REMEDIAL ACTION WORK PLAN

August 25, 2023

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
Site #C915344

Prepared For:
65 Lake Avenue LLC

Prepared By:

MATRIX
ENVIRONMENTAL TECHNOLOGIES INC.

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ABBREVIATIONS AND ACRONYMS

AA	Alternatives Analysis
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BGS	Below ground surface
CAMP	Community Air Monitoring Plan
CDISCO	Conceptual Design for ISCO
DCE	Dichloroethene
DNAPL	Dense non-aqueous phase liquid
DO	Dissolved Oxygen
DUSR	Data Usability Summary Report
EC	Engineering Control
ESTCP	Environmental Security Technology Certification Program
FEMA	Federal Emergency Management Agency
FER	Final Engineering Report
HASP	Health and Safety Plan
IC	Institutional Control
ID	Inner Diameter
ISCO	*In situ* chemical oxidation
LCS	Laboratory control sample
METI	Matrix Environmental Technologies Inc.
MNA	Monitored Natural Attenuation
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	6 New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxidation-Reduction Potential
OVM	Organic Vapor Meter
P&ID	Process and Instrumentation Diagram
PCBs	Polychlorinated biphenyls
PCE	Tetrachloroethylene
PFAS	Per- and polyfluoroalkyl substances
PID	Photoionization Detector
PNOD	Permanganate Natural Oxidant Demand
PVC	Polyvinyl chloride
QC	Quality Control
RAWP	Remedial Action Work Plan
RAO	Remedial Action Objective
RI	Remedial Investigation
ROI	Radius of Influence
RPD	Relative Percent Difference
SCG	Standards, criteria and guidance
SSD	Sub-Slab Depressurization
SVE	Soil Vapor Extraction
SVOC	Semivolatile Organic Compound
TIC	Tentatively Identified Compound
TCE	Trichloroethylene
TCL	Target Compound List

TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
UIC	Underground Injection Control
USEPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOC	Volatile Organic Compound

CERTIFICATION STATEMENT

I, Sean R. Carter, P.E., certify that I am currently a NYS Professional Engineer as defined in 6 NYCRR Part 375 and that this Remedial Action Work Plan (RAWP) for the Lakeside Village Apartments, Site #C915344, located at 65-67 Lake Avenue, Lancaster, NY was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the NYSDEC Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10).

Sean R. Carter, P.E. #083593
Matrix Environmental Engineers, PLLC

8,25,21
Date

SEAL

1.0 INTRODUCTION

This Remedial Action Work Plan (RAWP) has been prepared by Matrix Environmental Technologies Inc. (METI) on behalf of 65 Lake Avenue LLC for the Lakeside Village Apartments Site located at 65-67 Lake Avenue, Town of Lancaster, Erie County, New York (Site). Work is being completed under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). Brownfield Cleanup Agreement (BCA) #C915344-11-19 was executed on December 16, 2019.

Potential threats to public health and the environment are addressed by the remedies proposed in this RAWP. The proposed remedies are intended to result in the attainment of remedial action objectives (RAOs) and take into consideration the applicable standards, criteria, and guidance (SCG) identified in the Remedial Investigation/Alternatives Analysis (RI/AA) Report.

1.1 Site Description

The Site is currently utilized as a residential apartment complex in a moderately developed residential area in the Town of Lancaster, Erie County, New York. The Site includes two parcels totaling approximately 1.18 acres of land: SBL #115.27-1-22.21 addressed as 65 Lake Avenue and SBL #115.27-1-23.11 addressed as 67 Lake Avenue. On-site structures include three (3) two-story townhomes constructed in 2006 (65 Lake Avenue) and a two-story apartment building constructed in 1903 (67 Lake Avenue). The Site is bordered by undeveloped land and apartment buildings to the south, residences to the north and west, and Lake Avenue to the east. Properties beyond those adjacent to the Site, including to the south, consist mostly of private residences. Cayuga Creek is located approximately 200 feet to the southwest. The location of the Site and the Site boundaries are shown on **Figures 1-3**. A current site plan is included as **Figure 4**.

1.2 Site History

Historically, the eastern portion of the Site was utilized as a dry cleaner from at least 1949. The former dry cleaning building was located on the eastern portion of 65 Lake Avenue and the northern portion of 67 Lake Avenue. The building was reportedly destroyed by a fire in the late 1970s and was removed or demolished by at least 1995. According to members of the Young family, who owned both properties from at least 1882 through 2005, historical use of the properties has remained residential since at least 1900 with the exception of the dry cleaner. Buildings utilized for vehicle storage were present in the current location of Building A and a private residence was located in the current vicinity of Buildings B and C. The storage buildings and the residence were reportedly demolished at approximately the same time as the dry cleaning building.

1.3 Physical Setting

1.3.1 General Site Features and Site Topography

Cayuga Creek, a tributary of the Buffalo River which discharges into Lake Erie, is located approximately 200 feet southwest of the Site. The direction of flow in Cayuga Creek (closest to the Site) is to the west. The topographic elevation at the Site is approximately 668 feet above sea level.

The elevation of Cayuga Creek closest to the Site is 644 feet above sea level. The Site is generally flat with a gentle slope to the west and southwest towards the Cayuga Creek floodplain.

The Site and surrounding area are serviced by municipal utilities. As indicated on the Site Plan, underground electric, communications, gas, water, and storm sewer utilities are generally located in the southern portion of the parking lot in front of Building A and Building 1. There are no known groundwater supply wells located within a one-mile radius of the Site. The Site does not have state or federal wetlands within property limits, nor is the Site located in a floodplain. Nearby wetlands include the federal riverine wetland located along Cayuga Creek approximately 140 feet southwest of the Site. The adjacent property to the south, 69 Lake Avenue, is within a FEMA 100-year floodplain.

