12/24 11:47	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 180-470117/1-D

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470796

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4-Dinitrophenol	ND		100	33	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		06/06/24 12:37	06/12/24 11:47	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Chlorophenol	ND		10	2.3	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Methylphenol	ND		10	5.6	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Nitroaniline	ND		50	5.5	ug/L		06/06/24 12:37	06/12/24 11:47	1
2-Nitrophenol	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 11:47	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		06/06/24 12:37	06/12/24 11:47	1
3-Nitroaniline	ND		50	4.4	ug/L		06/06/24 12:37	06/12/24 11:47	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Chloroaniline	ND		10	3.8	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		06/06/24 12:37	06/12/24 11:47	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Nitroaniline	ND		50	3.6	ug/L		06/06/24 12:37	06/12/24 11:47	1
4-Nitrophenol	ND		50	9.4	ug/L		06/06/24 12:37	06/12/24 11:47	1
Acenaphthene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 11:47	1
Acenaphthylene	ND		1.9	0.65	ug/L		06/06/24 12:37	06/12/24 11:47	1
Acetophenone	ND		10	1.6	ug/L		06/06/24 12:37	06/12/24 11:47	1
Anthracene	ND		1.9	0.49	ug/L		06/06/24 12:37	06/12/24 11:47	1
Atrazine	ND		10	6.3	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzaldehyde	ND		10	5.4	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 11:47	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		06/06/24 12:37	06/12/24 11:47	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		06/06/24 12:37	06/12/24 11:47	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		06/06/24 12:37	06/12/24 11:47	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		06/06/24 12:37	06/12/24 11:47	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		06/06/24 12:37	06/12/24 11:47	1
Caprolactam	ND		50	14	ug/L		06/06/24 12:37	06/12/24 11:47	1
Carbazole	ND		1.9	0.51	ug/L		06/06/24 12:37	06/12/24 11:47	1
Chrysene	ND		1.9	0.81	ug/L		06/06/24 12:37	06/12/24 11:47	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		06/06/24 12:37	06/12/24 11:47	1
Dibenzofuran	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 11:47	1
Diethyl phthalate	ND		10	5.7	ug/L		06/06/24 12:37	06/12/24 11:47	1
Dimethyl phthalate	ND		20	2.0	ug/L		06/06/24 12:37	06/12/24 11:47	1
Di-n-butyl phthalate	ND		100	49	ug/L		06/06/24 12:37	06/12/24 11:47	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		06/06/24 12:37	06/12/24 11:47	1
Fluoranthene	ND		1.9	0.60	ug/L		06/06/24 12:37	06/12/24 11:47	1
Fluorene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 11:47	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		06/06/24 12:37	06/12/24 11:47	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		06/06/24 12:37	06/12/24 11:47	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		06/06/24 12:37	06/12/24 11:47	1
Hexachloroethane	ND		10	1.3	ug/L		06/06/24 12:37	06/12/24 11:47	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 180-470117/1-D

Matrix: Solid

Analysis Batch: 471252

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470796

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		06/06/24 12:37	06/12/24 11:47	1
Isophorone	ND		10	1.9	ug/L		06/06/24 12:37	06/12/24 11:47	1
Naphthalene	ND		1.9	0.59	ug/L		06/06/24 12:37	06/12/24 11:47	1
Nitrobenzene	ND		20	5.0	ug/L		06/06/24 12:37	06/12/24 11:47	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		06/06/24 12:37	06/12/24 11:47	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		06/06/24 12:37	06/12/24 11:47	1
Pentachlorophenol	ND		50	8.5	ug/L		06/06/24 12:37	06/12/24 11:47	1
Phenanthrene	ND		1.9	1.6	ug/L		06/06/24 12:37	06/12/24 11:47	1
Phenol	ND		10	4.9	ug/L		06/06/24 12:37	06/12/24 11:47	1
Pyrene	ND		1.9	0.54	ug/L		06/06/24 12:37	06/12/24 11:47	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	72		39 - 121	06/06/24 12:37	06/12/24 11:47	1
2-Fluorobiphenyl	65		45 - 105	06/06/24 12:37	06/12/24 11:47	1
2-Fluorophenol (Surr)	55		38 - 105	06/06/24 12:37	06/12/24 11:47	1
Nitrobenzene-d5 (Surr)	60		45 - 106	06/06/24 12:37	06/12/24 11:47	1
Phenol-d5 (Surr)	58		38 - 105	06/06/24 12:37	06/12/24 11:47	1
Terphenyl-d14 (Surr)	67		28 - 125	06/06/24 12:37	06/12/24 11:47	1

Method: EPA 6010D - Metals (ICP)

Lab Sample ID: MB 180-470318/1-A

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:10	1
Aluminum	ND		200	110	ug/L		06/01/24 08:18	06/03/24 16:10	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:10	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:10	1
Barium	ND		200	27	ug/L		06/01/24 08:18	06/03/24 16:10	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:10	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:10	1
Calcium	ND		5000	640	ug/L		06/01/24 08:18	06/03/24 16:10	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:10	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:10	1
Copper	ND		25	2.2	ug/L		06/01/24 08:18	06/03/24 16:10	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:10	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:10	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:10	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:10	1
Nickel	ND		40	3.5	ug/L		06/01/24 08:18	06/03/24 16:10	1
Potassium	ND		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:10	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 16:10	1
Sodium	ND		5000	800	ug/L		06/01/24 08:18	06/03/24 16:10	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:10	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:10	1
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:10	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-470318/2-A

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	250	252		ug/L		101	80 - 120
Aluminum	5000	5280		ug/L		106	80 - 120
Arsenic	1000	1090		ug/L		109	80 - 120
Antimony	250	278		ug/L		111	80 - 120
Barium	1000	1100		ug/L		110	80 - 120
Beryllium	500	543		ug/L		109	80 - 120
Cadmium	500	531		ug/L		106	80 - 120
Calcium	25000	26900		ug/L		108	80 - 120
Chromium	500	525		ug/L		105	80 - 120
Cobalt	500	516		ug/L		103	80 - 120
Copper	500	519		ug/L		104	80 - 120
Iron	5000	5390		ug/L		108	80 - 120
Lead	500	519		ug/L		104	80 - 120
Magnesium	25000	26400		ug/L		105	80 - 120
Manganese	500	525		ug/L		105	80 - 120
Nickel	500	517		ug/L		103	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Selenium	1000	1100		ug/L		110	80 - 120
Sodium	25000	26600		ug/L		106	80 - 120
Thallium	1000	1060		ug/L		106	80 - 120
Vanadium	500	533		ug/L		107	80 - 120
Zinc	250	261		ug/L		104	80 - 120

Lab Sample ID: LB 180-470117/1-B

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470318

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		5.0	0.91	ug/L		06/01/24 08:18	06/03/24 16:20	1
Aluminum	ND		200	110	ug/L		06/01/24 08:18	06/03/24 16:20	1
Arsenic	ND		10	8.3	ug/L		06/01/24 08:18	06/03/24 16:20	1
Antimony	ND		10	6.2	ug/L		06/01/24 08:18	06/03/24 16:20	1
Barium	123	J B	200	27	ug/L		06/01/24 08:18	06/03/24 16:20	1
Beryllium	ND		4.0	1.5	ug/L		06/01/24 08:18	06/03/24 16:20	1
Cadmium	ND		5.0	0.30	ug/L		06/01/24 08:18	06/03/24 16:20	1
Calcium	6690	B	5000	640	ug/L		06/01/24 08:18	06/03/24 16:20	1
Chromium	ND		5.0	3.1	ug/L		06/01/24 08:18	06/03/24 16:20	1
Cobalt	ND		50	3.4	ug/L		06/01/24 08:18	06/03/24 16:20	1
Copper	ND		25	2.2	ug/L		06/01/24 08:18	06/03/24 16:20	1
Iron	ND		100	72	ug/L		06/01/24 08:18	06/03/24 16:20	1
Lead	ND		10	4.4	ug/L		06/01/24 08:18	06/03/24 16:20	1
Magnesium	ND		5000	690	ug/L		06/01/24 08:18	06/03/24 16:20	1
Manganese	ND		15	2.4	ug/L		06/01/24 08:18	06/03/24 16:20	1
Nickel	ND		40	3.5	ug/L		06/01/24 08:18	06/03/24 16:20	1
Potassium	ND		5000	2600	ug/L		06/01/24 08:18	06/03/24 16:20	1
Selenium	ND		10	3.7	ug/L		06/01/24 08:18	06/03/24 16:20	1
Sodium	1750	J B	5000	800	ug/L		06/01/24 08:18	06/03/24 16:20	1
Thallium	ND		20	3.0	ug/L		06/01/24 08:18	06/03/24 16:20	1
Vanadium	ND		50	5.3	ug/L		06/01/24 08:18	06/03/24 16:20	1

Eurofins Pittsburgh

QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LB 180-470117/1-B

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470318

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		50	42	ug/L		06/01/24 08:18	06/03/24 16:20	1

Lab Sample ID: 180-174649-1 MS

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: MIX-ISS2-7.5PC

Prep Type: SPLP East

Prep Batch: 470318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		250	256		ug/L		102	75 - 125
Aluminum	1400		5000	6610		ug/L		104	75 - 125
Arsenic	ND		1000	1090		ug/L		109	75 - 125
Antimony	ND		250	283		ug/L		113	75 - 125
Barium	410	B	1000	1480		ug/L		107	75 - 125
Beryllium	ND		500	527		ug/L		105	75 - 125
Cadmium	ND		500	509		ug/L		102	75 - 125
Chromium	7.1		500	513		ug/L		101	75 - 125
Cobalt	ND		500	507		ug/L		101	75 - 125
Copper	7.2	J	500	527		ug/L		104	75 - 125
Iron	ND		5000	5240		ug/L		105	75 - 125
Lead	ND		500	519		ug/L		104	75 - 125
Magnesium	ND		25000	25400		ug/L		102	75 - 125
Manganese	ND		500	509		ug/L		102	75 - 125
Nickel	ND		500	506		ug/L		101	75 - 125
Potassium	10000		25000	36400		ug/L		105	75 - 125
Selenium	ND		1000	1120		ug/L		112	75 - 125
Sodium	2100	J B	25000	29200		ug/L		109	75 - 125
Thallium	ND		1000	1050		ug/L		105	75 - 125
Vanadium	ND		500	523		ug/L		105	75 - 125
Zinc	ND		250	249		ug/L		100	75 - 125

Lab Sample ID: 180-174649-1 MS

Matrix: Solid

Analysis Batch: 470698

Client Sample ID: MIX-ISS2-7.5PC

Prep Type: SPLP East

Prep Batch: 470318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	430000	4 B	25000	388000	4	ug/L		-183	75 - 125

Lab Sample ID: 180-174649-1 MSD

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: MIX-ISS2-7.5PC

Prep Type: SPLP East

Prep Batch: 470318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		250	254		ug/L		102	75 - 125	1	20
Aluminum	1400		5000	6760		ug/L		107	75 - 125	2	20
Arsenic	ND		1000	1100		ug/L		110	75 - 125	1	20
Antimony	ND		250	284		ug/L		114	75 - 125	0	20
Barium	410	B	1000	1520		ug/L		111	75 - 125	2	20
Beryllium	ND		500	538		ug/L		108	75 - 125	2	20
Cadmium	ND		500	513		ug/L		103	75 - 125	1	20
Chromium	7.1		500	514		ug/L		101	75 - 125	0	20

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QC Sample Results

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: 180-174649-1 MSD

Matrix: Solid

Analysis Batch: 470530

Client Sample ID: MIX-ISS2-7.5PC

Prep Type: SPLP East

Prep Batch: 470318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	ND		500	509		ug/L		102	75 - 125	0	20
Copper	7.2	J	500	524		ug/L		103	75 - 125	1	20
Iron	ND		5000	5350		ug/L		107	75 - 125	2	20
Lead	ND		500	520		ug/L		104	75 - 125	0	20
Magnesium	ND		25000	25900		ug/L		104	75 - 125	2	20
Manganese	ND		500	522		ug/L		104	75 - 125	3	20
Nickel	ND		500	508		ug/L		102	75 - 125	0	20
Potassium	10000		25000	37100		ug/L		108	75 - 125	2	20
Selenium	ND		1000	1130		ug/L		113	75 - 125	1	20
Sodium	2100	J B	25000	29600		ug/L		110	75 - 125	1	20
Thallium	ND		1000	1060		ug/L		106	75 - 125	1	20
Vanadium	ND		500	525		ug/L		105	75 - 125	0	20
Zinc	ND		250	250		ug/L		100	75 - 125	0	20

Lab Sample ID: 180-174649-1 MSD

Matrix: Solid

Analysis Batch: 470698

Client Sample ID: MIX-ISS2-7.5PC

Prep Type: SPLP East

Prep Batch: 470318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	430000	4 B	25000	470000	4	ug/L		145	75 - 125	19	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-470463/1-A

Matrix: Solid

Analysis Batch: 470589

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		06/04/24 06:50	06/04/24 12:52	1

Lab Sample ID: LCS 180-470463/2-A

Matrix: Solid

Analysis Batch: 470589

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.61		ug/L		105	80 - 120

Lab Sample ID: LB 180-470117/1-C

Matrix: Solid

Analysis Batch: 470589

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470463

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		06/04/24 06:50	06/04/24 13:08	1

Lab Sample ID: LB 180-470271/1-E

Matrix: Solid

Analysis Batch: 470589

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 470463

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		06/04/24 06:50	06/04/24 12:54	1

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QC Association Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

GC/MS VOA

Leach Batch: 470123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP	Solid	EPA 1312	
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP	Solid	EPA 1312	
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP	Solid	EPA 1312	
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP	Solid	EPA 1312	
180-174649-5	MIX-ISS3-7.5PC	SPLP	Solid	EPA 1312	
180-174649-5 - DL	MIX-ISS3-7.5PC	SPLP	Solid	EPA 1312	
180-174649-6 - DL	MIX-ISS3-7.5-2PC1SL	SPLP	Solid	EPA 1312	
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP	Solid	EPA 1312	
180-174649-7 - DL	MIX-ISS3-10-3PC1SL	SPLP	Solid	EPA 1312	
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP	Solid	EPA 1312	
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP	Solid	EPA 1312	
LB 180-470123/1-A	Method Blank	SPLP	Solid	EPA 1312	

Analysis Batch: 471237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP	Solid	EPA 8260D	470123
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP	Solid	EPA 8260D	470123
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP	Solid	EPA 8260D	470123
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP	Solid	EPA 8260D	470123
180-174649-5	MIX-ISS3-7.5PC	SPLP	Solid	EPA 8260D	470123
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP	Solid	EPA 8260D	470123
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP	Solid	EPA 8260D	470123
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP	Solid	EPA 8260D	470123
LB 180-470123/1-A	Method Blank	SPLP	Solid	EPA 8260D	470123
LCS 180-471237/7	Lab Control Sample	Total/NA	Solid	EPA 8260D	

Analysis Batch: 471394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-5 - DL	MIX-ISS3-7.5PC	SPLP	Solid	EPA 8260D	470123
180-174649-6 - DL	MIX-ISS3-7.5-2PC1SL	SPLP	Solid	EPA 8260D	470123
180-174649-7 - DL	MIX-ISS3-10-3PC1SL	SPLP	Solid	EPA 8260D	470123
MB 180-471394/7	Method Blank	Total/NA	Solid	EPA 8260D	
LCS 180-471394/4	Lab Control Sample	Total/NA	Solid	EPA 8260D	

GC/MS Semi VOA

Leach Batch: 470117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 1312	
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	EPA 1312	
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	EPA 1312	
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	EPA 1312	
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	EPA 1312	
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	EPA 1312	
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	EPA 1312	
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	EPA 1312	
LB 180-470117/1-D	Method Blank	SPLP East	Solid	EPA 1312	

Prep Batch: 470796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	3520C	470117

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QC Association Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

GC/MS Semi VOA (Continued)

Prep Batch: 470796 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	3520C	470117
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	3520C	470117
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	3520C	470117
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	3520C	470117
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	3520C	470117
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	3520C	470117
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	3520C	470117
LB 180-470117/1-D	Method Blank	SPLP East	Solid	3520C	470117
MB 180-470796/1-A	Method Blank	Total/NA	Solid	3520C	
LCS 180-470796/2-A	Lab Control Sample	Total/NA	Solid	3520C	
LCSD 180-470796/3-A	Lab Control Sample Dup	Total/NA	Solid	3520C	

Analysis Batch: 471252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 8270E	470796
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	EPA 8270E	470796
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	EPA 8270E	470796
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	EPA 8270E	470796
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	EPA 8270E	470796
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	EPA 8270E	470796
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	EPA 8270E	470796
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	EPA 8270E	470796
LB 180-470117/1-D	Method Blank	SPLP East	Solid	EPA 8270E	470796
MB 180-470796/1-A	Method Blank	Total/NA	Solid	EPA 8270E	470796
LCS 180-470796/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	470796
LCSD 180-470796/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	470796

Metals

Leach Batch: 470117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 1312	
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	EPA 1312	
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	EPA 1312	
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	EPA 1312	
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	EPA 1312	
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	EPA 1312	
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	EPA 1312	
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	EPA 1312	
LB 180-470117/1-B	Method Blank	SPLP East	Solid	EPA 1312	
LB 180-470117/1-C	Method Blank	SPLP East	Solid	EPA 1312	
180-174649-1 MS	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 1312	
180-174649-1 MSD	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 1312	

Leach Batch: 470271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-470271/1-E	Method Blank	SPLP East	Solid	EPA 1311	

Prep Batch: 470318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	3010A	470117

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QC Association Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Metals (Continued)

Prep Batch: 470318 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	3010A	470117
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	3010A	470117
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	3010A	470117
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	3010A	470117
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	3010A	470117
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	3010A	470117
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	3010A	470117
LB 180-470117/1-B	Method Blank	SPLP East	Solid	3010A	470117
MB 180-470318/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-470318/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-174649-1 MS	MIX-ISS2-7.5PC	SPLP East	Solid	3010A	470117
180-174649-1 MSD	MIX-ISS2-7.5PC	SPLP East	Solid	3010A	470117

Prep Batch: 470463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	7470A	470117
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	7470A	470117
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	7470A	470117
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	7470A	470117
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	7470A	470117
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	7470A	470117
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	7470A	470117
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	7470A	470117
LB 180-470117/1-C	Method Blank	SPLP East	Solid	7470A	470117
LB 180-470271/1-E	Method Blank	SPLP East	Solid	7470A	470271
MB 180-470463/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 180-470463/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 470530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	EPA 6010D	470318
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	EPA 6010D	470318
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	EPA 6010D	470318
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	EPA 6010D	470318
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	EPA 6010D	470318
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	EPA 6010D	470318
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	EPA 6010D	470318
LB 180-470117/1-B	Method Blank	SPLP East	Solid	EPA 6010D	470318
MB 180-470318/1-A	Method Blank	Total/NA	Solid	EPA 6010D	470318
LCS 180-470318/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	470318
180-174649-1 MS	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318
180-174649-1 MSD	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318

Analysis Batch: 470589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 7470A	470463
180-174649-2	MIX-ISS2-7.5-2PC1S1	SPLP East	Solid	EPA 7470A	470463
180-174649-3	MIX-ISS2-10-3PC1SL	SPLP East	Solid	EPA 7470A	470463
180-174649-4	MIX-ISS2-10-1PC1SL	SPLP East	Solid	EPA 7470A	470463
180-174649-5	MIX-ISS3-7.5PC	SPLP East	Solid	EPA 7470A	470463

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QC Association Summary

Client: ENTACT, LLC
Project/Site: NorthPoint Staten Island

Job ID: 180-174649-1

Metals (Continued)

Analysis Batch: 470589 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-6	MIX-ISS3-7.5-2PC1SL	SPLP East	Solid	EPA 7470A	470463
180-174649-7	MIX-ISS3-10-3PC1SL	SPLP East	Solid	EPA 7470A	470463
180-174649-8	MIX-ISS3-10-1PC1SL	SPLP East	Solid	EPA 7470A	470463
LB 180-470117/1-C	Method Blank	SPLP East	Solid	EPA 7470A	470463
LB 180-470271/1-E	Method Blank	SPLP East	Solid	EPA 7470A	470463
MB 180-470463/1-A	Method Blank	Total/NA	Solid	EPA 7470A	470463
LCS 180-470463/2-A	Lab Control Sample	Total/NA	Solid	EPA 7470A	470463

Analysis Batch: 470698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-174649-1	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318
180-174649-1 MS	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318
180-174649-1 MSD	MIX-ISS2-7.5PC	SPLP East	Solid	EPA 6010D	470318

Chain of Custody Record

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(xxx) xxx-xxxx		☐ CALENDAR DAYS ☒ WORKING DAYS					
Project Name: NorthPoint Staten Island ISS Study		TAT if different from Below					
Site: NorthPoint Staten Island		☒ 2 weeks					
P O # E9285		☐ 1 week					
		☐ 2 days					
		☐ 1 day					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	
MIX-ISS2-7.5PC	5/28			C	S		
MIX-ISS2-5PC-2.5-7.5-2PC-1SL				C	S		
MIX-ISS2-7.5PC-2.5-10-3PC-1SL				C	S		
MIX-ISS2-5PC-2.5-10-1PC-1SL				C	S		
MIX-ISS3-7.5PC				C	S		
MIX-ISS3-5PC-2.5-7.5-2PC-1SL				C	S		
MIX-ISS3-7.5PC-2.5-10-3PC-1SL				C	S		
MIX-ISS3-5PC-2.5-10-1PC-1SL				C	S		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							
Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown							
Special Instructions/QC Requirements & Comments: USE METHOD 1312 MODIFIED - NO ADDITIONAL PULVERIZATION OF SAMPLE							
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Therm ID No.:	
Relinquished by: <i>Julie Carr</i>		Company: <i>Entact</i>		Received by: <i>Deb Bowen</i>		Company: <i>EPHANE</i>	
Relinquished by:		Company:		Received by:		Company:	
Relinquished by:		Company:		Received in Laboratory by:		Company:	

Login Sample Receipt Checklist

Client: ENTACT, LLC

Job Number: 180-174649-1

Login Number: 174649

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Jule Carr
ENTACT, LLC
2873 Hardies Road
Suite 3
Gibsonia, Pennsylvania 15044

Generated 8/28/2024 8:09:35 AM

JOB DESCRIPTION

North Point Staten Island ISS Study

JOB NUMBER

180-176969-1

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization



Generated
8/28/2024 8:09:35 AM

Authorized for release by
Debra Bowen, Project Manager I
Debra.Bowen@et.eurofinsus.com
(412)963-2445

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Case Narrative

Client: ENTACT, LLC
Project: North Point Staten Island ISS Study

Job ID: 180-176969-1

Job ID: 180-176969-1

Eurofins Pittsburgh

Job Narrative 180-176969-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 7/12/2024 2:15 PM and 8/15/2024 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.4°C and 4.5°C.

Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

The Chain-of-Custody (COC) does not have a collection date or time. These items were taken from the sample container labels.

The following samples were collected in an improper container: MIX-ISS4-7.5PC-0.5C (180-176969-1), MIX-ISS4-7.5PC-1.0C (180-176969-2), MIX-ISS4-7.5PC-1.5C (180-176969-3) and MIX-ISS4-7.5PC (180-176969-4). PFAS analyses were submitted in glass containers, instead of plastic. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE_ONE> proceed with/cancel analysis.

GC/MS VOA

Method 8260D - SPLP: The laboratory control sample duplicate (LCSD) for analytical batch 180-474216 recovered outside control limits for the following analyte: Methyl acetate. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method 8260D - SPLP: Surrogate recovery for the following lab blank was outside the upper control limit: (LB 180-474140/1-A). This sample did not contain any target analytes; therefore, re-analysis was not performed.

Method 8260D - SPLP: Surrogate recovery for the following samples were outside control limits: MIX-ISS4-7.5PC-1.0C (180-176969-2), MIX-ISS4-7.5PC-1.5C (180-176969-3) and MIX-ISS4-7.5PC (180-176969-4).

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-474216 was outside the method criteria for the following analytes: 2-Hexanone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-474216 was outside the method criteria for the following analytes: Carbon tetrachloride, Chloromethane, Methyl acetate, Vinyl chloride and Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method 8260D - SPLP: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 180-474216 was outside criteria for the following analyte(s): Vinyl chloride, Dichloro-difluoromethane and Chloromethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: Surrogate recovery for the following sample was outside control limits: MIX-ISS4-7.5PC-0.5C (180-176969-1). Evidence of matrix interferences is not obvious. This is a re-analysis to confirm results. Report and narrate.

Method 8260D - SPLP: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 180-474315 was outside criteria for the following analyte(s): Vinyl chloride, Dichloro-difluoromethane and Chloromethane.

Eurofins Pittsburgh

Case Narrative

Client: ENTACT, LLC
Project: North Point Staten Island ISS Study

Job ID: 180-176969-1

Job ID: 180-176969-1 (Continued)

Eurofins Pittsburgh

As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in batch 180-474315 was outside the method criteria for the following analyte(s): 2-Hexanone, Acetone, 1,2,4-Trichlorobenzene, 2-Butanone and Dichloro-difluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The continuing calibration verification (CCV) analyzed in 180-474315 was outside the method criteria for the following analyte(s): Methyl acetate and Bromoform. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D - SPLP: The following samples were diluted to bring the concentration of target analytes within the calibration range: MIX-ISS4-7.5PC-0.5C (180-176969-1) and MIX-ISS4-7.5PC (180-176969-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

Method 8270E - SPLP East: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 474359.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS

Method 1633_Final - SPLP East: The following samples were analyzed outside of analytical holding time due to the samples being received outside of holding time MIX-ISS4-7.5PC-0.5C (180-176969-1), MIX-ISS4-7.5PC-1.0C (180-176969-2), MIX-ISS4-7.5PC-1.5C (180-176969-3) and MIX-ISS4-7.5PC (180-176969-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010D - SPLP East: The method blank for preparation batch 180-474214 and analytical batch 180-474551 contained Copper above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 7470A - SPLP East: The following samples were released by the client and logged in by the PM outside the holding time for mercury: MIX-ISS4-7.5PC-0.5C (180-176969-1), MIX-ISS4-7.5PC-1.0C (180-176969-2), MIX-ISS4-7.5PC-1.5C (180-176969-3) and MIX-ISS4-7.5PC (180-176969-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Pittsburgh

Definitions/Glossary

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
B	Analyte was found in the blank.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Eurofins Pittsburgh

Definitions/Glossary

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Accreditation/Certification Summary

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 7470A	7470A	Solid	Mercury

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (VW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Sample Summary

Client: ENTACT, LLC

Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-176969-1	MIX-ISS4-7.5PC-0.5C	Solid	07/12/24 10:44	07/12/24 14:15
180-176969-2	MIX-ISS4-7.5PC-1.0C	Solid	07/12/24 10:50	07/12/24 14:15
180-176969-3	MIX-ISS4-7.5PC-1.5C	Solid	07/12/24 10:55	07/12/24 14:15
180-176969-4	MIX-ISS4-7.5PC	Solid	07/12/24 11:02	07/12/24 14:15

Method Summary

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method	Method Description	Protocol	Laboratory
EPA 8260D	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
EPA 6010D	Metals (ICP)	SW846	EET PIT
EPA 7470A	Mercury (CVAA)	SW846	EET PIT
1312	SPLP Extraction	SW846	EET CLE
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE
3010A	Preparation, Total Metals	SW846	EET PIT
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PIT
5030C	Purge and Trap	SW846	EET PIT
7470A	Preparation, Mercury	SW846	EET PIT
EPA 1312	SPLP Extraction	SW846	EET PIT

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-0.5C

Lab Sample ID: 180-176969-1

Date Collected: 07/12/24 10:44

Matrix: Solid

Date Received: 07/12/24 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.26 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	474216	07/16/24 20:17	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	DL		25.26 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D	DL	5	5 mL	5 mL	474315	07/17/24 14:26	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			25.13 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3520C			230 mL	2.5 mL	474359	07/17/24 13:54	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	474632	07/22/24 18:01	VVP	EET PIT
Instrument ID: CH733										
SPLP East	Leach	1312			1.0 g	1.0 mL	624120	08/20/24 14:55	DRJ	EET CLE
SPLP East	Prep	1633			134.4 mL	5 mL	624382	08/22/24 10:43	CLB	EET CLE
SPLP East	Analysis	1633		1			624677	08/26/24 11:37	MRL	EET CLE
Instrument ID: LCMS02										
SPLP East	Leach	EPA 1312			25.13 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474551	07/18/24 16:08	MRG	EET PIT
Instrument ID: C										
SPLP East	Leach	EPA 1312			25.13 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474661	07/19/24 16:39	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			60.26 g	1205 mL	477632	08/26/24 12:20	Z1M	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	477712	08/27/24 11:20	SJM	EET PIT
SPLP East	Analysis	EPA 7470A		1			477753	08/27/24 14:23	RJR	EET PIT
Instrument ID: HGY										

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.14 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	474216	07/16/24 20:38	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	RA		25.14 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D	RA	1	5 mL	5 mL	474315	07/17/24 13:04	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			25.03 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3520C			230 mL	2.5 mL	474359	07/17/24 13:54	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	474632	07/22/24 18:23	VVP	EET PIT
Instrument ID: CH733										
SPLP East	Leach	1312			1.0 g	1.0 mL	624120	08/20/24 14:55	DRJ	EET CLE
SPLP East	Prep	1633			132.2 mL	5 mL	624382	08/22/24 10:43	CLB	EET CLE
SPLP East	Analysis	1633		1			624677	08/26/24 11:54	MRL	EET CLE
Instrument ID: LCMS02										

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	EPA 1312			25.03 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474551	07/18/24 16:14	MRG	EET PIT
Instrument ID: C										
SPLP East	Leach	EPA 1312			25.03 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474661	07/19/24 16:44	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			86.04 g	1720 mL	477632	08/26/24 12:20	Z1M	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	477712	08/27/24 11:20	SJM	EET PIT
SPLP East	Analysis	EPA 7470A		1			477753	08/27/24 14:24	RJR	EET PIT
Instrument ID: HGY										

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.40 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	474216	07/16/24 20:58	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	RA		25.40 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D	RA	1	5 mL	5 mL	474315	07/17/24 13:25	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			25.02 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3520C			240 mL	2.5 mL	474359	07/17/24 13:54	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	474632	07/22/24 18:44	VVP	EET PIT
Instrument ID: CH733										
SPLP East	Leach	1312			1.0 g	1.0 mL	624120	08/20/24 14:55	DRJ	EET CLE
SPLP East	Prep	1633			127.5 mL	5 mL	624382	08/22/24 10:43	CLB	EET CLE
SPLP East	Analysis	1633		1			624677	08/26/24 12:10	MRL	EET CLE
Instrument ID: LCMS02										
SPLP East	Leach	EPA 1312			25.02 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474551	07/18/24 16:19	MRG	EET PIT
Instrument ID: C										
SPLP East	Leach	EPA 1312			25.02 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474661	07/19/24 16:50	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			68.71 g	1375 mL	477632	08/26/24 12:20	Z1M	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	477712	08/27/24 11:20	SJM	EET PIT
SPLP East	Analysis	EPA 7470A		1			477753	08/27/24 14:25	RJR	EET PIT
Instrument ID: HGY										

Eurofins Pittsburgh

Lab Chronicle

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP	Leach	EPA 1312			25.11 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D		1	5 mL	5 mL	474216	07/16/24 21:19	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP	Leach	EPA 1312	DL		25.11 g	500 mL	474140	07/15/24 09:54	Z1M	EET PIT
SPLP	Analysis	EPA 8260D	DL	5	5 mL	5 mL	474315	07/17/24 12:44	PJJ	EET PIT
Instrument ID: CHHP11										
SPLP East	Leach	EPA 1312			25.24 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3520C			240 mL	2.5 mL	474359	07/17/24 13:54	BJT	EET PIT
SPLP East	Analysis	EPA 8270E		1	1 mL	1 mL	474632	07/22/24 19:06	VVP	EET PIT
Instrument ID: CH733										
SPLP East	Leach	1312			1.0 g	1.0 mL	624120	08/20/24 14:55	DRJ	EET CLE
SPLP East	Prep	1633			128.6 mL	5 mL	624382	08/22/24 10:43	CLB	EET CLE
SPLP East	Analysis	1633		1			624677	08/26/24 12:27	MRL	EET CLE
Instrument ID: LCMS02										
SPLP East	Leach	EPA 1312			25.24 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474551	07/18/24 16:24	MRG	EET PIT
Instrument ID: C										
SPLP East	Leach	EPA 1312			25.24 g	500 mL	474141	07/15/24 09:56	Z1M	EET PIT
SPLP East	Prep	3010A			5 mL	50 mL	474214	07/16/24 09:17	DFC	EET PIT
SPLP East	Analysis	EPA 6010D		1			474661	07/19/24 16:55	MRG	EET PIT
Instrument ID: Q										
SPLP East	Leach	EPA 1312			43.82 g	880 mL	477632	08/26/24 12:20	Z1M	EET PIT
SPLP East	Prep	7470A			25 mL	25 mL	477712	08/27/24 11:20	SJM	EET PIT
SPLP East	Analysis	EPA 7470A		1			477753	08/27/24 14:26	RJR	EET PIT
Instrument ID: HGY										

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

- Analyst References:**
- Lab: EET CLE
- Batch Type: Leach
 - DRJ = Diane Jones
 - Batch Type: Prep
 - CLB = Carrie Bearshak
 - Batch Type: Analysis
 - MRL = Matthew Loeb
- Lab: EET PIT
- Batch Type: Leach
 - Z1M = Zee Menakruzz
 - Batch Type: Prep
 - BJT = Bill Trout
 - DFC = David Coyle
 - SJM = Shannon Mueller
 - Batch Type: Analysis
 - MRG = Mismel Garcia
 - PJJ = Patrick Journet
 - RJR = Ron Rosenbaum
 - VVP = Vincent Piccolino

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Client Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-0.5C

Lab Sample ID: 180-176969-1

Date Collected: 07/12/24 10:44

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/24 20:17	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/16/24 20:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/16/24 20:17	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/24 20:17	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/16/24 20:17	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/24 20:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/16/24 20:17	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/24 20:17	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/16/24 20:17	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/24 20:17	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/16/24 20:17	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:17	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/24 20:17	1
2-Butanone (MEK)	ND		25	13	ug/L			07/16/24 20:17	1
2-Hexanone	ND	^c	25	16	ug/L			07/16/24 20:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/16/24 20:17	1
Acetone	23	J	25	17	ug/L			07/16/24 20:17	1
Benzene	ND		5.0	3.0	ug/L			07/16/24 20:17	1
Bromoform	ND		5.0	4.9	ug/L			07/16/24 20:17	1
Bromomethane	ND	^c	5.0	4.4	ug/L			07/16/24 20:17	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/16/24 20:17	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			07/16/24 20:17	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:17	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/16/24 20:17	1
Chloroform	ND		5.0	3.0	ug/L			07/16/24 20:17	1
Chloromethane	ND	^c	5.0	4.5	ug/L			07/16/24 20:17	1
Chloroethane	ND		5.0	4.5	ug/L			07/16/24 20:17	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/16/24 20:17	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/24 20:17	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/16/24 20:17	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/16/24 20:17	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/24 20:17	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/16/24 20:17	1
Cyclohexane	ND		5.0	3.2	ug/L			07/16/24 20:17	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/16/24 20:17	1
Methyl acetate	ND	*+ ^c	25	8.4	ug/L			07/16/24 20:17	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/16/24 20:17	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/16/24 20:17	1
Styrene	ND		5.0	2.4	ug/L			07/16/24 20:17	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/24 20:17	1
Toluene	ND		5.0	2.3	ug/L			07/16/24 20:17	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:17	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/24 20:17	1
Trichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:17	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/16/24 20:17	1
Vinyl chloride	ND	^c	5.0	2.0	ug/L			07/16/24 20:17	1
Xylenes, Total	ND		10	4.5	ug/L			07/16/24 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		52 - 151		07/16/24 20:17	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-0.5C

Lab Sample ID: 180-176969-1

Date Collected: 07/12/24 10:44

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62		49 - 118		07/16/24 20:17	1
Dibromofluoromethane (Surr)	123		60 - 132		07/16/24 20:17	1
Toluene-d8 (Surr)	73		53 - 124		07/16/24 20:17	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	92		25	22	ug/L			07/17/24 14:26	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		52 - 151		07/17/24 14:26	5
4-Bromofluorobenzene (Surr)	91		49 - 118		07/17/24 14:26	5
Dibromofluoromethane (Surr)	136	S1+	60 - 132		07/17/24 14:26	5
Toluene-d8 (Surr)	76		53 - 124		07/17/24 14:26	5

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	1.5	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.63	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4,5-Trichlorophenol	ND		11	2.7	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4,6-Trichlorophenol	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4-Dichlorophenol	ND		2.1	0.55	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4-Dimethylphenol	ND		11	6.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4-Dinitrophenol	ND		110	35	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,4-Dinitrotoluene	ND		11	3.8	ug/L		07/17/24 13:54	07/22/24 18:01	1
2,6-Dinitrotoluene	ND		11	1.9	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Chloronaphthalene	ND		2.1	0.64	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Chlorophenol	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Methylnaphthalene	1.1	J	2.1	0.67	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Methylphenol	ND		11	6.1	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Nitroaniline	ND		54	6.0	ug/L		07/17/24 13:54	07/22/24 18:01	1
2-Nitrophenol	ND		11	2.1	ug/L		07/17/24 13:54	07/22/24 18:01	1
3,3'-Dichlorobenzidine	ND		11	6.3	ug/L		07/17/24 13:54	07/22/24 18:01	1
3-Nitroaniline	ND		54	4.8	ug/L		07/17/24 13:54	07/22/24 18:01	1
4,6-Dinitro-2-methylphenol	ND		54	16	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Bromophenyl phenyl ether	ND		11	3.5	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Chloro-3-methylphenol	ND		11	4.7	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Chloroaniline	ND		11	4.1	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Chlorophenyl phenyl ether	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
Methylphenol, 3 & 4	ND		11	4.0	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Nitroaniline	ND		54	3.9	ug/L		07/17/24 13:54	07/22/24 18:01	1
4-Nitrophenol	ND		54	10	ug/L		07/17/24 13:54	07/22/24 18:01	1
Acenaphthene	2.0	J	2.1	0.71	ug/L		07/17/24 13:54	07/22/24 18:01	1
Acenaphthylene	ND		2.1	0.71	ug/L		07/17/24 13:54	07/22/24 18:01	1
Acetophenone	ND		11	1.7	ug/L		07/17/24 13:54	07/22/24 18:01	1
Anthracene	4.8		2.1	0.53	ug/L		07/17/24 13:54	07/22/24 18:01	1
Atrazine	ND		11	6.9	ug/L		07/17/24 13:54	07/22/24 18:01	1
Benzaldehyde	ND		11	5.8	ug/L		07/17/24 13:54	07/22/24 18:01	1
Benzo[a]anthracene	ND		2.1	0.82	ug/L		07/17/24 13:54	07/22/24 18:01	1
Benzo[a]pyrene	ND		2.1	0.58	ug/L		07/17/24 13:54	07/22/24 18:01	1
Benzo[b]fluoranthene	ND		2.1	1.1	ug/L		07/17/24 13:54	07/22/24 18:01	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-0.5C

Lab Sample ID: 180-176969-1

Date Collected: 07/12/24 10:44

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:01	1
Benzo[k]fluoranthene	ND		2.1	0.96	ug/L		07/17/24 13:54	07/22/24 18:01	1
Bis(2-chloroethoxy)methane	ND		11	1.7	ug/L		07/17/24 13:54	07/22/24 18:01	1
Bis(2-chloroethyl)ether	ND		2.1	0.43	ug/L		07/17/24 13:54	07/22/24 18:01	1
Bis(2-ethylhexyl) phthalate	ND		110	68	ug/L		07/17/24 13:54	07/22/24 18:01	1
Butyl benzyl phthalate	ND		22	10	ug/L		07/17/24 13:54	07/22/24 18:01	1
Caprolactam	ND		54	15	ug/L		07/17/24 13:54	07/22/24 18:01	1
Carbazole	8.0		2.1	0.55	ug/L		07/17/24 13:54	07/22/24 18:01	1
Chrysene	ND		2.1	0.88	ug/L		07/17/24 13:54	07/22/24 18:01	1
Dibenz(a,h)anthracene	ND		2.1	0.78	ug/L		07/17/24 13:54	07/22/24 18:01	1
Dibenzofuran	ND		11	2.1	ug/L		07/17/24 13:54	07/22/24 18:01	1
Diethyl phthalate	ND		11	6.2	ug/L		07/17/24 13:54	07/22/24 18:01	1
Dimethyl phthalate	ND		22	2.2	ug/L		07/17/24 13:54	07/22/24 18:01	1
Di-n-butyl phthalate	ND		110	53	ug/L		07/17/24 13:54	07/22/24 18:01	1
Di-n-octyl phthalate	ND		11	7.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
Fluoranthene	1.1	J	2.1	0.65	ug/L		07/17/24 13:54	07/22/24 18:01	1
Fluorene	2.2		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:01	1
Hexachlorobenzene	ND		2.1	0.61	ug/L		07/17/24 13:54	07/22/24 18:01	1
Hexachlorobutadiene	ND		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:01	1
Hexachlorocyclopentadiene	ND		11	5.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
Hexachloroethane	ND		11	1.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.92	ug/L		07/17/24 13:54	07/22/24 18:01	1
Isophorone	ND		11	2.0	ug/L		07/17/24 13:54	07/22/24 18:01	1
Naphthalene	1.1	J	2.1	0.64	ug/L		07/17/24 13:54	07/22/24 18:01	1
Nitrobenzene	ND		22	5.4	ug/L		07/17/24 13:54	07/22/24 18:01	1
N-Nitrosodi-n-propylamine	ND		2.1	0.77	ug/L		07/17/24 13:54	07/22/24 18:01	1
N-Nitrosodiphenylamine	ND		11	1.3	ug/L		07/17/24 13:54	07/22/24 18:01	1
Pentachlorophenol	ND		54	9.2	ug/L		07/17/24 13:54	07/22/24 18:01	1
Phenanthrene	3.5		2.1	1.7	ug/L		07/17/24 13:54	07/22/24 18:01	1
Phenol	ND		11	5.3	ug/L		07/17/24 13:54	07/22/24 18:01	1
Pyrene	0.97	J	2.1	0.59	ug/L		07/17/24 13:54	07/22/24 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	113		39 - 121	07/17/24 13:54	07/22/24 18:01	1
2-Fluorobiphenyl	102		45 - 105	07/17/24 13:54	07/22/24 18:01	1
2-Fluorophenol (Surr)	97		38 - 105	07/17/24 13:54	07/22/24 18:01	1
Nitrobenzene-d5 (Surr)	104		45 - 106	07/17/24 13:54	07/22/24 18:01	1
Phenol-d5 (Surr)	104		38 - 105	07/17/24 13:54	07/22/24 18:01	1
Terphenyl-d14 (Surr)	109		28 - 125	07/17/24 13:54	07/22/24 18:01	1

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.99	J H	3.7	0.93	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorohexanoic acid (PFHxA)	2.3	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorooctanoic acid (PFOA)	17	H	1.9	0.50	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorononanoic acid (PFNA)	450	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorodecanoic acid (PFDA)	1.7	J H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.75	J H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-0.5C

Lab Sample ID: 180-176969-1

Date Collected: 07/12/24 10:44

Matrix: Solid

Date Received: 07/12/24 14:15

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	5.4	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:37	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	210	H	1.4	0.43	ng/L		08/22/24 10:43	08/26/24 11:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	95.2		5 - 130				08/22/24 10:43	08/26/24 11:37	1
13C5 PFHxA	102		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C8 PFOA	110		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C9 PFNA	94.3		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C6 PFDA	102		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C3 PFBS	113		40 - 135				08/22/24 10:43	08/26/24 11:37	1
13C3 PFHxS	119		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C8 PFOS	100		40 - 130				08/22/24 10:43	08/26/24 11:37	1
13C3 HFPO-DA	88.1		40 - 130				08/22/24 10:43	08/26/24 11:37	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		50	9.1	ug/L		07/16/24 09:17	07/18/24 16:08	1
Aluminum	ND		2000	1100	ug/L		07/16/24 09:17	07/18/24 16:08	1
Arsenic	ND		100	83	ug/L		07/16/24 09:17	07/18/24 16:08	1
Antimony	ND		100	62	ug/L		07/16/24 09:17	07/18/24 16:08	1
Barium	390	J	2000	270	ug/L		07/16/24 09:17	07/18/24 16:08	1
Beryllium	ND		40	15	ug/L		07/16/24 09:17	07/18/24 16:08	1
Cadmium	ND		50	3.0	ug/L		07/16/24 09:17	07/18/24 16:08	1
Calcium	330000		50000	6400	ug/L		07/16/24 09:17	07/18/24 16:08	1
Chromium	ND		50	31	ug/L		07/16/24 09:17	07/18/24 16:08	1
Cobalt	ND		500	34	ug/L		07/16/24 09:17	07/18/24 16:08	1
Copper	100	J B	250	22	ug/L		07/16/24 09:17	07/18/24 16:08	1
Iron	ND		1000	720	ug/L		07/16/24 09:17	07/18/24 16:08	1
Lead	ND		100	44	ug/L		07/16/24 09:17	07/18/24 16:08	1
Magnesium	ND		50000	6900	ug/L		07/16/24 09:17	07/18/24 16:08	1
Manganese	ND		150	24	ug/L		07/16/24 09:17	07/18/24 16:08	1
Nickel	ND		400	35	ug/L		07/16/24 09:17	07/18/24 16:08	1
Potassium	ND		50000	26000	ug/L		07/16/24 09:17	07/18/24 16:08	1
Selenium	ND		100	37	ug/L		07/16/24 09:17	07/18/24 16:08	1
Sodium	ND		50000	8000	ug/L		07/16/24 09:17	07/18/24 16:08	1
Thallium	ND		200	30	ug/L		07/16/24 09:17	07/19/24 16:39	1
Vanadium	ND		500	53	ug/L		07/16/24 09:17	07/18/24 16:08	1
Zinc	ND		500	420	ug/L		07/16/24 09:17	07/18/24 16:08	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H I	0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:23	1

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/24 20:38	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/16/24 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/16/24 20:38	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/24 20:38	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/16/24 20:38	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/24 20:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/16/24 20:38	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/24 20:38	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/16/24 20:38	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/24 20:38	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/16/24 20:38	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:38	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/24 20:38	1
2-Butanone (MEK)	ND		25	13	ug/L			07/16/24 20:38	1
2-Hexanone	ND	^c	25	16	ug/L			07/16/24 20:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/16/24 20:38	1
Acetone	22	J	25	17	ug/L			07/16/24 20:38	1
Benzene	ND		5.0	3.0	ug/L			07/16/24 20:38	1
Bromoform	ND		5.0	4.9	ug/L			07/16/24 20:38	1
Bromomethane	ND	^c	5.0	4.4	ug/L			07/16/24 20:38	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/16/24 20:38	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			07/16/24 20:38	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:38	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/16/24 20:38	1
Chloroform	ND		5.0	3.0	ug/L			07/16/24 20:38	1
Chloromethane	ND	^c	5.0	4.5	ug/L			07/16/24 20:38	1
Chloroethane	ND		5.0	4.5	ug/L			07/16/24 20:38	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/16/24 20:38	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/24 20:38	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/16/24 20:38	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/16/24 20:38	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/24 20:38	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/16/24 20:38	1
Cyclohexane	ND		5.0	3.2	ug/L			07/16/24 20:38	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/16/24 20:38	1
Methyl acetate	ND	*+ ^c	25	8.4	ug/L			07/16/24 20:38	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/16/24 20:38	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/16/24 20:38	1
Methylene Chloride	28		5.0	4.4	ug/L			07/16/24 20:38	1
Styrene	ND		5.0	2.4	ug/L			07/16/24 20:38	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/24 20:38	1
Toluene	ND		5.0	2.3	ug/L			07/16/24 20:38	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:38	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/24 20:38	1
Trichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:38	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/16/24 20:38	1
Vinyl chloride	ND	^c	5.0	2.0	ug/L			07/16/24 20:38	1
Xylenes, Total	ND		10	4.5	ug/L			07/16/24 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		52 - 151		07/16/24 20:38	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		49 - 118		07/16/24 20:38	1
Dibromofluoromethane (Surr)	144	S1+	60 - 132		07/16/24 20:38	1
Toluene-d8 (Surr)	83		53 - 124		07/16/24 20:38	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/17/24 13:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/17/24 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/17/24 13:04	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/17/24 13:04	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/17/24 13:04	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/17/24 13:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/17/24 13:04	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/17/24 13:04	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/17/24 13:04	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/17/24 13:04	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			07/17/24 13:04	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/17/24 13:04	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/17/24 13:04	1
2-Butanone (MEK)	ND	^c	25	13	ug/L			07/17/24 13:04	1
2-Hexanone	ND	^c	25	16	ug/L			07/17/24 13:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/17/24 13:04	1
Acetone	ND	^c	25	17	ug/L			07/17/24 13:04	1
Benzene	ND		5.0	3.0	ug/L			07/17/24 13:04	1
Bromoform	ND	^c	5.0	4.9	ug/L			07/17/24 13:04	1
Bromomethane	ND		5.0	4.4	ug/L			07/17/24 13:04	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/17/24 13:04	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/17/24 13:04	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/17/24 13:04	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/17/24 13:04	1
Chloroform	ND		5.0	3.0	ug/L			07/17/24 13:04	1
Chloromethane	ND		5.0	4.5	ug/L			07/17/24 13:04	1
Chloroethane	ND		5.0	4.5	ug/L			07/17/24 13:04	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/17/24 13:04	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/17/24 13:04	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/17/24 13:04	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			07/17/24 13:04	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/17/24 13:04	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/17/24 13:04	1
Cyclohexane	ND		5.0	3.2	ug/L			07/17/24 13:04	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/17/24 13:04	1
Methyl acetate	ND	^c	25	8.4	ug/L			07/17/24 13:04	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/17/24 13:04	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/17/24 13:04	1
Methylene Chloride	16		5.0	4.4	ug/L			07/17/24 13:04	1
Styrene	ND		5.0	2.4	ug/L			07/17/24 13:04	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/17/24 13:04	1
Toluene	ND		5.0	2.3	ug/L			07/17/24 13:04	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/17/24 13:04	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/17/24 13:04	1
Trichloroethene	ND		5.0	3.4	ug/L			07/17/24 13:04	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/17/24 13:04	1
Vinyl chloride	ND		5.0	2.0	ug/L			07/17/24 13:04	1
Xylenes, Total	ND		10	4.5	ug/L			07/17/24 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		52 - 151		07/17/24 13:04	1
4-Bromofluorobenzene (Surr)	103		49 - 118		07/17/24 13:04	1
Dibromofluoromethane (Surr)	123		60 - 132		07/17/24 13:04	1
Toluene-d8 (Surr)	84		53 - 124		07/17/24 13:04	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	1.5	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.63	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4,5-Trichlorophenol	ND		11	2.7	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4,6-Trichlorophenol	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4-Dichlorophenol	ND		2.1	0.55	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4-Dimethylphenol	ND		11	6.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4-Dinitrophenol	ND		110	35	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,4-Dinitrotoluene	ND		11	3.8	ug/L		07/17/24 13:54	07/22/24 18:23	1
2,6-Dinitrotoluene	ND		11	1.9	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Chloronaphthalene	ND		2.1	0.64	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Chlorophenol	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Methylnaphthalene	0.83	J	2.1	0.67	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Methylphenol	ND		11	6.1	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Nitroaniline	ND		54	6.0	ug/L		07/17/24 13:54	07/22/24 18:23	1
2-Nitrophenol	ND		11	2.1	ug/L		07/17/24 13:54	07/22/24 18:23	1
3,3'-Dichlorobenzidine	ND		11	6.3	ug/L		07/17/24 13:54	07/22/24 18:23	1
3-Nitroaniline	ND		54	4.8	ug/L		07/17/24 13:54	07/22/24 18:23	1
4,6-Dinitro-2-methylphenol	ND		54	16	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Bromophenyl phenyl ether	ND		11	3.5	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Chloro-3-methylphenol	ND		11	4.7	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Chloroaniline	ND		11	4.1	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Chlorophenyl phenyl ether	ND		11	2.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
Methylphenol, 3 & 4	ND		11	4.0	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Nitroaniline	ND		54	3.9	ug/L		07/17/24 13:54	07/22/24 18:23	1
4-Nitrophenol	ND		54	10	ug/L		07/17/24 13:54	07/22/24 18:23	1
Acenaphthene	1.2	J	2.1	0.71	ug/L		07/17/24 13:54	07/22/24 18:23	1
Acenaphthylene	ND		2.1	0.71	ug/L		07/17/24 13:54	07/22/24 18:23	1
Acetophenone	ND		11	1.7	ug/L		07/17/24 13:54	07/22/24 18:23	1
Anthracene	1.3	J	2.1	0.53	ug/L		07/17/24 13:54	07/22/24 18:23	1
Atrazine	ND		11	6.9	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzaldehyde	ND		11	5.8	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzo[a]anthracene	ND		2.1	0.82	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzo[a]pyrene	ND		2.1	0.58	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzo[b]fluoranthene	ND		2.1	1.1	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzo[g,h,i]perylene	ND		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:23	1
Benzo[k]fluoranthene	ND		2.1	0.96	ug/L		07/17/24 13:54	07/22/24 18:23	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		11	1.7	ug/L		07/17/24 13:54	07/22/24 18:23	1
Bis(2-chloroethyl)ether	ND		2.1	0.43	ug/L		07/17/24 13:54	07/22/24 18:23	1
Bis(2-ethylhexyl) phthalate	ND		110	68	ug/L		07/17/24 13:54	07/22/24 18:23	1
Butyl benzyl phthalate	ND		22	10	ug/L		07/17/24 13:54	07/22/24 18:23	1
Caprolactam	ND		54	15	ug/L		07/17/24 13:54	07/22/24 18:23	1
Carbazole	1.3	J	2.1	0.55	ug/L		07/17/24 13:54	07/22/24 18:23	1
Chrysene	ND		2.1	0.88	ug/L		07/17/24 13:54	07/22/24 18:23	1
Dibenz(a,h)anthracene	ND		2.1	0.78	ug/L		07/17/24 13:54	07/22/24 18:23	1
Dibenzofuran	ND		11	2.1	ug/L		07/17/24 13:54	07/22/24 18:23	1
Diethyl phthalate	ND		11	6.2	ug/L		07/17/24 13:54	07/22/24 18:23	1
Dimethyl phthalate	ND		22	2.2	ug/L		07/17/24 13:54	07/22/24 18:23	1
Di-n-butyl phthalate	ND		110	53	ug/L		07/17/24 13:54	07/22/24 18:23	1
Di-n-octyl phthalate	ND		11	7.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
Fluoranthene	ND		2.1	0.65	ug/L		07/17/24 13:54	07/22/24 18:23	1
Fluorene	ND		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:23	1
Hexachlorobenzene	ND		2.1	0.61	ug/L		07/17/24 13:54	07/22/24 18:23	1
Hexachlorobutadiene	ND		2.1	0.75	ug/L		07/17/24 13:54	07/22/24 18:23	1
Hexachlorocyclopentadiene	ND		11	5.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
Hexachloroethane	ND		11	1.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.92	ug/L		07/17/24 13:54	07/22/24 18:23	1
Isophorone	ND		11	2.0	ug/L		07/17/24 13:54	07/22/24 18:23	1
Naphthalene	1.2	J	2.1	0.64	ug/L		07/17/24 13:54	07/22/24 18:23	1
Nitrobenzene	ND		22	5.4	ug/L		07/17/24 13:54	07/22/24 18:23	1
N-Nitrosodi-n-propylamine	ND		2.1	0.77	ug/L		07/17/24 13:54	07/22/24 18:23	1
N-Nitrosodiphenylamine	ND		11	1.3	ug/L		07/17/24 13:54	07/22/24 18:23	1
Pentachlorophenol	ND		54	9.2	ug/L		07/17/24 13:54	07/22/24 18:23	1
Phenanthrene	ND		2.1	1.7	ug/L		07/17/24 13:54	07/22/24 18:23	1
Phenol	ND		11	5.3	ug/L		07/17/24 13:54	07/22/24 18:23	1
Pyrene	ND		2.1	0.59	ug/L		07/17/24 13:54	07/22/24 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	104		39 - 121	07/17/24 13:54	07/22/24 18:23	1
2-Fluorobiphenyl	97		45 - 105	07/17/24 13:54	07/22/24 18:23	1
2-Fluorophenol (Surr)	97		38 - 105	07/17/24 13:54	07/22/24 18:23	1
Nitrobenzene-d5 (Surr)	98		45 - 106	07/17/24 13:54	07/22/24 18:23	1
Phenol-d5 (Surr)	101		38 - 105	07/17/24 13:54	07/22/24 18:23	1
Terphenyl-d14 (Surr)	112		28 - 125	07/17/24 13:54	07/22/24 18:23	1

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.1	J H	3.8	0.95	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorohexanoic acid (PFHxA)	1.1	J H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorooctanoic acid (PFOA)	2.1	H	1.9	0.51	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorononanoic acid (PFNA)	190	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorodecanoic acid (PFDA)	0.93	J H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorobutanesulfonic acid (PFBS)	0.78	J H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorohexanesulfonic acid (PFHxS)	ND	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1
Perfluorooctanesulfonic acid (PFOS)	2.1	H	1.9	0.47	ng/L		08/22/24 10:43	08/26/24 11:54	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.0C

Lab Sample ID: 180-176969-2

Date Collected: 07/12/24 10:50

Matrix: Solid

Date Received: 07/12/24 14:15

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	160	H	1.4	0.43	ng/L		08/22/24 10:43	08/26/24 11:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	94.8		5 - 130				08/22/24 10:43	08/26/24 11:54	1
13C5 PFHxA	103		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C8 PFOA	109		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C9 PFNA	91.4		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C6 PFDA	104		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C3 PFBS	110		40 - 135				08/22/24 10:43	08/26/24 11:54	1
13C3 PFHxS	120		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C8 PFOS	100		40 - 130				08/22/24 10:43	08/26/24 11:54	1
13C3 HFPO-DA	94.9		40 - 130				08/22/24 10:43	08/26/24 11:54	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		50	9.1	ug/L		07/16/24 09:17	07/18/24 16:14	1
Aluminum	ND		2000	1100	ug/L		07/16/24 09:17	07/18/24 16:14	1
Arsenic	ND		100	83	ug/L		07/16/24 09:17	07/18/24 16:14	1
Antimony	ND		100	62	ug/L		07/16/24 09:17	07/18/24 16:14	1
Barium	530	J	2000	270	ug/L		07/16/24 09:17	07/18/24 16:14	1
Beryllium	ND		40	15	ug/L		07/16/24 09:17	07/18/24 16:14	1
Cadmium	ND		50	3.0	ug/L		07/16/24 09:17	07/18/24 16:14	1
Calcium	390000		50000	6400	ug/L		07/16/24 09:17	07/18/24 16:14	1
Chromium	ND		50	31	ug/L		07/16/24 09:17	07/18/24 16:14	1
Cobalt	ND		500	34	ug/L		07/16/24 09:17	07/18/24 16:14	1
Copper	81	J B	250	22	ug/L		07/16/24 09:17	07/18/24 16:14	1
Iron	ND		1000	720	ug/L		07/16/24 09:17	07/18/24 16:14	1
Lead	ND		100	44	ug/L		07/16/24 09:17	07/18/24 16:14	1
Magnesium	ND		50000	6900	ug/L		07/16/24 09:17	07/18/24 16:14	1
Manganese	ND		150	24	ug/L		07/16/24 09:17	07/18/24 16:14	1
Nickel	ND		400	35	ug/L		07/16/24 09:17	07/18/24 16:14	1
Potassium	ND		50000	26000	ug/L		07/16/24 09:17	07/18/24 16:14	1
Selenium	ND		100	37	ug/L		07/16/24 09:17	07/18/24 16:14	1
Sodium	10000	J	50000	8000	ug/L		07/16/24 09:17	07/18/24 16:14	1
Thallium	ND		200	30	ug/L		07/16/24 09:17	07/19/24 16:44	1
Vanadium	ND		500	53	ug/L		07/16/24 09:17	07/18/24 16:14	1
Zinc	ND		500	420	ug/L		07/16/24 09:17	07/18/24 16:14	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H !	0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:24	1

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/24 20:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/16/24 20:58	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/16/24 20:58	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/24 20:58	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/16/24 20:58	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/24 20:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/16/24 20:58	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/24 20:58	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/16/24 20:58	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/24 20:58	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/16/24 20:58	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:58	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/24 20:58	1
2-Butanone (MEK)	ND		25	13	ug/L			07/16/24 20:58	1
2-Hexanone	ND	^c	25	16	ug/L			07/16/24 20:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/16/24 20:58	1
Acetone	22	J	25	17	ug/L			07/16/24 20:58	1
Benzene	ND		5.0	3.0	ug/L			07/16/24 20:58	1
Bromoform	ND		5.0	4.9	ug/L			07/16/24 20:58	1
Bromomethane	ND	^c	5.0	4.4	ug/L			07/16/24 20:58	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/16/24 20:58	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			07/16/24 20:58	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/24 20:58	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/16/24 20:58	1
Chloroform	ND		5.0	3.0	ug/L			07/16/24 20:58	1
Chloromethane	ND	^c	5.0	4.5	ug/L			07/16/24 20:58	1
Chloroethane	ND		5.0	4.5	ug/L			07/16/24 20:58	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/16/24 20:58	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/24 20:58	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/16/24 20:58	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/16/24 20:58	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/24 20:58	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/16/24 20:58	1
Cyclohexane	ND		5.0	3.2	ug/L			07/16/24 20:58	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/16/24 20:58	1
Methyl acetate	ND	*+ ^c	25	8.4	ug/L			07/16/24 20:58	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/16/24 20:58	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/16/24 20:58	1
Methylene Chloride	22		5.0	4.4	ug/L			07/16/24 20:58	1
Styrene	ND		5.0	2.4	ug/L			07/16/24 20:58	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/24 20:58	1
Toluene	ND		5.0	2.3	ug/L			07/16/24 20:58	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:58	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/24 20:58	1
Trichloroethene	ND		5.0	3.4	ug/L			07/16/24 20:58	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/16/24 20:58	1
Vinyl chloride	ND	^c	5.0	2.0	ug/L			07/16/24 20:58	1
Xylenes, Total	ND		10	4.5	ug/L			07/16/24 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		52 - 151		07/16/24 20:58	1
4-Bromofluorobenzene (Surr)	66		49 - 118		07/16/24 20:58	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	136	S1+	60 - 132		07/16/24 20:58	1
Toluene-d8 (Surr)	82		53 - 124		07/16/24 20:58	1

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/17/24 13:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/17/24 13:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/17/24 13:25	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/17/24 13:25	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/17/24 13:25	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/17/24 13:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/17/24 13:25	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/17/24 13:25	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/17/24 13:25	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/17/24 13:25	1
1,2,4-Trichlorobenzene	ND	^c	5.0	3.9	ug/L			07/17/24 13:25	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/17/24 13:25	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/17/24 13:25	1
2-Butanone (MEK)	ND	^c	25	13	ug/L			07/17/24 13:25	1
2-Hexanone	ND	^c	25	16	ug/L			07/17/24 13:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/17/24 13:25	1
Acetone	ND	^c	25	17	ug/L			07/17/24 13:25	1
Benzene	ND		5.0	3.0	ug/L			07/17/24 13:25	1
Bromoform	ND	^c	5.0	4.9	ug/L			07/17/24 13:25	1
Bromomethane	ND		5.0	4.4	ug/L			07/17/24 13:25	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/17/24 13:25	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/17/24 13:25	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/17/24 13:25	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/17/24 13:25	1
Chloroform	ND		5.0	3.0	ug/L			07/17/24 13:25	1
Chloromethane	ND		5.0	4.5	ug/L			07/17/24 13:25	1
Chloroethane	ND		5.0	4.5	ug/L			07/17/24 13:25	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/17/24 13:25	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/17/24 13:25	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/17/24 13:25	1
Dichlorodifluoromethane	ND	^c	5.0	4.2	ug/L			07/17/24 13:25	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/17/24 13:25	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/17/24 13:25	1
Cyclohexane	ND		5.0	3.2	ug/L			07/17/24 13:25	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/17/24 13:25	1
Methyl acetate	ND	^c	25	8.4	ug/L			07/17/24 13:25	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/17/24 13:25	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/17/24 13:25	1
Methylene Chloride	10		5.0	4.4	ug/L			07/17/24 13:25	1
Styrene	ND		5.0	2.4	ug/L			07/17/24 13:25	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/17/24 13:25	1
Toluene	ND		5.0	2.3	ug/L			07/17/24 13:25	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/17/24 13:25	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/17/24 13:25	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	3.4	ug/L			07/17/24 13:25	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/17/24 13:25	1
Vinyl chloride	ND		5.0	2.0	ug/L			07/17/24 13:25	1
Xylenes, Total	ND		10	4.5	ug/L			07/17/24 13:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		52 - 151					07/17/24 13:25	1
4-Bromofluorobenzene (Surr)	76		49 - 118					07/17/24 13:25	1
Dibromofluoromethane (Surr)	122		60 - 132					07/17/24 13:25	1
Toluene-d8 (Surr)	84		53 - 124					07/17/24 13:25	1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.5	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.60	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4,5-Trichlorophenol	ND		10	2.6	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4,6-Trichlorophenol	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4-Dichlorophenol	ND		2.0	0.53	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4-Dimethylphenol	ND		10	6.1	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4-Dinitrophenol	ND		100	34	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,4-Dinitrotoluene	ND		10	3.7	ug/L		07/17/24 13:54	07/22/24 18:44	1
2,6-Dinitrotoluene	ND		10	1.8	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Chloronaphthalene	ND		2.0	0.61	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Methylnaphthalene	ND		2.0	0.65	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Methylphenol	ND		10	5.8	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Nitroaniline	ND		52	5.7	ug/L		07/17/24 13:54	07/22/24 18:44	1
2-Nitrophenol	ND		10	2.0	ug/L		07/17/24 13:54	07/22/24 18:44	1
3,3'-Dichlorobenzidine	ND		10	6.1	ug/L		07/17/24 13:54	07/22/24 18:44	1
3-Nitroaniline	ND		52	4.6	ug/L		07/17/24 13:54	07/22/24 18:44	1
4,6-Dinitro-2-methylphenol	ND		52	15	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Bromophenyl phenyl ether	ND		10	3.3	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Chloro-3-methylphenol	ND		10	4.5	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Chloroaniline	ND		10	3.9	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Chlorophenyl phenyl ether	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 18:44	1
Methylphenol, 3 & 4	ND		10	3.9	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Nitroaniline	ND		52	3.8	ug/L		07/17/24 13:54	07/22/24 18:44	1
4-Nitrophenol	ND		52	9.8	ug/L		07/17/24 13:54	07/22/24 18:44	1
Acenaphthene	ND		2.0	0.68	ug/L		07/17/24 13:54	07/22/24 18:44	1
Acenaphthylene	ND		2.0	0.68	ug/L		07/17/24 13:54	07/22/24 18:44	1
Acetophenone	ND		10	1.7	ug/L		07/17/24 13:54	07/22/24 18:44	1
Anthracene	0.62	J	2.0	0.51	ug/L		07/17/24 13:54	07/22/24 18:44	1
Atrazine	ND		10	6.6	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzaldehyde	ND		10	5.6	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzo[a]anthracene	ND		2.0	0.78	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzo[a]pyrene	ND		2.0	0.55	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzo[b]fluoranthene	ND		2.0	1.0	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzo[g,h,i]perylene	0.89	J	2.0	0.72	ug/L		07/17/24 13:54	07/22/24 18:44	1
Benzo[k]fluoranthene	ND		2.0	0.92	ug/L		07/17/24 13:54	07/22/24 18:44	1
Bis(2-chloroethoxy)methane	ND		10	1.6	ug/L		07/17/24 13:54	07/22/24 18:44	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		2.0	0.42	ug/L		07/17/24 13:54	07/22/24 18:44	1
Bis(2-ethylhexyl) phthalate	ND		100	65	ug/L		07/17/24 13:54	07/22/24 18:44	1
Butyl benzyl phthalate	ND		21	10	ug/L		07/17/24 13:54	07/22/24 18:44	1
Caprolactam	ND		52	15	ug/L		07/17/24 13:54	07/22/24 18:44	1
Carbazole	ND		2.0	0.53	ug/L		07/17/24 13:54	07/22/24 18:44	1
Chrysene	ND		2.0	0.84	ug/L		07/17/24 13:54	07/22/24 18:44	1
Dibenz(a,h)anthracene	ND		2.0	0.75	ug/L		07/17/24 13:54	07/22/24 18:44	1
Dibenzofuran	ND		10	2.0	ug/L		07/17/24 13:54	07/22/24 18:44	1
Diethyl phthalate	ND		10	5.9	ug/L		07/17/24 13:54	07/22/24 18:44	1
Dimethyl phthalate	ND		21	2.1	ug/L		07/17/24 13:54	07/22/24 18:44	1
Di-n-butyl phthalate	ND		100	51	ug/L		07/17/24 13:54	07/22/24 18:44	1
Di-n-octyl phthalate	ND		10	7.1	ug/L		07/17/24 13:54	07/22/24 18:44	1
Fluoranthene	ND		2.0	0.63	ug/L		07/17/24 13:54	07/22/24 18:44	1
Fluorene	ND		2.0	0.72	ug/L		07/17/24 13:54	07/22/24 18:44	1
Hexachlorobenzene	ND		2.0	0.58	ug/L		07/17/24 13:54	07/22/24 18:44	1
Hexachlorobutadiene	ND		2.0	0.72	ug/L		07/17/24 13:54	07/22/24 18:44	1
Hexachlorocyclopentadiene	ND		10	5.2	ug/L		07/17/24 13:54	07/22/24 18:44	1
Hexachloroethane	ND		10	1.4	ug/L		07/17/24 13:54	07/22/24 18:44	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.89	ug/L		07/17/24 13:54	07/22/24 18:44	1
Isophorone	ND		10	2.0	ug/L		07/17/24 13:54	07/22/24 18:44	1
Naphthalene	ND		2.0	0.61	ug/L		07/17/24 13:54	07/22/24 18:44	1
Nitrobenzene	ND		21	5.2	ug/L		07/17/24 13:54	07/22/24 18:44	1
N-Nitrosodi-n-propylamine	ND		2.0	0.74	ug/L		07/17/24 13:54	07/22/24 18:44	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		07/17/24 13:54	07/22/24 18:44	1
Pentachlorophenol	ND		52	8.8	ug/L		07/17/24 13:54	07/22/24 18:44	1
Phenanthrene	ND		2.0	1.6	ug/L		07/17/24 13:54	07/22/24 18:44	1
Phenol	ND		10	5.1	ug/L		07/17/24 13:54	07/22/24 18:44	1
Pyrene	ND		2.0	0.56	ug/L		07/17/24 13:54	07/22/24 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	108		39 - 121	07/17/24 13:54	07/22/24 18:44	1
2-Fluorobiphenyl	93		45 - 105	07/17/24 13:54	07/22/24 18:44	1
2-Fluorophenol (Surr)	92		38 - 105	07/17/24 13:54	07/22/24 18:44	1
Nitrobenzene-d5 (Surr)	97		45 - 106	07/17/24 13:54	07/22/24 18:44	1
Phenol-d5 (Surr)	95		38 - 105	07/17/24 13:54	07/22/24 18:44	1
Terphenyl-d14 (Surr)	110		28 - 125	07/17/24 13:54	07/22/24 18:44	1

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	H	3.9	0.98	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorohexanoic acid (PFHxA)	1.4	J H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorooctanoic acid (PFOA)	8.2	H	2.0	0.53	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorononanoic acid (PFNA)	200	H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorodecanoic acid (PFDA)	1.7	J H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorobutanesulfonic acid (PFBS)	ND	H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorohexanesulfonic acid (PFHxS)	0.55	J H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Perfluorooctanesulfonic acid (PFOS)	2.2	H	2.0	0.49	ng/L		08/22/24 10:43	08/26/24 12:10	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	39	H	1.5	0.45	ng/L		08/22/24 10:43	08/26/24 12:10	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC-1.5C

Lab Sample ID: 180-176969-3

Date Collected: 07/12/24 10:55

Matrix: Solid

Date Received: 07/12/24 14:15

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	97.1		5 - 130	08/22/24 10:43	08/26/24 12:10	1
13C5 PFHxA	101		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C8 PFOA	112		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C9 PFNA	94.5		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C6 PFDA	99.2		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C3 PFBS	107		40 - 135	08/22/24 10:43	08/26/24 12:10	1
13C3 PFHxS	117		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C8 PFOS	96.8		40 - 130	08/22/24 10:43	08/26/24 12:10	1
13C3 HFPO-DA	97.5		40 - 130	08/22/24 10:43	08/26/24 12:10	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		50	9.1	ug/L		07/16/24 09:17	07/18/24 16:19	1
Aluminum	ND		2000	1100	ug/L		07/16/24 09:17	07/18/24 16:19	1
Arsenic	ND		100	83	ug/L		07/16/24 09:17	07/18/24 16:19	1
Antimony	ND		100	62	ug/L		07/16/24 09:17	07/18/24 16:19	1
Barium	590	J	2000	270	ug/L		07/16/24 09:17	07/18/24 16:19	1
Beryllium	ND		40	15	ug/L		07/16/24 09:17	07/18/24 16:19	1
Cadmium	ND		50	3.0	ug/L		07/16/24 09:17	07/18/24 16:19	1
Calcium	400000		50000	6400	ug/L		07/16/24 09:17	07/18/24 16:19	1
Chromium	ND		50	31	ug/L		07/16/24 09:17	07/18/24 16:19	1
Cobalt	ND		500	34	ug/L		07/16/24 09:17	07/18/24 16:19	1
Copper	100	J B	250	22	ug/L		07/16/24 09:17	07/18/24 16:19	1
Iron	ND		1000	720	ug/L		07/16/24 09:17	07/18/24 16:19	1
Lead	ND		100	44	ug/L		07/16/24 09:17	07/18/24 16:19	1
Magnesium	ND		50000	6900	ug/L		07/16/24 09:17	07/18/24 16:19	1
Manganese	ND		150	24	ug/L		07/16/24 09:17	07/18/24 16:19	1
Nickel	ND		400	35	ug/L		07/16/24 09:17	07/18/24 16:19	1
Potassium	ND		50000	26000	ug/L		07/16/24 09:17	07/18/24 16:19	1
Selenium	ND		100	37	ug/L		07/16/24 09:17	07/18/24 16:19	1
Sodium	9200	J	50000	8000	ug/L		07/16/24 09:17	07/18/24 16:19	1
Thallium	ND		200	30	ug/L		07/16/24 09:17	07/19/24 16:50	1
Vanadium	ND		500	53	ug/L		07/16/24 09:17	07/18/24 16:19	1
Zinc	ND		500	420	ug/L		07/16/24 09:17	07/18/24 16:19	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H !	0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:25	1

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/24 21:19	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/16/24 21:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/16/24 21:19	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/24 21:19	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/16/24 21:19	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/24 21:19	1

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Client Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/16/24 21:19	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/24 21:19	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/16/24 21:19	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/24 21:19	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/16/24 21:19	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/24 21:19	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/24 21:19	1
2-Butanone (MEK)	ND		25	13	ug/L			07/16/24 21:19	1
2-Hexanone	ND	^c	25	16	ug/L			07/16/24 21:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/16/24 21:19	1
Acetone	26		25	17	ug/L			07/16/24 21:19	1
Benzene	ND		5.0	3.0	ug/L			07/16/24 21:19	1
Bromoform	ND		5.0	4.9	ug/L			07/16/24 21:19	1
Bromomethane	ND	^c	5.0	4.4	ug/L			07/16/24 21:19	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/16/24 21:19	1
Carbon tetrachloride	ND	^c	5.0	4.4	ug/L			07/16/24 21:19	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/24 21:19	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/16/24 21:19	1
Chloroform	ND		5.0	3.0	ug/L			07/16/24 21:19	1
Chloromethane	ND	^c	5.0	4.5	ug/L			07/16/24 21:19	1
Chloroethane	ND		5.0	4.5	ug/L			07/16/24 21:19	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/16/24 21:19	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/24 21:19	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/16/24 21:19	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/16/24 21:19	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/24 21:19	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/16/24 21:19	1
Cyclohexane	ND		5.0	3.2	ug/L			07/16/24 21:19	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/16/24 21:19	1
Methyl acetate	ND	*+ ^c	25	8.4	ug/L			07/16/24 21:19	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/16/24 21:19	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/16/24 21:19	1
Styrene	ND		5.0	2.4	ug/L			07/16/24 21:19	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/24 21:19	1
Toluene	ND		5.0	2.3	ug/L			07/16/24 21:19	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/24 21:19	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/24 21:19	1
Trichloroethene	ND		5.0	3.4	ug/L			07/16/24 21:19	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/16/24 21:19	1
Vinyl chloride	ND	^c	5.0	2.0	ug/L			07/16/24 21:19	1
Xylenes, Total	ND		10	4.5	ug/L			07/16/24 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		52 - 151					07/16/24 21:19	1
4-Bromofluorobenzene (Surr)	67		49 - 118					07/16/24 21:19	1
Dibromofluoromethane (Surr)	136	S1+	60 - 132					07/16/24 21:19	1
Toluene-d8 (Surr)	81		53 - 124					07/16/24 21:19	1

Eurofins Pittsburgh

Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - SPLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	97		25	22	ug/L			07/17/24 12:44	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		52 - 151		07/17/24 12:44	5
4-Bromofluorobenzene (Surr)	95		49 - 118		07/17/24 12:44	5
Dibromofluoromethane (Surr)	121		60 - 132		07/17/24 12:44	5
Toluene-d8 (Surr)	81		53 - 124		07/17/24 12:44	5

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.5	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.60	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4,5-Trichlorophenol	ND		10	2.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4,6-Trichlorophenol	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4-Dichlorophenol	ND		2.0	0.53	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4-Dimethylphenol	ND		10	6.1	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4-Dinitrophenol	ND		100	34	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,4-Dinitrotoluene	ND		10	3.7	ug/L		07/17/24 13:54	07/22/24 19:06	1
2,6-Dinitrotoluene	ND		10	1.8	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Chloronaphthalene	ND		2.0	0.61	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Methylnaphthalene	1.9	J	2.0	0.65	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Methylphenol	ND		10	5.8	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Nitroaniline	ND		52	5.7	ug/L		07/17/24 13:54	07/22/24 19:06	1
2-Nitrophenol	ND		10	2.0	ug/L		07/17/24 13:54	07/22/24 19:06	1
3,3'-Dichlorobenzidine	ND		10	6.1	ug/L		07/17/24 13:54	07/22/24 19:06	1
3-Nitroaniline	ND		52	4.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
4,6-Dinitro-2-methylphenol	ND		52	15	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Bromophenyl phenyl ether	ND		10	3.3	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Chloro-3-methylphenol	ND		10	4.5	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Chloroaniline	ND		10	3.9	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Chlorophenyl phenyl ether	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 19:06	1
Methylphenol, 3 & 4	ND		10	3.9	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Nitroaniline	ND		52	3.8	ug/L		07/17/24 13:54	07/22/24 19:06	1
4-Nitrophenol	ND		52	9.8	ug/L		07/17/24 13:54	07/22/24 19:06	1
Acenaphthene	7.0		2.0	0.68	ug/L		07/17/24 13:54	07/22/24 19:06	1
Acenaphthylene	ND		2.0	0.68	ug/L		07/17/24 13:54	07/22/24 19:06	1
Acetophenone	ND		10	1.7	ug/L		07/17/24 13:54	07/22/24 19:06	1
Anthracene	20		2.0	0.51	ug/L		07/17/24 13:54	07/22/24 19:06	1
Atrazine	ND		10	6.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzaldehyde	ND		10	5.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzo[a]anthracene	ND		2.0	0.78	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzo[a]pyrene	ND		2.0	0.55	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzo[b]fluoranthene	ND		2.0	1.0	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzo[g,h,i]perylene	ND		2.0	0.72	ug/L		07/17/24 13:54	07/22/24 19:06	1
Benzo[k]fluoranthene	ND		2.0	0.92	ug/L		07/17/24 13:54	07/22/24 19:06	1
Bis(2-chloroethoxy)methane	ND		10	1.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
Bis(2-chloroethyl)ether	ND		2.0	0.42	ug/L		07/17/24 13:54	07/22/24 19:06	1
Bis(2-ethylhexyl) phthalate	ND		100	65	ug/L		07/17/24 13:54	07/22/24 19:06	1
Butyl benzyl phthalate	ND		21	10	ug/L		07/17/24 13:54	07/22/24 19:06	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		52	15	ug/L		07/17/24 13:54	07/22/24 19:06	1
Carbazole	50		2.0	0.53	ug/L		07/17/24 13:54	07/22/24 19:06	1
Chrysene	ND		2.0	0.84	ug/L		07/17/24 13:54	07/22/24 19:06	1
Dibenz(a,h)anthracene	ND		2.0	0.75	ug/L		07/17/24 13:54	07/22/24 19:06	1
Dibenzofuran	4.7	J	10	2.0	ug/L		07/17/24 13:54	07/22/24 19:06	1
Diethyl phthalate	ND		10	5.9	ug/L		07/17/24 13:54	07/22/24 19:06	1
Dimethyl phthalate	ND		21	2.1	ug/L		07/17/24 13:54	07/22/24 19:06	1
Di-n-butyl phthalate	ND		100	51	ug/L		07/17/24 13:54	07/22/24 19:06	1
Di-n-octyl phthalate	ND		10	7.1	ug/L		07/17/24 13:54	07/22/24 19:06	1
Fluoranthene	2.7		2.0	0.63	ug/L		07/17/24 13:54	07/22/24 19:06	1
Fluorene	10		2.0	0.72	ug/L		07/17/24 13:54	07/22/24 19:06	1
Hexachlorobenzene	ND		2.0	0.58	ug/L		07/17/24 13:54	07/22/24 19:06	1
Hexachlorobutadiene	ND		2.0	0.72	ug/L		07/17/24 13:54	07/22/24 19:06	1
Hexachlorocyclopentadiene	ND		10	5.2	ug/L		07/17/24 13:54	07/22/24 19:06	1
Hexachloroethane	ND		10	1.4	ug/L		07/17/24 13:54	07/22/24 19:06	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.89	ug/L		07/17/24 13:54	07/22/24 19:06	1
Isophorone	ND		10	2.0	ug/L		07/17/24 13:54	07/22/24 19:06	1
Naphthalene	1.9	J	2.0	0.61	ug/L		07/17/24 13:54	07/22/24 19:06	1
Nitrobenzene	ND		21	5.2	ug/L		07/17/24 13:54	07/22/24 19:06	1
N-Nitrosodi-n-propylamine	ND		2.0	0.74	ug/L		07/17/24 13:54	07/22/24 19:06	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		07/17/24 13:54	07/22/24 19:06	1
Pentachlorophenol	ND		52	8.8	ug/L		07/17/24 13:54	07/22/24 19:06	1
Phenanthrene	16		2.0	1.6	ug/L		07/17/24 13:54	07/22/24 19:06	1
Phenol	ND		10	5.1	ug/L		07/17/24 13:54	07/22/24 19:06	1
Pyrene	2.3		2.0	0.56	ug/L		07/17/24 13:54	07/22/24 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	112		39 - 121	07/17/24 13:54	07/22/24 19:06	1
2-Fluorobiphenyl	93		45 - 105	07/17/24 13:54	07/22/24 19:06	1
2-Fluorophenol (Surr)	92		38 - 105	07/17/24 13:54	07/22/24 19:06	1
Nitrobenzene-d5 (Surr)	99		45 - 106	07/17/24 13:54	07/22/24 19:06	1
Phenol-d5 (Surr)	96		38 - 105	07/17/24 13:54	07/22/24 19:06	1
Terphenyl-d14 (Surr)	107		28 - 125	07/17/24 13:54	07/22/24 19:06	1

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.5	J H	3.9	0.97	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorohexanoic acid (PFHxA)	3.8	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorooctanoic acid (PFOA)	57	H I	1.9	0.52	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorononanoic acid (PFNA)	720	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorodecanoic acid (PFDA)	1.9	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorobutanesulfonic acid (PFBS)	9.0	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorohexanesulfonic acid (PFHxS)	1.9	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Perfluorooctanesulfonic acid (PFOS)	4.4	H	1.9	0.49	ng/L		08/22/24 10:43	08/26/24 12:27	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	6.9	H	1.5	0.45	ng/L		08/22/24 10:43	08/26/24 12:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98.3		5 - 130	08/22/24 10:43	08/26/24 12:27	1

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Client Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Client Sample ID: MIX-ISS4-7.5PC

Lab Sample ID: 180-176969-4

Date Collected: 07/12/24 11:02

Matrix: Solid

Date Received: 07/12/24 14:15

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - SPLP East (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFHxA	104		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C8 PFOA	110		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C9 PFNA	92.1		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C6 PFDA	103		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C3 PFBS	111		40 - 135	08/22/24 10:43	08/26/24 12:27	1
13C3 PFHxS	119		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C8 PFOS	98.5		40 - 130	08/22/24 10:43	08/26/24 12:27	1
13C3 HFPO-DA	101		40 - 130	08/22/24 10:43	08/26/24 12:27	1

Method: SW846 EPA 6010D - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		50	9.1	ug/L		07/16/24 09:17	07/18/24 16:24	1
Aluminum	ND		2000	1100	ug/L		07/16/24 09:17	07/18/24 16:24	1
Arsenic	ND		100	83	ug/L		07/16/24 09:17	07/18/24 16:24	1
Antimony	ND		100	62	ug/L		07/16/24 09:17	07/18/24 16:24	1
Barium	360	J	2000	270	ug/L		07/16/24 09:17	07/18/24 16:24	1
Beryllium	ND		40	15	ug/L		07/16/24 09:17	07/18/24 16:24	1
Cadmium	ND		50	3.0	ug/L		07/16/24 09:17	07/18/24 16:24	1
Calcium	340000		50000	6400	ug/L		07/16/24 09:17	07/18/24 16:24	1
Chromium	ND		50	31	ug/L		07/16/24 09:17	07/18/24 16:24	1
Cobalt	ND		500	34	ug/L		07/16/24 09:17	07/18/24 16:24	1
Copper	72	J B	250	22	ug/L		07/16/24 09:17	07/18/24 16:24	1
Iron	ND		1000	720	ug/L		07/16/24 09:17	07/18/24 16:24	1
Lead	ND		100	44	ug/L		07/16/24 09:17	07/18/24 16:24	1
Magnesium	ND		50000	6900	ug/L		07/16/24 09:17	07/18/24 16:24	1
Manganese	ND		150	24	ug/L		07/16/24 09:17	07/18/24 16:24	1
Nickel	ND		400	35	ug/L		07/16/24 09:17	07/18/24 16:24	1
Potassium	ND		50000	26000	ug/L		07/16/24 09:17	07/18/24 16:24	1
Selenium	ND		100	37	ug/L		07/16/24 09:17	07/18/24 16:24	1
Sodium	ND		50000	8000	ug/L		07/16/24 09:17	07/18/24 16:24	1
Thallium	ND		200	30	ug/L		07/16/24 09:17	07/19/24 16:55	1
Vanadium	ND		500	53	ug/L		07/16/24 09:17	07/18/24 16:24	1
Zinc	ND		500	420	ug/L		07/16/24 09:17	07/18/24 16:24	1

Method: SW846 EPA 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H !	0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:26	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCS 180-474216/7

Matrix: Solid

Analysis Batch: 474216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	10.0	11.4		ug/L		114	64 - 133
1,1,2,2-Tetrachloroethane	10.0	9.47		ug/L		95	47 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.0		ug/L		110	48 - 134
1,1,2-Trichloroethane	10.0	9.71		ug/L		97	59 - 137
1,1-Dichloroethane	10.0	10.7		ug/L		107	59 - 125
1,1-Dichloroethene	10.0	11.0		ug/L		110	49 - 132
1,2-Dibromo-3-Chloropropane	10.0	8.99		ug/L		90	10 - 170
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	68 - 116
1,2-Dichloroethane	10.0	10.5		ug/L		105	57 - 149
1,2-Dichloropropane	10.0	10.5		ug/L		105	65 - 129
1,2,4-Trichlorobenzene	10.0	8.59		ug/L		86	15 - 169
1,3-Dichlorobenzene	10.0	9.78		ug/L		98	70 - 119
1,4-Dichlorobenzene	10.0	9.69		ug/L		97	74 - 117
2-Butanone (MEK)	10.0	ND		ug/L		89	35 - 158
2-Hexanone	10.0	ND		ug/L		78	38 - 157
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		94	29 - 167
Acetone	10.0	ND		ug/L		98	29 - 163
Benzene	10.0	10.4		ug/L		104	68 - 122
Bromoform	10.0	11.6		ug/L		116	31 - 164
Bromomethane	10.0	11.0		ug/L		110	20 - 170
Carbon disulfide	10.0	9.94		ug/L		99	32 - 139
Carbon tetrachloride	10.0	11.8		ug/L		118	60 - 135
Chlorobenzene	10.0	10.1		ug/L		101	72 - 123
Chlorodibromomethane	10.0	10.8		ug/L		108	51 - 144
Chloroform	10.0	10.1		ug/L		101	62 - 121
Chloromethane	10.0	17.0		ug/L		170	37 - 170
Chloroethane	10.0	10.9		ug/L		109	10 - 170
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	64 - 122
cis-1,3-Dichloropropene	10.0	9.79		ug/L		98	53 - 140
Dichlorobromomethane	10.0	10.3		ug/L		103	63 - 132
Dichlorodifluoromethane	10.0	7.29		ug/L		73	21 - 165
Ethylbenzene	10.0	9.73		ug/L		97	66 - 122
1,2-Dibromoethane	10.0	9.50		ug/L		95	55 - 146
Cyclohexane	10.0	10.3		ug/L		103	50 - 161
Isopropylbenzene	10.0	10.0		ug/L		100	54 - 130
Methyl acetate	20.0	33.9		ug/L		170	10 - 170
Methyl tert-butyl ether	10.0	9.23		ug/L		92	36 - 141
Methylcyclohexane	10.0	9.46		ug/L		95	60 - 127
Methylene Chloride	10.0	8.87		ug/L		89	51 - 137
m-Xylene & p-Xylene	10.0	9.74		ug/L		97	61 - 128
o-Xylene	10.0	9.95		ug/L		100	64 - 120
Styrene	10.0	10.0		ug/L		100	68 - 127
Tetrachloroethene	10.0	11.7		ug/L		117	60 - 129
Toluene	10.0	9.64		ug/L		96	67 - 128
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	62 - 126
trans-1,3-Dichloropropene	10.0	8.82		ug/L		88	57 - 137
Trichloroethene	10.0	11.9		ug/L		119	67 - 121
Trichlorofluoromethane	10.0	8.82		ug/L		88	32 - 157

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-474216/7

Matrix: Solid

Analysis Batch: 474216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10.0	13.2		ug/L		132	47 - 147
Xylenes, Total	20.0	19.7		ug/L		98	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		52 - 151
4-Bromofluorobenzene (Surr)	91		49 - 118
Dibromofluoromethane (Surr)	108		60 - 132
Toluene-d8 (Surr)	95		53 - 124

Lab Sample ID: LCSD 180-474216/8

Matrix: Solid

Analysis Batch: 474216

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	64 - 133	5	22
1,1,2,2-Tetrachloroethane	10.0	9.39		ug/L		94	47 - 147	1	35
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.0		ug/L		110	48 - 134	0	28
1,1,2-Trichloroethane	10.0	9.71		ug/L		97	59 - 137	0	29
1,1-Dichloroethane	10.0	10.7		ug/L		107	59 - 125	0	20
1,1-Dichloroethene	10.0	10.8		ug/L		108	49 - 132	1	23
1,2-Dibromo-3-Chloropropane	10.0	9.11		ug/L		91	10 - 170	1	35
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	68 - 116	1	20
1,2-Dichloroethane	10.0	10.5		ug/L		105	57 - 149	0	27
1,2-Dichloropropane	10.0	10.6		ug/L		106	65 - 129	1	23
1,2,4-Trichlorobenzene	10.0	8.70		ug/L		87	15 - 169	1	35
1,3-Dichlorobenzene	10.0	9.96		ug/L		100	70 - 119	2	18
1,4-Dichlorobenzene	10.0	9.61		ug/L		96	74 - 117	1	17
2-Butanone (MEK)	10.0	ND		ug/L		93	35 - 158	4	35
2-Hexanone	10.0	ND		ug/L		81	38 - 157	3	35
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		97	29 - 167	3	35
Acetone	10.0	ND		ug/L		104	29 - 163	5	35
Benzene	10.0	10.1		ug/L		101	68 - 122	3	21
Bromoform	10.0	12.3		ug/L		123	31 - 164	6	35
Bromomethane	10.0	10.9		ug/L		109	20 - 170	0	30
Carbon disulfide	10.0	9.35		ug/L		93	32 - 139	6	25
Carbon tetrachloride	10.0	11.7		ug/L		117	60 - 135	2	25
Chlorobenzene	10.0	9.86		ug/L		99	72 - 123	3	19
Chlorodibromomethane	10.0	11.0		ug/L		110	51 - 144	1	25
Chloroform	10.0	10.0		ug/L		100	62 - 121	1	22
Chloromethane	10.0	13.9		ug/L		139	37 - 170	20	28
Chloroethane	10.0	10.4		ug/L		104	10 - 170	5	29
cis-1,2-Dichloroethene	10.0	9.93		ug/L		99	64 - 122	2	22
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	53 - 140	3	26
Dichlorobromomethane	10.0	10.4		ug/L		104	63 - 132	1	24
Dichlorodifluoromethane	10.0	7.64		ug/L		76	21 - 165	5	26
Ethylbenzene	10.0	9.26		ug/L		93	66 - 122	5	22
1,2-Dibromoethane	10.0	9.87		ug/L		99	55 - 146	4	30
Cyclohexane	10.0	10.2		ug/L		102	50 - 161	0	28

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-474216/8

Matrix: Solid

Analysis Batch: 474216

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Isopropylbenzene	10.0	9.68		ug/L		97	54 - 130	3	22
Methyl acetate	20.0	35.7	*+	ug/L		179	10 - 170	5	35
Methyl tert-butyl ether	10.0	9.54		ug/L		95	36 - 141	3	35
Methylcyclohexane	10.0	9.24		ug/L		92	60 - 127	2	26
Methylene Chloride	10.0	8.96		ug/L		90	51 - 137	1	35
m-Xylene & p-Xylene	10.0	9.53		ug/L		95	61 - 128	2	21
o-Xylene	10.0	9.49		ug/L		95	64 - 120	5	23
Styrene	10.0	9.58		ug/L		96	68 - 127	4	22
Tetrachloroethene	10.0	11.4		ug/L		114	60 - 129	3	22
Toluene	10.0	9.13		ug/L		91	67 - 128	5	22
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	62 - 126	3	23
trans-1,3-Dichloropropene	10.0	8.67		ug/L		87	57 - 137	2	25
Trichloroethene	10.0	11.6		ug/L		116	67 - 121	2	23
Trichlorofluoromethane	10.0	8.90		ug/L		89	32 - 157	1	35
Vinyl chloride	10.0	12.8		ug/L		128	47 - 147	3	25
Xylenes, Total	20.0	19.0		ug/L		95	64 - 123	3	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		52 - 151
4-Bromofluorobenzene (Surr)	90		49 - 118
Dibromofluoromethane (Surr)	110		60 - 132
Toluene-d8 (Surr)	91		53 - 124

Lab Sample ID: MB 180-474315/10

Matrix: Solid

Analysis Batch: 474315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/17/24 11:13	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/17/24 11:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/17/24 11:13	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/17/24 11:13	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/17/24 11:13	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/17/24 11:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/17/24 11:13	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/17/24 11:13	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/17/24 11:13	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/17/24 11:13	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/17/24 11:13	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/17/24 11:13	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/17/24 11:13	1
2-Butanone (MEK)	ND		25	13	ug/L			07/17/24 11:13	1
2-Hexanone	ND		25	16	ug/L			07/17/24 11:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/17/24 11:13	1
Acetone	ND		25	17	ug/L			07/17/24 11:13	1
Benzene	ND		5.0	3.0	ug/L			07/17/24 11:13	1
Bromoform	ND		5.0	4.9	ug/L			07/17/24 11:13	1
Bromomethane	ND		5.0	4.4	ug/L			07/17/24 11:13	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-474315/10

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 474315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	4.4	ug/L			07/17/24 11:13	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/17/24 11:13	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/17/24 11:13	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/17/24 11:13	1
Chloroform	ND		5.0	3.0	ug/L			07/17/24 11:13	1
Chloromethane	ND		5.0	4.5	ug/L			07/17/24 11:13	1
Chloroethane	ND		5.0	4.5	ug/L			07/17/24 11:13	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/17/24 11:13	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/17/24 11:13	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/17/24 11:13	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/17/24 11:13	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/17/24 11:13	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/17/24 11:13	1
Cyclohexane	ND		5.0	3.2	ug/L			07/17/24 11:13	1
Isopropylbenzene	ND		5.0	1.7	ug/L			07/17/24 11:13	1
Methyl acetate	ND		25	8.4	ug/L			07/17/24 11:13	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/17/24 11:13	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/17/24 11:13	1
Methylene Chloride	ND		5.0	4.4	ug/L			07/17/24 11:13	1
Styrene	ND		5.0	2.4	ug/L			07/17/24 11:13	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/17/24 11:13	1
Toluene	ND		5.0	2.3	ug/L			07/17/24 11:13	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/17/24 11:13	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/17/24 11:13	1
Trichloroethene	ND		5.0	3.4	ug/L			07/17/24 11:13	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/17/24 11:13	1
Vinyl chloride	ND		5.0	2.0	ug/L			07/17/24 11:13	1
Xylenes, Total	ND		10	4.5	ug/L			07/17/24 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		52 - 151		07/17/24 11:13	1
4-Bromofluorobenzene (Surr)	99		49 - 118		07/17/24 11:13	1
Dibromofluoromethane (Surr)	131		60 - 132		07/17/24 11:13	1
Toluene-d8 (Surr)	87		53 - 124		07/17/24 11:13	1

Lab Sample ID: LCS 180-474315/3

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 474315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	64 - 133
1,1,1,2-Tetrachloroethane	10.0	9.07		ug/L		91	47 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.3		ug/L		103	48 - 134
1,1,2-Trichloroethane	10.0	9.25		ug/L		93	59 - 137
1,1-Dichloroethane	10.0	9.78		ug/L		98	59 - 125
1,1-Dichloroethene	10.0	9.62		ug/L		96	49 - 132
1,2-Dibromo-3-Chloropropane	10.0	7.34		ug/L		73	10 - 170
1,2-Dichlorobenzene	10.0	9.51		ug/L		95	68 - 116

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QC Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-474315/3

Matrix: Solid

Analysis Batch: 474315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	10.0	9.97		ug/L		100	57 - 149
1,2-Dichloropropane	10.0	10.4		ug/L		104	65 - 129
1,2,4-Trichlorobenzene	10.0	8.39		ug/L		84	15 - 169
1,3-Dichlorobenzene	10.0	9.30		ug/L		93	70 - 119
1,4-Dichlorobenzene	10.0	9.17		ug/L		92	74 - 117
2-Butanone (MEK)	10.0	ND		ug/L		70	35 - 158
2-Hexanone	10.0	ND		ug/L		63	38 - 157
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		83	29 - 167
Acetone	10.0	ND		ug/L		84	29 - 163
Benzene	10.0	9.59		ug/L		96	68 - 122
Bromoform	10.0	11.3		ug/L		113	31 - 164
Bromomethane	10.0	9.75		ug/L		98	20 - 170
Carbon disulfide	10.0	9.29		ug/L		93	32 - 139
Carbon tetrachloride	10.0	10.7		ug/L		107	60 - 135
Chlorobenzene	10.0	9.47		ug/L		95	72 - 123
Chlorodibromomethane	10.0	10.7		ug/L		107	51 - 144
Chloroform	10.0	9.56		ug/L		96	62 - 121
Chloromethane	10.0	13.8		ug/L		138	37 - 170
Chloroethane	10.0	9.50		ug/L		95	10 - 170
cis-1,2-Dichloroethene	10.0	9.49		ug/L		95	64 - 122
cis-1,3-Dichloropropene	10.0	9.70		ug/L		97	53 - 140
Dichlorobromomethane	10.0	10.1		ug/L		101	63 - 132
Dichlorodifluoromethane	10.0	5.57		ug/L		56	21 - 165
Ethylbenzene	10.0	8.94		ug/L		89	66 - 122
1,2-Dibromoethane	10.0	9.07		ug/L		91	55 - 146
Cyclohexane	10.0	9.44		ug/L		94	50 - 161
Isopropylbenzene	10.0	9.25		ug/L		92	54 - 130
Methyl acetate	20.0	28.3		ug/L		142	10 - 170
Methyl tert-butyl ether	10.0	9.16		ug/L		92	36 - 141
Methylcyclohexane	10.0	9.88		ug/L		99	60 - 127
Methylene Chloride	10.0	7.77		ug/L		78	51 - 137
m-Xylene & p-Xylene	10.0	8.97		ug/L		90	61 - 128
o-Xylene	10.0	9.34		ug/L		93	64 - 120
Styrene	10.0	9.69		ug/L		97	68 - 127
Tetrachloroethene	10.0	10.7		ug/L		107	60 - 129
Toluene	10.0	8.79		ug/L		88	67 - 128
trans-1,2-Dichloroethene	10.0	9.79		ug/L		98	62 - 126
trans-1,3-Dichloropropene	10.0	8.40		ug/L		84	57 - 137
Trichloroethene	10.0	10.7		ug/L		107	67 - 121
Trichlorofluoromethane	10.0	8.61		ug/L		86	32 - 157
Vinyl chloride	10.0	9.59		ug/L		96	47 - 147
Xylenes, Total	20.0	18.3		ug/L		92	64 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		52 - 151
4-Bromofluorobenzene (Surr)	92		49 - 118
Dibromofluoromethane (Surr)	114		60 - 132
Toluene-d8 (Surr)	91		53 - 124

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-474315/4

Matrix: Solid

Analysis Batch: 474315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	10.6		ug/L		106	64 - 133	4	22
1,1,2,2-Tetrachloroethane	10.0	9.63		ug/L		96	47 - 147	6	35
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	48 - 134	1	28
1,1,2-Trichloroethane	10.0	9.58		ug/L		96	59 - 137	3	29
1,1-Dichloroethane	10.0	10.2		ug/L		102	59 - 125	5	20
1,1-Dichloroethene	10.0	9.90		ug/L		99	49 - 132	3	23
1,2-Dibromo-3-Chloropropane	10.0	9.41		ug/L		94	10 - 170	25	35
1,2-Dichlorobenzene	10.0	9.68		ug/L		97	68 - 116	2	20
1,2-Dichloroethane	10.0	10.1		ug/L		101	57 - 149	1	27
1,2-Dichloropropane	10.0	10.3		ug/L		103	65 - 129	1	23
1,2,4-Trichlorobenzene	10.0	8.35		ug/L		84	15 - 169	0	35
1,3-Dichlorobenzene	10.0	9.39		ug/L		94	70 - 119	1	18
1,4-Dichlorobenzene	10.0	9.40		ug/L		94	74 - 117	3	17
2-Butanone (MEK)	10.0	ND		ug/L		82	35 - 158	15	35
2-Hexanone	10.0	ND		ug/L		70	38 - 157	10	35
4-Methyl-2-pentanone (MIBK)	10.0	ND		ug/L		90	29 - 167	8	35
Acetone	10.0	ND		ug/L		95	29 - 163	12	35
Benzene	10.0	9.76		ug/L		98	68 - 122	2	21
Bromoform	10.0	11.6		ug/L		116	31 - 164	3	35
Bromomethane	10.0	9.47		ug/L		95	20 - 170	3	30
Carbon disulfide	10.0	8.89		ug/L		89	32 - 139	4	25
Carbon tetrachloride	10.0	11.1		ug/L		111	60 - 135	4	25
Chlorobenzene	10.0	9.27		ug/L		93	72 - 123	2	19
Chlorodibromomethane	10.0	10.8		ug/L		108	51 - 144	0	25
Chloroform	10.0	9.89		ug/L		99	62 - 121	3	22
Chloromethane	10.0	11.9		ug/L		119	37 - 170	15	28
Chloroethane	10.0	10.1		ug/L		101	10 - 170	6	29
cis-1,2-Dichloroethene	10.0	9.61		ug/L		96	64 - 122	1	22
cis-1,3-Dichloropropene	10.0	9.70		ug/L		97	53 - 140	0	26
Dichlorobromomethane	10.0	10.3		ug/L		103	63 - 132	2	24
Dichlorodifluoromethane	10.0	5.84		ug/L		58	21 - 165	5	26
Ethylbenzene	10.0	8.98		ug/L		90	66 - 122	0	22
1,2-Dibromoethane	10.0	9.48		ug/L		95	55 - 146	4	30
Cyclohexane	10.0	9.33		ug/L		93	50 - 161	1	28
Isopropylbenzene	10.0	8.84		ug/L		88	54 - 130	4	22
Methyl acetate	20.0	31.3		ug/L		156	10 - 170	10	35
Methyl tert-butyl ether	10.0	9.11		ug/L		91	36 - 141	0	35
Methylcyclohexane	10.0	8.41		ug/L		84	60 - 127	16	26
Methylene Chloride	10.0	7.89		ug/L		79	51 - 137	1	35
m-Xylene & p-Xylene	10.0	8.82		ug/L		88	61 - 128	2	21
o-Xylene	10.0	8.92		ug/L		89	64 - 120	5	23
Styrene	10.0	9.40		ug/L		94	68 - 127	3	22
Tetrachloroethene	10.0	10.9		ug/L		109	60 - 129	2	22
Toluene	10.0	8.87		ug/L		89	67 - 128	1	22
trans-1,2-Dichloroethene	10.0	9.80		ug/L		98	62 - 126	0	23
trans-1,3-Dichloropropene	10.0	8.41		ug/L		84	57 - 137	0	25
Trichloroethene	10.0	10.9		ug/L		109	67 - 121	2	23
Trichlorofluoromethane	10.0	8.89		ug/L		89	32 - 157	3	35

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-474315/4

Matrix: Solid

Analysis Batch: 474315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	10.0	11.0		ug/L		110	47 - 147	14	25
Xylenes, Total	20.0	17.7		ug/L		89	64 - 123	3	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		52 - 151
4-Bromofluorobenzene (Surr)	88		49 - 118
Dibromofluoromethane (Surr)	114		60 - 132
Toluene-d8 (Surr)	93		53 - 124

Lab Sample ID: LB 180-474140/1-A

Matrix: Solid

Analysis Batch: 474216

Client Sample ID: Method Blank

Prep Type: SPLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/24 17:34	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			07/16/24 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	4.3	ug/L			07/16/24 17:34	1
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/24 17:34	1
1,1-Dichloroethane	ND		5.0	3.1	ug/L			07/16/24 17:34	1
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/24 17:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	4.4	ug/L			07/16/24 17:34	1
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/24 17:34	1
1,2-Dichloroethane	ND		5.0	2.9	ug/L			07/16/24 17:34	1
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/24 17:34	1
1,2,4-Trichlorobenzene	ND		5.0	3.9	ug/L			07/16/24 17:34	1
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/24 17:34	1
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/24 17:34	1
2-Butanone (MEK)	ND		25	13	ug/L			07/16/24 17:34	1
2-Hexanone	ND		25	16	ug/L			07/16/24 17:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	15	ug/L			07/16/24 17:34	1
Acetone	ND		25	17	ug/L			07/16/24 17:34	1
Benzene	ND		5.0	3.0	ug/L			07/16/24 17:34	1
Bromoform	ND		5.0	4.9	ug/L			07/16/24 17:34	1
Bromomethane	ND		5.0	4.4	ug/L			07/16/24 17:34	1
Carbon disulfide	ND		5.0	4.4	ug/L			07/16/24 17:34	1
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/16/24 17:34	1
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/24 17:34	1
Chlorodibromomethane	ND		5.0	4.2	ug/L			07/16/24 17:34	1
Chloroform	ND		5.0	3.0	ug/L			07/16/24 17:34	1
Chloromethane	ND		5.0	4.5	ug/L			07/16/24 17:34	1
Chloroethane	ND		5.0	4.5	ug/L			07/16/24 17:34	1
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			07/16/24 17:34	1
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/24 17:34	1
Dichlorobromomethane	ND		5.0	3.2	ug/L			07/16/24 17:34	1
Dichlorodifluoromethane	ND		5.0	4.2	ug/L			07/16/24 17:34	1
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/24 17:34	1
1,2-Dibromoethane	ND		5.0	2.5	ug/L			07/16/24 17:34	1
Cyclohexane	ND		5.0	3.2	ug/L			07/16/24 17:34	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-474140/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: SPLP

Analysis Batch: 474216

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isopropylbenzene	ND		5.0	1.7	ug/L			07/16/24 17:34	1
Methyl acetate	ND		25	8.4	ug/L			07/16/24 17:34	1
Methyl tert-butyl ether	ND		5.0	3.0	ug/L			07/16/24 17:34	1
Methylcyclohexane	ND		5.0	3.0	ug/L			07/16/24 17:34	1
Methylene Chloride	ND		5.0	4.4	ug/L			07/16/24 17:34	1
Styrene	ND		5.0	2.4	ug/L			07/16/24 17:34	1
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/24 17:34	1
Toluene	ND		5.0	2.3	ug/L			07/16/24 17:34	1
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/24 17:34	1
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/24 17:34	1
Trichloroethene	ND		5.0	3.4	ug/L			07/16/24 17:34	1
Trichlorofluoromethane	ND		5.0	4.4	ug/L			07/16/24 17:34	1
Vinyl chloride	ND		5.0	2.0	ug/L			07/16/24 17:34	1
Xylenes, Total	ND		10	4.5	ug/L			07/16/24 17:34	1
Surrogate	LB	LB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	111		52 - 151					07/16/24 17:34	1
4-Bromofluorobenzene (Surr)	94		49 - 118					07/16/24 17:34	1
Dibromofluoromethane (Surr)	133	S1+	60 - 132					07/16/24 17:34	1
Toluene-d8 (Surr)	88		53 - 124					07/16/24 17:34	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-474359/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 474632

Prep Batch: 474359

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1'-Biphenyl	ND		10	1.4	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4-Dinitrophenol	ND		100	33	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		07/17/24 13:54	07/22/24 08:43	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Methylphenol	ND		10	5.6	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Nitroaniline	ND		50	5.5	ug/L		07/17/24 13:54	07/22/24 08:43	1
2-Nitrophenol	ND		10	1.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		07/17/24 13:54	07/22/24 08:43	1
3-Nitroaniline	ND		50	4.4	ug/L		07/17/24 13:54	07/22/24 08:43	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		07/17/24 13:54	07/22/24 08:43	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		07/17/24 13:54	07/22/24 08:43	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		07/17/24 13:54	07/22/24 08:43	1
4-Chloroaniline	ND		10	3.8	ug/L		07/17/24 13:54	07/22/24 08:43	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-474359/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 474632

Prep Batch: 474359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		07/17/24 13:54	07/22/24 08:43	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		07/17/24 13:54	07/22/24 08:43	1
4-Nitroaniline	ND		50	3.6	ug/L		07/17/24 13:54	07/22/24 08:43	1
4-Nitrophenol	ND		50	9.4	ug/L		07/17/24 13:54	07/22/24 08:43	1
Acenaphthene	ND		1.9	0.65	ug/L		07/17/24 13:54	07/22/24 08:43	1
Acenaphthylene	ND		1.9	0.65	ug/L		07/17/24 13:54	07/22/24 08:43	1
Acetophenone	ND		10	1.6	ug/L		07/17/24 13:54	07/22/24 08:43	1
Anthracene	ND		1.9	0.49	ug/L		07/17/24 13:54	07/22/24 08:43	1
Atrazine	ND		10	6.3	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzaldehyde	ND		10	5.4	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		07/17/24 13:54	07/22/24 08:43	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		07/17/24 13:54	07/22/24 08:43	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		07/17/24 13:54	07/22/24 08:43	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		07/17/24 13:54	07/22/24 08:43	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		07/17/24 13:54	07/22/24 08:43	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		07/17/24 13:54	07/22/24 08:43	1
Caprolactam	ND		50	14	ug/L		07/17/24 13:54	07/22/24 08:43	1
Carbazole	ND		1.9	0.51	ug/L		07/17/24 13:54	07/22/24 08:43	1
Chrysene	ND		1.9	0.81	ug/L		07/17/24 13:54	07/22/24 08:43	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		07/17/24 13:54	07/22/24 08:43	1
Dibenzofuran	ND		10	1.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
Diethyl phthalate	ND		10	5.7	ug/L		07/17/24 13:54	07/22/24 08:43	1
Dimethyl phthalate	ND		20	2.0	ug/L		07/17/24 13:54	07/22/24 08:43	1
Di-n-butyl phthalate	ND		100	49	ug/L		07/17/24 13:54	07/22/24 08:43	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
Fluoranthene	ND		1.9	0.60	ug/L		07/17/24 13:54	07/22/24 08:43	1
Fluorene	ND		1.9	0.69	ug/L		07/17/24 13:54	07/22/24 08:43	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		07/17/24 13:54	07/22/24 08:43	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		07/17/24 13:54	07/22/24 08:43	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		07/17/24 13:54	07/22/24 08:43	1
Hexachloroethane	ND		10	1.3	ug/L		07/17/24 13:54	07/22/24 08:43	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		07/17/24 13:54	07/22/24 08:43	1
Isophorone	ND		10	1.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
Naphthalene	ND		1.9	0.59	ug/L		07/17/24 13:54	07/22/24 08:43	1
Nitrobenzene	ND		20	5.0	ug/L		07/17/24 13:54	07/22/24 08:43	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		07/17/24 13:54	07/22/24 08:43	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		07/17/24 13:54	07/22/24 08:43	1
Pentachlorophenol	ND		50	8.5	ug/L		07/17/24 13:54	07/22/24 08:43	1
Phenanthrene	ND		1.9	1.6	ug/L		07/17/24 13:54	07/22/24 08:43	1
Phenol	ND		10	4.9	ug/L		07/17/24 13:54	07/22/24 08:43	1
Pyrene	ND		1.9	0.54	ug/L		07/17/24 13:54	07/22/24 08:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	83		39 - 121	07/17/24 13:54	07/22/24 08:43	1
2-Fluorobiphenyl	82		45 - 105	07/17/24 13:54	07/22/24 08:43	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-474359/1-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474359

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	87		38 - 105	07/17/24 13:54	07/22/24 08:43	1
Nitrobenzene-d5 (Surr)	81		45 - 106	07/17/24 13:54	07/22/24 08:43	1
Phenol-d5 (Surr)	83		38 - 105	07/17/24 13:54	07/22/24 08:43	1
Terphenyl-d14 (Surr)	88		28 - 125	07/17/24 13:54	07/22/24 08:43	1

Lab Sample ID: LCS 180-474359/2-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	200	141		ug/L		70	50 - 100
2,2'-oxybis[1-chloropropane]	200	147		ug/L		73	24 - 111
2,4,5-Trichlorophenol	200	156		ug/L		78	54 - 100
2,4,6-Trichlorophenol	200	164		ug/L		82	54 - 100
2,4-Dichlorophenol	200	149		ug/L		75	54 - 100
2,4-Dimethylphenol	200	141		ug/L		71	52 - 100
2,4-Dinitrophenol	400	294		ug/L		74	32 - 100
2,4-Dinitrotoluene	200	161		ug/L		81	56 - 101
2,6-Dinitrotoluene	200	159		ug/L		79	54 - 103
2-Chloronaphthalene	200	144		ug/L		72	51 - 100
2-Chlorophenol	200	151		ug/L		75	52 - 100
2-Methylnaphthalene	200	148		ug/L		74	53 - 100
2-Methylphenol	200	158		ug/L		79	50 - 100
2-Nitroaniline	200	157		ug/L		78	50 - 102
2-Nitrophenol	200	158		ug/L		79	54 - 100
3,3'-Dichlorobenzidine	200	149		ug/L		75	41 - 100
3-Nitroaniline	200	157		ug/L		78	53 - 100
4,6-Dinitro-2-methylphenol	400	293		ug/L		73	49 - 100
4-Bromophenyl phenyl ether	200	158		ug/L		79	50 - 100
4-Chloro-3-methylphenol	200	161		ug/L		80	46 - 107
4-Chloroaniline	200	151		ug/L		75	48 - 100
4-Chlorophenyl phenyl ether	200	150		ug/L		75	52 - 100
Methylphenol, 3 & 4	200	159		ug/L		80	51 - 100
4-Nitroaniline	200	155		ug/L		78	54 - 100
4-Nitrophenol	400	328		ug/L		82	39 - 117
Acenaphthene	200	144		ug/L		72	51 - 100
Acenaphthylene	200	149		ug/L		75	53 - 100
Acetophenone	200	154		ug/L		77	47 - 100
Anthracene	200	151		ug/L		76	53 - 100
Atrazine	200	159		ug/L		80	47 - 100
Benzaldehyde	200	99.4		ug/L		50	10 - 129
Benzo[a]anthracene	200	148		ug/L		74	49 - 100
Benzo[a]pyrene	200	149		ug/L		74	48 - 100
Benzo[b]fluoranthene	200	143		ug/L		72	47 - 100
Benzo[g,h,i]perylene	200	149		ug/L		75	49 - 100
Benzo[k]fluoranthene	200	144		ug/L		72	46 - 100
Bis(2-chloroethoxy)methane	200	147		ug/L		74	49 - 100
Bis(2-chloroethyl)ether	200	144		ug/L		72	46 - 100

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-474359/2-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Bis(2-ethylhexyl) phthalate	200	163		ug/L		81	51 - 101	
Butyl benzyl phthalate	200	163		ug/L		81	51 - 101	
Carbazole	200	147		ug/L		74	54 - 100	
Chrysene	200	141		ug/L		71	49 - 100	
Dibenz(a,h)anthracene	200	157		ug/L		79	50 - 102	
Dibenzofuran	200	144		ug/L		72	53 - 100	
Diethyl phthalate	200	151		ug/L		76	53 - 100	
Dimethyl phthalate	200	148		ug/L		74	54 - 100	
Di-n-butyl phthalate	200	158		ug/L		79	56 - 100	
Di-n-octyl phthalate	200	141		ug/L		70	39 - 100	
Fluoranthene	200	150		ug/L		75	55 - 100	
Fluorene	200	147		ug/L		74	53 - 100	
Hexachlorobenzene	200	145		ug/L		73	46 - 100	
Hexachlorobutadiene	200	152		ug/L		76	42 - 100	
Hexachlorocyclopentadiene	200	164		ug/L		82	41 - 100	
Hexachloroethane	200	156		ug/L		78	49 - 100	
Indeno[1,2,3-cd]pyrene	200	158		ug/L		79	50 - 100	
Isophorone	200	155		ug/L		78	50 - 100	
Naphthalene	200	146		ug/L		73	53 - 100	
Nitrobenzene	200	153		ug/L		76	50 - 100	
N-Nitrosodi-n-propylamine	200	162		ug/L		81	46 - 100	
N-Nitrosodiphenylamine	200	145		ug/L		73	50 - 100	
Pentachlorophenol	400	330		ug/L		82	37 - 100	
Phenanthrene	200	144		ug/L		72	52 - 100	
Phenol	200	151		ug/L		75	47 - 100	
Pyrene	200	146		ug/L		73	50 - 100	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	81		39 - 121
2-Fluorobiphenyl	72		45 - 105
2-Fluorophenol (Surr)	77		38 - 105
Nitrobenzene-d5 (Surr)	74		45 - 106
Phenol-d5 (Surr)	78		38 - 105
Terphenyl-d14 (Surr)	68		28 - 125

Lab Sample ID: LCSD 180-474359/3-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474359

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD	
									RPD	Limit
1,1'-Biphenyl	200	153		ug/L		76	50 - 100		8	15
2,2'-oxybis[1-chloropropane]	200	145		ug/L		73	24 - 111		1	15
2,4,5-Trichlorophenol	200	161		ug/L		81	54 - 100		3	15
2,4,6-Trichlorophenol	200	176		ug/L		88	54 - 100		7	15
2,4-Dichlorophenol	200	153		ug/L		77	54 - 100		3	15
2,4-Dimethylphenol	200	146		ug/L		73	52 - 100		3	15
2,4-Dinitrophenol	400	310		ug/L		78	32 - 100		5	15
2,4-Dinitrotoluene	200	170		ug/L		85	56 - 101		5	15

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-474359/3-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474359

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
2,6-Dinitrotoluene	200	167		ug/L		84	54 - 103		5	15
2-Chloronaphthalene	200	152		ug/L		76	51 - 100		6	15
2-Chlorophenol	200	155		ug/L		78	52 - 100		3	15
2-Methylnaphthalene	200	156		ug/L		78	53 - 100		5	15
2-Methylphenol	200	158		ug/L		79	50 - 100		0	15
2-Nitroaniline	200	171		ug/L		86	50 - 102		9	15
2-Nitrophenol	200	166		ug/L		83	54 - 100		5	15
3,3'-Dichlorobenzidine	200	149		ug/L		75	41 - 100		0	15
3-Nitroaniline	200	170		ug/L		85	53 - 100		8	15
4,6-Dinitro-2-methylphenol	400	297		ug/L		74	49 - 100		1	15
4-Bromophenyl phenyl ether	200	159		ug/L		79	50 - 100		1	15
4-Chloro-3-methylphenol	200	167		ug/L		84	46 - 107		4	15
4-Chloroaniline	200	159		ug/L		80	48 - 100		5	15
4-Chlorophenyl phenyl ether	200	161		ug/L		80	52 - 100		7	15
Methylphenol, 3 & 4	200	154		ug/L		77	51 - 100		3	15
4-Nitroaniline	200	164		ug/L		82	54 - 100		6	15
4-Nitrophenol	400	351		ug/L		88	39 - 117		7	15
Acenaphthene	200	152		ug/L		76	51 - 100		5	15
Acenaphthylene	200	159		ug/L		79	53 - 100		6	15
Acetophenone	200	153		ug/L		77	47 - 100		1	15
Anthracene	200	157		ug/L		78	53 - 100		3	15
Atrazine	200	166		ug/L		83	47 - 100		4	16
Benzaldehyde	200	98.8		ug/L		49	10 - 129		1	15
Benzo[a]anthracene	200	152		ug/L		76	49 - 100		2	15
Benzo[a]pyrene	200	148		ug/L		74	48 - 100		0	15
Benzo[b]fluoranthene	200	139		ug/L		70	47 - 100		3	15
Benzo[g,h,i]perylene	200	150		ug/L		75	49 - 100		0	15
Benzo[k]fluoranthene	200	152		ug/L		76	46 - 100		6	15
Bis(2-chloroethoxy)methane	200	150		ug/L		75	49 - 100		2	15
Bis(2-chloroethyl)ether	200	145		ug/L		72	46 - 100		0	15
Bis(2-ethylhexyl) phthalate	200	165		ug/L		82	51 - 101		1	15
Butyl benzyl phthalate	200	163		ug/L		81	51 - 101		0	15
Carbazole	200	152		ug/L		76	54 - 100		3	15
Chrysene	200	145		ug/L		73	49 - 100		2	15
Dibenz(a,h)anthracene	200	162		ug/L		81	50 - 102		3	15
Dibenzofuran	200	155		ug/L		77	53 - 100		7	15
Diethyl phthalate	200	160		ug/L		80	53 - 100		6	15
Dimethyl phthalate	200	159		ug/L		80	54 - 100		7	15
Di-n-butyl phthalate	200	167		ug/L		84	56 - 100		5	15
Di-n-octyl phthalate	200	142		ug/L		71	39 - 100		1	15
Fluoranthene	200	154		ug/L		77	55 - 100		3	15
Fluorene	200	158		ug/L		79	53 - 100		7	15
Hexachlorobenzene	200	147		ug/L		74	46 - 100		1	15
Hexachlorobutadiene	200	153		ug/L		77	42 - 100		1	15
Hexachlorocyclopentadiene	200	176		ug/L		88	41 - 100		7	15
Hexachloroethane	200	155		ug/L		77	49 - 100		1	15
Indeno[1,2,3-cd]pyrene	200	162		ug/L		81	50 - 100		2	15
Isophorone	200	162		ug/L		81	50 - 100		4	15
Naphthalene	200	151		ug/L		75	53 - 100		3	15

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-474359/3-A

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 474359

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrobenzene	200	159		ug/L		80	50 - 100	4	15
N-Nitrosodi-n-propylamine	200	167		ug/L		84	46 - 100	3	15
N-Nitrosodiphenylamine	200	150		ug/L		75	50 - 100	3	15
Pentachlorophenol	400	336		ug/L		84	37 - 100	2	15
Phenanthrene	200	148		ug/L		74	52 - 100	3	15
Phenol	200	154		ug/L		77	47 - 100	2	15
Pyrene	200	148		ug/L		74	50 - 100	1	15

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	86		39 - 121
2-Fluorobiphenyl	76		45 - 105
2-Fluorophenol (Surr)	79		38 - 105
Nitrobenzene-d5 (Surr)	78		45 - 106
Phenol-d5 (Surr)	78		38 - 105
Terphenyl-d14 (Surr)	69		28 - 125

Lab Sample ID: LB 180-474141/1-B

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 474359

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	1.4	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.58	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4,5-Trichlorophenol	ND		10	2.5	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4,6-Trichlorophenol	ND		10	2.2	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4-Dichlorophenol	ND		1.9	0.51	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4-Dimethylphenol	ND		10	5.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4-Dinitrophenol	ND		100	33	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,4-Dinitrotoluene	ND		10	3.5	ug/L		07/17/24 13:55	07/22/24 11:35	1
2,6-Dinitrotoluene	ND		10	1.7	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Chloronaphthalene	ND		1.9	0.59	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Methylnaphthalene	ND		1.9	0.62	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Methylphenol	ND		10	5.6	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Nitroaniline	ND		50	5.5	ug/L		07/17/24 13:55	07/22/24 11:35	1
2-Nitrophenol	ND		10	1.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
3,3'-Dichlorobenzidine	ND		10	5.8	ug/L		07/17/24 13:55	07/22/24 11:35	1
3-Nitroaniline	ND		50	4.4	ug/L		07/17/24 13:55	07/22/24 11:35	1
4,6-Dinitro-2-methylphenol	ND		50	15	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Bromophenyl phenyl ether	ND		10	3.2	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Chloro-3-methylphenol	ND		10	4.4	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Chloroaniline	ND		10	3.8	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Chlorophenyl phenyl ether	ND		10	2.2	ug/L		07/17/24 13:55	07/22/24 11:35	1
Methylphenol, 3 & 4	ND		10	3.7	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Nitroaniline	ND		50	3.6	ug/L		07/17/24 13:55	07/22/24 11:35	1
4-Nitrophenol	ND		50	9.4	ug/L		07/17/24 13:55	07/22/24 11:35	1
Acenaphthene	ND		1.9	0.65	ug/L		07/17/24 13:55	07/22/24 11:35	1
Acenaphthylene	ND		1.9	0.65	ug/L		07/17/24 13:55	07/22/24 11:35	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 180-474141/1-B

Matrix: Solid

Analysis Batch: 474632

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 474359

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		10	1.6	ug/L		07/17/24 13:55	07/22/24 11:35	1
Anthracene	ND		1.9	0.49	ug/L		07/17/24 13:55	07/22/24 11:35	1
Atrazine	ND		10	6.3	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzaldehyde	ND		10	5.4	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzo[a]anthracene	ND		1.9	0.75	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzo[a]pyrene	ND		1.9	0.53	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzo[b]fluoranthene	ND		1.9	0.97	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzo[g,h,i]perylene	ND		1.9	0.69	ug/L		07/17/24 13:55	07/22/24 11:35	1
Benzo[k]fluoranthene	ND		1.9	0.88	ug/L		07/17/24 13:55	07/22/24 11:35	1
Bis(2-chloroethoxy)methane	ND		10	1.5	ug/L		07/17/24 13:55	07/22/24 11:35	1
Bis(2-chloroethyl)ether	ND		1.9	0.40	ug/L		07/17/24 13:55	07/22/24 11:35	1
Bis(2-ethylhexyl) phthalate	ND		100	62	ug/L		07/17/24 13:55	07/22/24 11:35	1
Butyl benzyl phthalate	ND		20	9.6	ug/L		07/17/24 13:55	07/22/24 11:35	1
Caprolactam	ND		50	14	ug/L		07/17/24 13:55	07/22/24 11:35	1
Carbazole	ND		1.9	0.51	ug/L		07/17/24 13:55	07/22/24 11:35	1
Chrysene	ND		1.9	0.81	ug/L		07/17/24 13:55	07/22/24 11:35	1
Dibenz(a,h)anthracene	ND		1.9	0.72	ug/L		07/17/24 13:55	07/22/24 11:35	1
Dibenzofuran	ND		10	1.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
Diethyl phthalate	ND		10	5.7	ug/L		07/17/24 13:55	07/22/24 11:35	1
Dimethyl phthalate	ND		20	2.0	ug/L		07/17/24 13:55	07/22/24 11:35	1
Di-n-butyl phthalate	ND		100	49	ug/L		07/17/24 13:55	07/22/24 11:35	1
Di-n-octyl phthalate	ND		10	6.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
Fluoranthene	ND		1.9	0.60	ug/L		07/17/24 13:55	07/22/24 11:35	1
Fluorene	ND		1.9	0.69	ug/L		07/17/24 13:55	07/22/24 11:35	1
Hexachlorobenzene	ND		1.9	0.56	ug/L		07/17/24 13:55	07/22/24 11:35	1
Hexachlorobutadiene	ND		1.9	0.69	ug/L		07/17/24 13:55	07/22/24 11:35	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		07/17/24 13:55	07/22/24 11:35	1
Hexachloroethane	ND		10	1.3	ug/L		07/17/24 13:55	07/22/24 11:35	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.85	ug/L		07/17/24 13:55	07/22/24 11:35	1
Isophorone	ND		10	1.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
Naphthalene	ND		1.9	0.59	ug/L		07/17/24 13:55	07/22/24 11:35	1
Nitrobenzene	ND		20	5.0	ug/L		07/17/24 13:55	07/22/24 11:35	1
N-Nitrosodi-n-propylamine	ND		1.9	0.71	ug/L		07/17/24 13:55	07/22/24 11:35	1
N-Nitrosodiphenylamine	ND		10	1.2	ug/L		07/17/24 13:55	07/22/24 11:35	1
Pentachlorophenol	ND		50	8.5	ug/L		07/17/24 13:55	07/22/24 11:35	1
Phenanthrene	ND		1.9	1.6	ug/L		07/17/24 13:55	07/22/24 11:35	1
Phenol	ND		10	4.9	ug/L		07/17/24 13:55	07/22/24 11:35	1
Pyrene	ND		1.9	0.54	ug/L		07/17/24 13:55	07/22/24 11:35	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	91		39 - 121	07/17/24 13:55	07/22/24 11:35	1
2-Fluorobiphenyl	84		45 - 105	07/17/24 13:55	07/22/24 11:35	1
2-Fluorophenol (Surr)	85		38 - 105	07/17/24 13:55	07/22/24 11:35	1
Nitrobenzene-d5 (Surr)	85		45 - 106	07/17/24 13:55	07/22/24 11:35	1
Phenol-d5 (Surr)	83		38 - 105	07/17/24 13:55	07/22/24 11:35	1
Terphenyl-d14 (Surr)	96		28 - 125	07/17/24 13:55	07/22/24 11:35	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-624382/1-A

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 624382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0	1.0	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.54	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		08/22/24 10:43	08/26/24 10:31	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.46	ng/L		08/22/24 10:43	08/26/24 10:31	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	96.1		5 - 130	08/22/24 10:43	08/26/24 10:31	1
13C5 PFHxA	98.8		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C8 PFOA	97.6		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C9 PFNA	93.8		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C6 PFDA	96.9		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C3 PFBS	102		40 - 135	08/22/24 10:43	08/26/24 10:31	1
13C3 PFHxS	108		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C8 PFOS	87.1		40 - 130	08/22/24 10:43	08/26/24 10:31	1
13C3 HFPO-DA	86.7		40 - 130	08/22/24 10:43	08/26/24 10:31	1

Lab Sample ID: LCS 240-624382/3-A

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 624382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	96.5		ng/L		121	70 - 140
Perfluorohexanoic acid (PFHxA)	40.0	45.6		ng/L		114	70 - 145
Perfluorooctanoic acid (PFOA)	40.0	44.3		ng/L		111	70 - 150
Perfluorononanoic acid (PFNA)	40.0	48.6		ng/L		121	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	44.6		ng/L		112	70 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	44.0		ng/L		124	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.9		ng/L		107	65 - 145
Perfluorooctanesulfonic acid (PFOS)	37.1	48.3		ng/L		130	55 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	36.8		ng/L		123	70 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	94.9		5 - 130
13C5 PFHxA	102		40 - 130
13C8 PFOA	109		40 - 130
13C9 PFNA	96.5		40 - 130
13C6 PFDA	98.5		40 - 130
13C3 PFBS	102		40 - 135
13C3 PFHxS	109		40 - 130
13C8 PFOS	89.4		40 - 130

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QC Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-624382/3-A

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 624382

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	90.5		40 - 130

Lab Sample ID: LLCS 240-624382/2-A

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 624382

Analyte	Spike Added	LLCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Perfluorobutanoic acid (PFBA)	8.00	10.9		ng/L		136	70 - 140
Perfluorohexanoic acid (PFHxA)	4.00	5.36		ng/L		134	70 - 145
Perfluorooctanoic acid (PFOA)	4.00	4.96		ng/L		124	70 - 150
Perfluorononanoic acid (PFNA)	4.00	5.11		ng/L		128	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	5.13		ng/L		128	70 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.54		ng/L		128	60 - 145
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.65		ng/L		128	65 - 145
Perfluorooctanesulfonic acid (PFOS)	3.71	5.14		ng/L		139	55 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	3.40		ng/L		113	70 - 140

Isotope Dilution	LLCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	97.5		5 - 130
13C5 PFHxA	102		40 - 130
13C8 PFOA	105		40 - 130
13C9 PFNA	94.2		40 - 130
13C6 PFDA	99.6		40 - 130
13C3 PFBS	100		40 - 135
13C3 PFHxS	108		40 - 130
13C8 PFOS	87.6		40 - 130
13C3 HFPO-DA	91.7		40 - 130

Lab Sample ID: LB 240-624120/14-B

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 624382

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		3.6	0.91	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.49	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.46	ng/L		08/22/24 10:43	08/26/24 11:21	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.4	0.42	ng/L		08/22/24 10:43	08/26/24 11:21	1

Isotope Dilution	LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	86.4		5 - 130	08/22/24 10:43	08/26/24 11:21	1

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QC Sample Results

Client: ENTACT, LLC

Job ID: 180-176969-1

Project/Site: North Point Staten Island ISS Study

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LB 240-624120/14-B

Matrix: Solid

Analysis Batch: 624677

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 624382

Isotope Dilution	LB LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFHxA	83.9		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C8 PFOA	88.0		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C9 PFNA	75.2		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C6 PFDA	84.1		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C3 PFBS	90.7		40 - 135	08/22/24 10:43	08/26/24 11:21	1
13C3 PFHxS	95.2		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C8 PFOS	82.3		40 - 130	08/22/24 10:43	08/26/24 11:21	1
13C3 HFPO-DA	77.3		40 - 130	08/22/24 10:43	08/26/24 11:21	1

Method: EPA 6010D - Metals (ICP)

Lab Sample ID: MB 180-474214/1-A

Matrix: Solid

Analysis Batch: 474551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474214

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	ND		5.0	0.91	ug/L		07/16/24 09:17	07/18/24 15:58	1
Aluminum	ND		200	110	ug/L		07/16/24 09:17	07/18/24 15:58	1
Arsenic	ND		10	8.3	ug/L		07/16/24 09:17	07/18/24 15:58	1
Antimony	ND		10	6.2	ug/L		07/16/24 09:17	07/18/24 15:58	1
Barium	ND		200	27	ug/L		07/16/24 09:17	07/18/24 15:58	1
Beryllium	ND		4.0	1.5	ug/L		07/16/24 09:17	07/18/24 15:58	1
Cadmium	ND		5.0	0.30	ug/L		07/16/24 09:17	07/18/24 15:58	1
Calcium	ND		5000	640	ug/L		07/16/24 09:17	07/18/24 15:58	1
Chromium	ND		5.0	3.1	ug/L		07/16/24 09:17	07/18/24 15:58	1
Cobalt	ND		50	3.4	ug/L		07/16/24 09:17	07/18/24 15:58	1
Copper	6.22	J B	25	2.2	ug/L		07/16/24 09:17	07/18/24 15:58	1
Iron	ND		100	72	ug/L		07/16/24 09:17	07/18/24 15:58	1
Lead	ND		10	4.4	ug/L		07/16/24 09:17	07/18/24 15:58	1
Magnesium	ND		5000	690	ug/L		07/16/24 09:17	07/18/24 15:58	1
Manganese	ND		15	2.4	ug/L		07/16/24 09:17	07/18/24 15:58	1
Nickel	ND		40	3.5	ug/L		07/16/24 09:17	07/18/24 15:58	1
Potassium	ND		5000	2600	ug/L		07/16/24 09:17	07/18/24 15:58	1
Selenium	ND		10	3.7	ug/L		07/16/24 09:17	07/18/24 15:58	1
Sodium	ND		5000	800	ug/L		07/16/24 09:17	07/18/24 15:58	1
Vanadium	ND		50	5.3	ug/L		07/16/24 09:17	07/18/24 15:58	1
Zinc	ND		50	42	ug/L		07/16/24 09:17	07/18/24 15:58	1

Lab Sample ID: MB 180-474214/1-A

Matrix: Solid

Analysis Batch: 474661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 474214

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Thallium	ND		20	3.0	ug/L		07/16/24 09:17	07/19/24 16:28	1

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QC Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-474214/2-A

Matrix: Solid

Analysis Batch: 474551

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	250	238		ug/L		95	80 - 120
Aluminum	5000	4910		ug/L		98	80 - 120
Arsenic	1000	946		ug/L		95	80 - 120
Antimony	250	244		ug/L		97	80 - 120
Barium	1000	940		ug/L		94	80 - 120
Beryllium	500	491		ug/L		98	80 - 120
Cadmium	500	469		ug/L		94	80 - 120
Calcium	25000	24800		ug/L		99	80 - 120
Chromium	500	461		ug/L		92	80 - 120
Cobalt	500	460		ug/L		92	80 - 120
Copper	500	485		ug/L		97	80 - 120
Iron	5000	5090		ug/L		102	80 - 120
Lead	500	484		ug/L		97	80 - 120
Magnesium	25000	24400		ug/L		98	80 - 120
Manganese	500	475		ug/L		95	80 - 120
Nickel	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	957		ug/L		96	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Vanadium	500	477		ug/L		95	80 - 120
Zinc	250	234		ug/L		94	80 - 120

Lab Sample ID: LCS 180-474214/2-A

Matrix: Solid

Analysis Batch: 474661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 474214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	1000	915		ug/L		92	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-477712/1-A

Matrix: Solid

Analysis Batch: 477753

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 477712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:19	1

Lab Sample ID: LCS 180-477712/2-A

Matrix: Solid

Analysis Batch: 477753

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 477712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.37		ug/L		95	80 - 120

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QC Sample Results

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 180-477632/1-B							Client Sample ID: Method Blank			
Matrix: Solid							Prep Type: SPLP East			
Analysis Batch: 477753							Prep Batch: 477712			
Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	ND		0.20	0.13	ug/L		08/27/24 11:20	08/27/24 14:22	1	

QC Association Summary

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

GC/MS VOA

Leach Batch: 474140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1 - DL	MIX-ISS4-7.5PC-0.5C	SPLP	Solid	EPA 1312	
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP	Solid	EPA 1312	
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP	Solid	EPA 1312	
180-176969-2 - RA	MIX-ISS4-7.5PC-1.0C	SPLP	Solid	EPA 1312	
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP	Solid	EPA 1312	
180-176969-3 - RA	MIX-ISS4-7.5PC-1.5C	SPLP	Solid	EPA 1312	
180-176969-4	MIX-ISS4-7.5PC	SPLP	Solid	EPA 1312	
180-176969-4 - DL	MIX-ISS4-7.5PC	SPLP	Solid	EPA 1312	
LB 180-474140/1-A	Method Blank	SPLP	Solid	EPA 1312	

Analysis Batch: 474216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP	Solid	EPA 8260D	474140
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP	Solid	EPA 8260D	474140
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP	Solid	EPA 8260D	474140
180-176969-4	MIX-ISS4-7.5PC	SPLP	Solid	EPA 8260D	474140
LB 180-474140/1-A	Method Blank	SPLP	Solid	EPA 8260D	474140
LCS 180-474216/7	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-474216/8	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	

Analysis Batch: 474315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1 - DL	MIX-ISS4-7.5PC-0.5C	SPLP	Solid	EPA 8260D	474140
180-176969-2 - RA	MIX-ISS4-7.5PC-1.0C	SPLP	Solid	EPA 8260D	474140
180-176969-3 - RA	MIX-ISS4-7.5PC-1.5C	SPLP	Solid	EPA 8260D	474140
180-176969-4 - DL	MIX-ISS4-7.5PC	SPLP	Solid	EPA 8260D	474140
MB 180-474315/10	Method Blank	Total/NA	Solid	EPA 8260D	
LCS 180-474315/3	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-474315/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	

GC/MS Semi VOA

Leach Batch: 474141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 1312	
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 1312	
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 1312	
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 1312	
LB 180-474141/1-B	Method Blank	SPLP East	Solid	EPA 1312	

Prep Batch: 474359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	3520C	474141
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	3520C	474141
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	3520C	474141
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	3520C	474141
LB 180-474141/1-B	Method Blank	SPLP East	Solid	3520C	474141
MB 180-474359/1-A	Method Blank	Total/NA	Solid	3520C	
LCS 180-474359/2-A	Lab Control Sample	Total/NA	Solid	3520C	
LCSD 180-474359/3-A	Lab Control Sample Dup	Total/NA	Solid	3520C	

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QC Association Summary

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

GC/MS Semi VOA

Analysis Batch: 474632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 8270E	474359
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 8270E	474359
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 8270E	474359
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 8270E	474359
LB 180-474141/1-B	Method Blank	SPLP East	Solid	EPA 8270E	474359
MB 180-474359/1-A	Method Blank	Total/NA	Solid	EPA 8270E	474359
LCS 180-474359/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	474359
LCSD 180-474359/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	474359

LCMS

Leach Batch: 624120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	1312	
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	1312	
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	1312	
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	1312	
LB 240-624120/14-B	Method Blank	SPLP East	Solid	1312	

Prep Batch: 624382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	1633	624120
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	1633	624120
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	1633	624120
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	1633	624120
LB 240-624120/14-B	Method Blank	SPLP East	Solid	1633	624120
MB 240-624382/1-A	Method Blank	Total/NA	Solid	1633	
LCS 240-624382/3-A	Lab Control Sample	Total/NA	Solid	1633	
LLCS 240-624382/2-A	Lab Control Sample	Total/NA	Solid	1633	

Analysis Batch: 624677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	1633	624382
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	1633	624382
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	1633	624382
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	1633	624382
LB 240-624120/14-B	Method Blank	SPLP East	Solid	1633	624382
MB 240-624382/1-A	Method Blank	Total/NA	Solid	1633	624382
LCS 240-624382/3-A	Lab Control Sample	Total/NA	Solid	1633	624382
LLCS 240-624382/2-A	Lab Control Sample	Total/NA	Solid	1633	624382

Metals

Leach Batch: 474141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 1312	
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 1312	
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 1312	
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 1312	

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QC Association Summary

Client: ENTACT, LLC

Job ID: 180-176969-1

Metals

Prep Batch: 474214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	3010A	474141
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	3010A	474141
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	3010A	474141
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	3010A	474141
MB 180-474214/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-474214/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 474551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 6010D	474214
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 6010D	474214
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 6010D	474214
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 6010D	474214
MB 180-474214/1-A	Method Blank	Total/NA	Solid	EPA 6010D	474214
LCS 180-474214/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	474214

Analysis Batch: 474661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 6010D	474214
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 6010D	474214
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 6010D	474214
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 6010D	474214
MB 180-474214/1-A	Method Blank	Total/NA	Solid	EPA 6010D	474214
LCS 180-474214/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	474214

Leach Batch: 477632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 1312	
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 1312	
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 1312	
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 1312	
LB 180-477632/1-B	Method Blank	SPLP East	Solid	EPA 1312	

Prep Batch: 477712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	7470A	477632
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	7470A	477632
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	7470A	477632
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	7470A	477632
LB 180-477632/1-B	Method Blank	SPLP East	Solid	7470A	477632
MB 180-477712/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 180-477712/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 477753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-176969-1	MIX-ISS4-7.5PC-0.5C	SPLP East	Solid	EPA 7470A	477712
180-176969-2	MIX-ISS4-7.5PC-1.0C	SPLP East	Solid	EPA 7470A	477712
180-176969-3	MIX-ISS4-7.5PC-1.5C	SPLP East	Solid	EPA 7470A	477712
180-176969-4	MIX-ISS4-7.5PC	SPLP East	Solid	EPA 7470A	477712
LB 180-477632/1-B	Method Blank	SPLP East	Solid	EPA 7470A	477712
MB 180-477712/1-A	Method Blank	Total/NA	Solid	EPA 7470A	477712

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QC Association Summary

Client: ENTACT, LLC
Project/Site: North Point Staten Island ISS Study

Job ID: 180-176969-1

Metals (Continued)

Analysis Batch: 477753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-477712/2-A	Lab Control Sample	Total/NA	Solid	EPA 7470A	477712

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Eurofins Environment T

Project Manager: Julie Carr Email: jcarr@eurofins.com		Site Contact: Noah Valdez Lab Contact: Deb Bowen		Date: _____		COC No: _____ of _____ COCs	
Tel/Fax: 716-462-9040		Analysis Turnaround Time		TALS Project #:		Sampler:	
☐ CALENDAR DAYS ☒ WORKING DAYS		TAT if different from Below _____		For Lab Use Only:		Walk-in Client	
☒ 2 weeks		☐ 1 week		Lab Sampling:			
☐ 2 days		☐ 1 day		Job / SDG No.:			
Project Name: NorthPoint Staten Island ISS Study		Site: NorthPoint Staten Island		Sample Specific Notes:			
P O # E9285				C7: # 200CF-04		4.994.5	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	
MIX-ISS4-7.5PC-0.5C				C	S		
MIX-ISS4-7.5PC-1.0C				C	S		
MIX-ISS4-7.5PC-1.5C				C	S		
MIX-ISS4-7.5PC				C	S		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							
Possible Hazard Identification:							
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown							
Special Instructions/QC Requirements & Comments: USE METHOD 1312 MODIFIED - NO ADDITIONAL PULVERIZATION OF SAMPLE							
Custody Seal No.: 244-5037		Cooler Temp. (°C): Obs'd: _____		Therm ID No.: _____			
Relinquished by: <i>Julie Carr</i>		Received by: <i>SA</i>		Company: <i>CH2M</i>		Date/Time: 7/12/24 1415	
Relinquished by:		Received by:		Company:		Date/Time:	
Relinquished by:		Received in Laboratory by:		Company:		Date/Time:	

Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412 963.2468

Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

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Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____

Barberton Facility

Client CELE-744 Site Name _____

Cooler Received on 8-20-24 Opened on 8-20-24

FedEx: 1st Grid Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-Hours, Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # CE Foam Box Client Cooler Box Other _____

Packing material used Bubble-Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None _____

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 22 (CF EDC) Observed Cooler Temp. 4.3 °C Corrected Cooler Temp. 4.2 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes ☒ No ☐
-Were the seals on the outside of the cooler(s) signed & dated? Yes ☒ No ☐
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes ☒ No ☐
-Were tamper/custody seals intact and uncompromised? Yes ☒ No ☐
3 Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
4 Did custody papers accompany the sample(s)? Yes ☒ No ☐
5 Were the custody papers relinquished & signed in the appropriate place? Yes ☒ No ☐
6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes ☒ No ☐
7 Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes ☒ No ☐
9 For each sample, does the COC specify preservatives (Y/N) # of containers (Y/N) and sample type of grab/comp (X/N)?
10 Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11 Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
12. Are these work share samples and all listed on the COC? Yes ☒ No ☐
If yes, Questions 13-17 have been checked at the originating laboratory
13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC442471
14 Were VOAs on the COC? Yes No
15 Were air bubbles >6 mm in any VOA vials? ☒ Larger than this. Yes No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page Samples processed by _____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

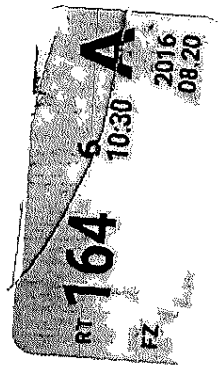
20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

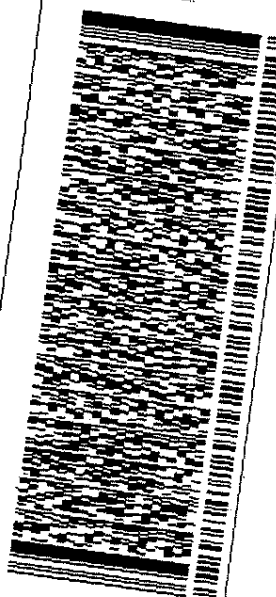
Do not lift using this tag.



ORIGIN TO LNSA (717) 556-3805
SHIPPING/RECEIVING
EUROFINS LANCASTER LABS
2425 NEW HOLLAND PIKE
LANCASTER, PA 17801
UNITED STATES US

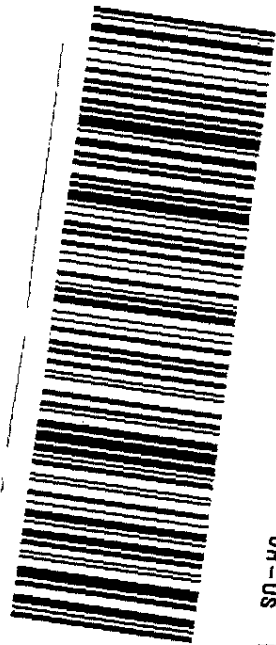
SHIP DATE 19AUG24
ACTWGT 23.20 LB
DIM 614137/CAF/E3808
BILL SENDER

SHIPPING / RECEIVING
EUROFINS ENVIRONMENT TESTING NORTH
180 SOUTH VAN BUREN AVENUE
BARBERTON OH 44203
(330) 497-8898
DEPT. 4031



J24102311220100

TRK# 6449 7740 2016
1201
NX CAKA
TUE - 20 AUG 10:30A
PRIORITY OVERNIGHT
44203
OH-US CLE



Part # 158148-434 MTW EXP 03/24 22

585CK/4128/C604

**301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468**

Environment Testing

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8/28/2024

Login Sample Receipt Checklist

Client: ENTACT, LLC

Job Number: 180-176969-1

Login Number: 176969

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Oster, Rachel A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ENTACT, LLC

Job Number: 180-176969-1

Login Number: 176969

List Number: 3

Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX B
Tank Area 12 Boring Logs from the
2021-2022 Remedial Investigation



205 Campus Drive
Edison, NJ 08837

LOG OF: **AST12-SB001R1**
(1 of 1)

Project Number:

Client: NP Staten Island Industrial, LLC			Project Number: 100		



205 Campus Drive
Edison, NJ 08837

LOG OF **MWAST12A-SB001R1**
(1 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC	Drilling Company: EPS	Driller: S. Folcher
Project: Former Port Mobil Terminal	Checked by: C. Tuero	
Location: Staten Island, NY	Drilling Method: DPT	
North (ft):	East (ft):	Logged By: S. Hale
Total Depth (ft) 20.0	Depth to Water (ft): 10.0	Completion Date: March 11, 2022

DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
0						
5						
10						
		SP	10-14': Brown, SAND, medium, loose, saturated	4.0/5	61.4 127.3 38.1 27 14.1 12.6 12.7 23.8	Saturation at 10.0'
15		NR	14-15': No recovery			
		SP	15-20': Brown, SAND, medium, loose, saturated	0.0/5		Liner jammed in macrocore and barrel soils tapped out onto the ground
20						
			End of Boring at 20.0' bgs			

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205 Campus Drive
Edison, NJ 08837

LOG OF **MWAST12A-SB001R1**
(2 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):		Logged By: S. Hale		
Total Depth (ft) 20.0		Depth to Water (ft): 10.0		Completion Date: March 11, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
						0.0-10.0' bgs previously logged on 3/4/22
						0.0-10.0' resampled but not logged, sand heave in 10.0-15.0', returned with 2.5 inch macrocore to sample 15.0-20.0'
						Well point WP01-MWAST12 re-installed to 18.0' bgs with 10.0' of screen



205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB003**
(1 of 1)

Project Number:

Client: NP Staten Island Industrial, LLC	Drilling Company: EPS	Driller: S. Folcher
Project: Former Port Mobil Terminal	Checked by: C. Tuero	
Location: Staten Island, NY	Drilling Method: DPT	
North (ft):	East (ft):	Logged By: S. Hale
Total Depth (ft) 10.0	Depth to Water (ft): 1.4	Completion Date: March 7, 2022

DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
0						
		GW	0-0.4': GRAVEL		48.5	
		SW	0.4-1.4': Brown, SAND, fine to medium, loose, wet		182.2	
		SW	1.4-2.4': Gray brown with staining, SAND, fine to medium, saturated, petroleum odor		203.7	
		SW-ML	2.4-3.1': Gray brown grading to brown, SAND, with silt, fine to medium, some fine to medium gravel, soft, saturated	3.1/5	168.4	Saturation at 1.4'
		NR	3.1-5': No recovery		499.3	Shake test at 1.5': positive for sheen, negative for globules
5					1315	Shake test at 2.5': positive for sheen, negative for globules
		ML-CL	5-9.5': Red, SILT, some clay, some fine to medium sand, little to some fine to coarse gravel, dense, moist	4.5/5	132.5	
					30.9	
					6.6	
					4.8	
					4	
					5.2	
					1.8	
					1.5	
					2.5	
10		NR	9.5-10': No recovery			Well point WP03-MWAST12A set to 10.0' bgs with 10.0' of screen
			End of Boring at 10.0' bgs			



205 Campus Drive
Edison, NJ 08837

LOG OF **MWAST12A-SB003R1**
(1 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):	Logged By: S. Hale			
Total Depth (ft): 20.0		Depth to Water (ft): 10.0		Completion Date: March 11, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
0						
5					4.7 32.7 41.9 7.3 0.9 0.6 1.4 4.2 1.1 2.1	
10					1266 1400 1558 1543 966.9 1041 376.2 158.2 85.5	
		ML	10-12.5': Red, SILT, some clay, some fine to medium sand, medium dense, saturated, low plasticity, no odor			Saturation at 10.0'
		SP	12.5-15': Red, SAND, fine to coarse, some silt, some fine to coarse gravel, saturated, no odor	5.0/5		
15		SW	15-17.2': Red, SAND, coarse, some fine to coarse gravel, loose, saturated, petroleum odor			Shake test at 16.5': positive for globules and sheen
		SW	17.2-18.5': Brownish red, SAND, coarse, some fine to coarse gravel, sheen on soil, black staining, saturated, petroleum odor	4.5/5		Shake test at 17.5': negative for sheen and globules
		SP	18.5-19': Brown, SAND, fine to medium, loose, saturated, petroleum odor			
20		NR	19-20': No recovery			

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205 Campus Drive
Edison, NJ 08837

LOG OF **MWAST12A-SB003R1**
(2 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):	Logged By: S. Hale			
Total Depth (ft) 20.0		Depth to Water (ft): 10.0		Completion Date: March 11, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
			End of Boring at 20.0' bgs			0.0-10.0' logged on 3/7/22 Well point WP03-MWAST12A reinstalled to 20.0' bgs with 10.0' of screen



205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB004**
(1 of 1)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS		Driller: S. Folcher		
Project: Former Port Mobil Terminal			Checked by: C. Tuero				
Location: Staten Island, NY			Drilling Method: DPT				
North (ft):		East (ft):		Logged By: S. Hale			
Total Depth (ft): 20.0		Depth to Water (ft): 2.5		Completion Date: March 15, 2022			
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments	
0							
		SW-ML	0-2.5': Brown, SAND, fine to medium, some silt, some medium to large gravel, medium dense, moist	3.5/5	245.1	Saturation at 2.5' Shake test at 3.0': negative sheen and globules	
					88.2		
					80.7		
		SW	2.5-3.5': Brown, SAND, fine to medium, wet to saturated, petroleum odor	3.5/5	135.1		
					331.6		
					306.4		
		NR	3.5-5': No recovery	3.5/5	332.8		
5							
		SW	5-8.8': Brown, SAND, fine to medium, little silt in lenses, loose, saturated, no odor	3.8/5	23.9		Saturation at 2.5' Shake test at 3.0': negative sheen and globules
					12.1		
					12.4		
				3.8/5	9.3		
					9.7		
					5.1		
				3.8/5	7.1		
					9.8		
10							
		SW	10-12.5': Brown, SAND, fine to medium, little silt in lenses, loose, saturated, no odor	5.0/5	21.6	Well point WP10-AST12 set to 20.0' with 10.0' of screen	
					11.2		
					3		
		ML-CL	12.5-15': Red, SILT, some clay, medium dense, wet	5.0/5	1.8		
					0.9		
					4.4		
				5.0/5	1.2		
					1		
					1.3		
15							
		SP	15-17': Red, SAND, fine, trace silt, soft, saturated, no odor	2.7/5	0.7		Well point WP10-AST12 set to 20.0' with 10.0' of screen
					2.6		
					1.3		
				2.7/5	0.4		
					0.7		
					2.1		
		ML-SC	17-17.7': Red, SILT, fine sand, some clay, little medium gravel, no odor	2.7/5			
		NR	17.7-20': No recovery	2.7/5			
20							
			End of Boring at 20.0' bgs				

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205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB005**
(1 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher				
Project: Former Port Mobil Terminal			Checked by: C. Tuero				
Location: Staten Island, NY			Drilling Method: DPT				
North (ft):		East (ft):	Logged By: S. Hale				
Total Depth (ft) 20.0		Depth to Water (ft): 10.0		Completion Date: March 15, 2022			
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments	
0							
		ML	0-0.9': Reddish brown, SILT, fine to medium sand, little fine to medium gravel, wet, petroleum odor	2.7/5	140.6		
		SW	0.9-2': Brown, SAND, fine to medium, wet, petroleum odor		367.3		
		SW	2-2.7': Gray stained, SAND, fine to medium, saturated, petroleum odor		401.4		
		NR	2.7-5': No recovery		394.3		
5				525.6			
		CL	5-6.7': Brownish gray, CLAY, little silt, soft, moderate plasticity, saturated, petroleum odor	4.4/5	248.8		Saturated at 10.0'
		ML-GW	6.7-9.4': Red, SILT, little fine to medium sand, some fine to medium gravel, very dense, moist, no odor		234.8		
		NR	9.4-10': No recovery		325.3		
					28.5		
10				15.4			
		SW-ML	10-12.7': Red, SAND AND SILT, medium to coarse, some fine to medium gravel, soft to medium dense, saturated	5.0/5	9.3		
		ML-GW	12.7-15': Red, SILT, little fine sand, some fine to medium gravel, dense, moist, no odor		6.2		
					5.1		
					28.6		
15							
		SW-GW	15-19.5': Reddish brown, SAND, medium to coarse, fining downwards, some fine to medium gravel, saturated, petroleum odor	4.5/5	8.3		Shake test at 16.5': positive for sheen, negative for globules
		NR	19.5-20': No recovery		7.9		
					4.9		
					4.2		
20				23.2			
					2.9	Well point WP11-AST12 set to 20.0' bgs with 10.0' of screen	
					3		
					3.2		
					6.6		
				77.7			

Saturated at 10.0'

Shake test at 16.5': positive for sheen, negative for globules

Well point WP11-AST12 set to 20.0' bgs with 10.0' of screen



205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB005**
(2 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):	Logged By: S. Hale			
Total Depth (ft) 20.0		Depth to Water (ft): 10.0		Completion Date: March 15, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
			End of Boring at 20.0' bgs			



205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12-SB006**
(1 of 1)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher						
Project: Former Port Mobil Terminal			Checked by: C. Tuero						
Location: Staten Island, NY			Drilling Method: DPT						
North (ft):		East (ft):	Logged By: S. Hale						
Total Depth (ft) 20.0		Depth to Water (ft): 10.0		Completion Date: March 16, 2022					
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments			
0									
		SP-SM	0-1.6': Reddish brown, SAND, coarse, some fine to medium gravel, little silt, moist, petroleum odor	4.0/5	285.3	Shake test at 8.0': positive for sheen, negative for globules			
					232				
		SC	1.6-3': Reddish brown, SILT, some clay, medium dense, moist, low plasticity, petroleum odor		242.9				
					85.2				
		ML	3-4': Red gray mottled, SILT, some clay, medium dense, moist, petroleum odor	228.3	449.5				
				142.8					
		NR	4-5': No recovery	327.4					
5									
		ML	5-9': Reddish brown, SILT, little clay, some fine to medium sand, little fine to medium gravel, moist, petroleum odor	4.0/5	702.1		Shake test at 10.0': positive for sheen, negative for globules Saturation at 10.0'		
					703.4				
		NR	9-10': No recovery		1037	1076			
					1372				
		SM	10-11': Brown, SILT, fine sand, little medium sand, fine gravel, saturated, strong petroleum odor	3.8/5	1450	Well point WP13-AST12 to 20.0' with 10.0' of screen			
					2003				
		SP-SM	11-13.8': Brown, SAND, fine to medium, little silt, trace fine to coarse gravel, saturated, strong petroleum odor		1326				
		NR	13.8-15': No recovery		1401			Well point WP13-AST12 to 20.0' with 10.0' of screen	
					288.1				
		SM	15-16.1': Brown, SAND & SILT, fine, little medium sand, saturated, strong petroleum odor		1012		1364		
					1152				
		NR	16.1-20': No recovery	1.1/5	268.4		Well point WP13-AST12 to 20.0' with 10.0' of screen		
					907.2				
		NR							
20									
			End of Boring at 20.0' bgs						

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205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB007**
(1 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):		Logged By: A. Roppoli		
Total Depth (ft) 20.0		Depth to Water (ft): 5.0		Completion Date: March 16, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
0		ML	0-0.5': Brown, SILT, some fine to medium sand, moist, slight staining and odor	2.0/5	31.7	Shake test at 1.0': negative sheen, negative globules
		SP-SM	0.5-2': Gray brown, SAND, fine to medium, little silt, moist, slight staining, strong odor		156.6	
			2-5': No recovery		120.3	
		NR			45.8	
5			5-8.8': Brown, SAND, fine, little silt, saturated	3.8/5	6.5	Saturated at 5.0'
		SP-SM			1	
					0.6	
					0.4	
				0.9		
				0.5		
				0.4		
10		NR	8.8-10': No recovery	3.5/5	0.2	
			10-13.5': Brown, SAND, fine, little silt, saturated		0.2	
		SP-SM			0.2	
					0.2	
					0.2	
					0.2	
15		NR	13.5-15': No recovery	4.5/5	0.1	
			15-19.5': Brown, SAND, fine, little silt, saturated		0.8	
		SP-SM			0.3	
					0.4	
					0.2	
					0.1	
					0.1	
					0.1	
20		NR	19.5-20': No recovery			Well point WP16 installed to 20.0' with 10.0' of screen

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205 Campus Drive
Edison, NJ 08837

LOG OF: **MWAST12A-SB007**
(2 of 2)

Project Number:

Client: NP Staten Island Industrial, LLC			Drilling Company: EPS Driller: S. Folcher			
Project: Former Port Mobil Terminal			Checked by: C. Tuero			
Location: Staten Island, NY			Drilling Method: DPT			
North (ft):		East (ft):	Logged By: A. Roppoli			
Total Depth (ft) 20.0		Depth to Water (ft): 5.0		Completion Date: March 16, 2022		
DEPTH (ft)	Symbol (USCS)	USCS	SOIL DESCRIPTION	Recovery (ft)	PID (ppm)	Comments
			End of Boring at 20.0' bgs			

APPENDIX C
NYSDEC In-Situ Solidification QA/QC
Guidance Document

NYSDEC In-Situ Solidification QA/QC

1.0 GENERAL

1.1 Introduction

Technology Description

In-situ solidification (ISS) is an established remediation treatment technology which can prevent migration of and exposure to certain contaminants in media including soil, sludge, and sediment. The ISS process is increasingly being used within remedial programs in the New York State Department of Environmental Conservation (Department).

ISS is a process that involves the mixing of reagents with contaminated soil to create a low permeability mass which encapsulates the contamination in the soil in place. Bucket excavators augers, or other technologies are used to mix the contaminated media and one or more reagents, entrapping the contaminated material within a low permeability mass. This reduces or eliminates non-aqueous phase liquid (NAPL) mobility and contaminant migration into exposure pathways, thus eliminating the treated area as a source of future exposure or contamination of groundwater, surface water, or vapor.

Complete mixing of the contaminated soil and the ISS reagents must be achieved for the process to be effective and protective of human health and the environment. Incomplete mixing can result in a non-homogenous mass, untreated areas, or large fractures within the ISS mass, which may allow mobility of NAPL and groundwater within the treated areas.

1.2 Document Purpose

The purpose of this document is to provide a method of Quality Assurance (QA)/Quality Control (QC) to ensure the effectiveness of ISS after field implementation is complete. This includes coring, and testing for hydraulic conductivity and unconfined compressive strength. The use of coring for QA/QC may not be suitable for all ISS projects and other QA/QC methods such as excavation/visual inspection will be considered an option on a case by case basis.

Failure to meet QA/QC goals, particularly incomplete mixing, is of greatest concern when it occurs along the edges of the solidified mass. The Department has noted a tendency for DNAPL to accumulate in permeable soils and sediments immediately above the bedrock surface, creating a potential pathway for DNAPL migration. Such zones can be quite difficult to mix adequately, whether using augers or bucket mixing. Thus, attention is required to ensure that "top of rock" zones are thoroughly solidified, and that this solidification is adequately documented.

To ensure the integrity of the treated material, the Department has identified QA/QC procedures, specifically coring, which are essential to ensure that ISS treatment processes are protective of the environment. This document has been developed to provide guidance on a coring program to be conducted to ensure confidence regarding complete mixing and ISS installation in the remedial area.

2.0 EQUIPMENT

2.1 Coring Drilling Method

To allow early coring information to be used for adjusting ISS operations, it is recommended that coring operations be conducted prior to complete curing of the ISS material. For high-strength material, a rock core is frequently required. Driven split spoons (typically using Direct Push tools but potentially using augers as well) may be used to collect core samples of the ISS material for lower strength materials. Rotasonic and compressed air drilling methods have not been successful in obtaining representative core samples.

Cores must be no longer than five (5) feet. If less than 60% of the core material is recovered from any of the coring runs, one (1) new core hole must be drilled adjacent to the previous location. If the recovery from the adjacent core hole continues to be less than 60%, the contractor may abandon the location. This is not intended to justify an inadequate sampling program. A representative number of successfully completed cores must be provided. Close communication with the Department's project manager (PM) is strongly encouraged to discuss and reach concurrence on the coring program.

2.2 Trenching

While trenching has not been used to date, there could potentially be instances where trenching would be a viable alternative. A trenching plan would have to be submitted to the Department during the remedial design. In the event trenching is proposed after the remedial design phase, but prior to field implementation of the ISS, a minimum of two weeks' notice should be provided to the Department for review of the trenching design.

2.3 Sample Collection for strength and permeability

Samples of the mixed soil will be collected while wet and formed into cylinders in accordance with the approved testing methods (ASTM D5084 for hydraulic conductivity, ASTM D2166 or D1633 for unconfined compressive strength). Samples should be collected every 500 cubic yards. Additional sampling may be appropriate on a site-specific basis in areas of particular concern.

3.0 EXECUTION

3.1.1 Coring Implementation

- One core borehole shall be completed for every 5,000 square feet of ISS treatment area, but not less than two bore holes per treatment area.
- To allow early coring information to be incorporated in adjusting ISS operations, the first coring location shall be completed when the ISS treatment project area is no more than 25 percent complete.
- Core borehole locations shall be biased towards areas with the greatest soil contamination, areas where contamination is in direct contact with the bedrock surface, and/or locations where difficulties in the ISS process were encountered.

- Core boreholes shall be placed in locations where individual treatment columns or cells overlap, to the extent possible.
- Core boreholes should be advanced to at least a foot below the monolith design or bedrock, if encountered. If coring reveals previously undocumented areas of contamination, delineation (and remediation, as necessary) of that contamination may be required outside the QA/QC program.
- Cores shall be archived following coring activities. Cores may be discarded upon final inspection by the Department. Following initial inspection, the Department may require cores to be retained to compare to future cores or to document issues that will need to be resolved.
- To allow any needed corrective actions to commence before the monolith cures to a point making corrective action difficult or impossible, core inspection by the Department will occur as soon as possible but not later than 48 hours of the core's collection.
- In order to identify potential areas of concern for the coring program, documentation on the volume/shrinkage of grout obtained during ISS installation shall be reviewed. Areas where excessive grout was lost during ISS implementation should be targeted for coring.

3.1.2 Trenching Implementation

- If trenching is used, it will be completed at the perimeter of the ISS treatment area and locations within the ISS treatment area. The minimum depth of excavation should be the design depth of the ISS treatment.
- If the bottom of the ISS treatment cannot be visually inspected, the Department may require cores to be collected.
- To allow inspection information to be incorporated in adjusting ISS operations, trenching shall commence when the ISS treatment project area is no more than 25 percent complete.

3.1.3 Sample analysis

- Typically, multiple cylinders are collected at each location for testing unconfined compressive strength. This allows testing after 3-5 days to get an initial indication of the strength of the mix, while reserving cylinders for compliance testing after they have achieved full strength (28 days).
- Cylinders tested for hydraulic conductivity in accordance with the approved plans. The maximum permeability should generally be 1×10^{-6} cm/sec, as measured using ASTM D 5084-00.

3.2 Performance Evaluations

3.2.1 Visual Inspection

Core samples and related equipment will be visually inspected for the following criteria, and the results recorded:

- Visible NAPL
- Non-mechanical induced cracking within the core
- Percent of core sample recovered

In addition, indirect indications of unmixed NAPL should be recorded, such as:

- NAPL coating on drilling tools
- NAPL in drill wash tub, if water-based drilling methods are employed

3.2.2 Performance Concerns

Performance testing must be completed early enough to identify problems. Substandard results cannot be ignored with the intention to “average-out” the results over the course of project. The purpose of this guidance is to detect installation of an inadequate remedy in time to correct the problems and avoid costly retreatment or repairs to ensure effectiveness of the ISS remedy, the following conditions will warrant further attention and will be documented during ISS implementation:

- A continuous layer or seam of NAPL is noted within the core.
- NAPL coating is visible on drilling tools
- Visible NAPL is noted in the drill wash tub
- Unconfined compressive strength below 50 psi
- Hydraulic conductivity greater than 1.0×10^{-6} cm/sec or project specific goal.
- Large sections (> 1 cf) of unmixed material.

If one or more of the above conditions are noted, the Department must be notified to discuss the severity of the problem, the degree of concern, and whether any corrective action will be necessary.

A notification, by itself, does not necessarily mean a corrective action or additional borings or testing are warranted. For instance, small NAPL blebs may be present within properly mixed areas of the ISS monolith, and coring through such a bleb, especially before the monolith has achieved its maximum strength, could result in NAPL coating on drilling tools and/or NAPL in the drill wash water. The first step to determining whether corrective action is required will be to complete additional borings around the area of concern and determine if identified NAPL within the ISS mass is encapsulated, thus eliminating NAPL mobility and impact to the surrounding environment. The results of all the samples taken within a given treatment area cannot be averaged to show compliance. While each sample must satisfy the definition on its own, a single test showing slightly elevated hydraulic conductivity would not necessarily require corrective action for that cell/column, but evaluation to ensure that it is not a systemic problem is required.

If NAPL is detected in the additional borings, particularly on the edges of the ISS monolith, or at the bottom of the ISS monolith, corrective actions may be necessary in order to fully encapsulate the source area.

3.2.3 Corrective Actions

If the ISS installation is deemed unsatisfactory after a collaborative evaluation of the coring program, measures will be put in-place to address the deficiencies and ensure that the remedy is protective of human health and the environment. Such measures may include:

- Repair, re-mixing, or isolation of the concerned area using jet grouting or other suitable method
- Excavation and disposal of the concerned area, where feasible and practicable.

3.2.4 Core Hole/Trench Abandonment

When a core has been drilled from the top to the bottom elevation of the targeted ISS treatment zone, and samples collected, it will be considered complete. Following completion of each coring location, the borings will be filled with grout using tremie methods.

If trenching is used for QA/QC activities, backfill material should meet the approved ISS specifications.

3.3 Field Documentation and Approvals

3.3.1 Field Documentation

Documentation of the ISS QA/QC activities shall be included with the Final Engineering Report (FER). Documentation will include (but not be limited to):

- Figure depicting boring/trenching locations
- Photographs of each core boring/trench referenced
- Type of drilling method or excavator used
- Field coring/trench logs

3.3.2 Department Approval

The Department should be notified of the ISS QA/QC activities as soon as possible, with a minimum of 72 hours' notice or two business days. Department personnel will attempt to be on-site, unless the remedial party is informed otherwise, to inspect the QA/QC activities and provide informal approval or recommend corrective actions.

Following on-site Department inspection of the ISS QA/QC, email correspondence should be sent to the Department project manager which summarizes observations of the coring results. The Department project manager will provide an email reply within 48 hours confirming that the ISS QA/QC objectives have been met. If the Department project manager does not feel the ISS

QA/QC objectives have been adequately satisfied, the response email will include any additional corrective actions required.

3.3.3. Resolution of Disagreements

In the event there is a disagreement regarding the ISS QA/QC program the remedial party will submit a written request for resolution to the project manager's supervisor. The correspondence shall include the ISS QA/QC activities, relevant documentation, and the nature of the dispute. The project manager's supervisor will meet with the Project Manager, Construction Inspector (if applicable) and the Bureau Director to discuss the request. If necessary, a meeting will be arranged which will include the remedial party, Department project manager, supervisor, and the Bureau Director to discuss the matter.

Following the meeting, the supervisor will send correspondence to the remedial party outlining the Department final decision.