1.3.2 Geology

According to the Surficial Geologic Map of New York, Niagara Sheet (1988) by Donald H. Cadwell and the U.S. Department of Agriculture Soil Conservation Service General Soil Map of Erie County, New York, soils underlying the Site consist of proglacial lake deposits, namely laminated clays and silts.

Characterization of soil samples collected during remedial investigations generally depict the subsurface environment as the following, with some variation across the Site:

- Surface to 4 to 5.5 feet below grade – sand with gravel and silt (fill material)
- 4 to 11.3 feet below grade – laminated clay and silt (lacustrine)
- 11.3 to 20 feet below grade – silty sand with gravel, occasional 2- to-3-inch lenses of dry, weathered limestone

According to the Geologic Map of New York, 1970 (Richard and Fisher), the bedrock underlying the Site is shale and/or limestone of the Skaneateles Formation (Hamilton Group) from the Upper Devonian Period (383 to 358 million years ago). Weathered and dry to moist 2- to 3-inch lenses of limestone were identified in several borings ranging from 16 to 20 feet below grade. Auger and sample refusal was also documented in that depth range, suggesting the surface of competent bedrock begins at approximately 20 feet below grade.

1.3.3 Hydrogeology

During the groundwater sampling events completed in August 2020 and August 2021, the average depth to groundwater was 8.04 feet below grade and 7.89 feet below grade respectively. This is consistent with observations from soil sample characterization indicating the water table exists within the clay and silt lacustrine sediments. Groundwater elevation data show that the groundwater flow direction is generally to the west with components of flow to the west northwest and southwest. The gradient is moderate at 0.035 ft/ft. Between the Site and Cayuga Creek the gradient is estimated to be steeper (e.g. 0.1 ft/ft) due to the difference in topographic elevation (28 feet).

1.4 Applicable Criteria

The following SCG will be utilized:

- 6 NYCRR Part 375-3 Brownfield Cleanup Program dated December 14, 2006.
- NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) document "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" dated June 1998, amended January 1999 Errata Sheet, April 2000 Addendum and June 2004 Addendum.
- NYSDEC "Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)" dated April 2023.
- NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and its addendums.

Sample analytical results are compared to Soil Cleanup Objectives (SCOs) for protection of groundwater for the following chlorinated VOCs under the BCP Cleanup Track 2:

- tetrachloroethene (PCE),
- trichloroethene (TCE),
- cis-1,2-dichloroethene (cis-1,2-DCE),
- trans-1,2-DCE, and
- vinyl chloride.

Sample analytical results for all other compounds are compared to SCOs for restricted residential use under the BCP Cleanup Track 2.

2.0 REMEDIAL INVESTIGATION SUMMARY

Multiple investigations of soil, groundwater, and soil vapor have been conducted at the Site prior to and following its introduction into the BCP. Full details and analytical results are presented in the corresponding reports listed in Section 7.0. A summary of all sampling locations completed since the Site's acceptance into the BCP is included as **Table 1** and are shown in **Figure 5**.

2.1 Summary of Preliminary Investigations

Subsurface investigations were completed at the Site in August 2005 and May 2018 by Lender Consulting Services, Inc. (LCS) and in February 2019 by METI. Chlorinated solvents were identified in soil and groundwater samples associated with past on-site dry cleaning operations during the 2018 and 2019 investigations. Soil samples collected in 2018 from one or more soil borings located near the approximate location of the former dry cleaning building identified acetone, cis-1,2-DCE, PCE, and TCE in exceedance of NYSDEC 6 NYCRR Part 375 SCOs for unrestricted use. Concentrations of nine volatile organic compounds (VOCs) and two semi-volatile organic compounds (SVOCs) in groundwater samples collected from temporary monitoring wells installed in three of the completed soil borings exceeded NYSDEC 6 NYCRR Part 703 Class GA Groundwater Criteria. Laboratory analytical results from the 2019 investigation indicated that VOCs and SVOCs were non-detect or below unrestricted use SCOs in samples collected from soil borings across the Site at depths ranging from 4 to 18 feet below grade. Based on the results from the three subsurface investigations, soil impacts were most elevated in shallow soils from 4 to 6 feet below grade in the approximate footprint of the former dry cleaner.

Due to the detections of chlorinated VOCs, vapor intrusion studies were completed in February and April 2019 within the four residential buildings. Vapor intrusion testing results identified chlorinated solvents, specifically PCE and TCE, within both sub-slab and indoor air samples in Buildings 1 and A. Based on guidance from the New York State Department of Health (NYSDOH), the concentrations of these solvents required mitigation in Building A on 65 Lake Avenue and Building 1 on 67 Lake Avenue. Mitigation was not required in Building B or Building C. As a result, sub-slab depressurization (SSD) systems were installed within Building A and Building 1 in November and December 2019 to mitigate vapor intrusion.

2.2 Summary of BCP Remedial Investigation

The remedial investigation (RI) scope of work included investigation for potential contamination in fill, native soils, groundwater, and soil vapor at the Site as well as in sub-slab vapor and indoor air in residences immediately south of the Site and in soil vapor and groundwater at a nearby property to the east (1 Franklin Street).

The scope of work for the on-site investigation included completion of 13 soil borings, nine of which were completed as permanent monitoring wells and one of which was utilized for soil vapor sampling, as well as the collection of nine surface soil samples. Subsurface soil sampling included locations within the estimated footprint of the former dry cleaning building and in the upgradient, cross gradient and downgradient directions. The wells are utilized for measurement of groundwater depth and collection of groundwater samples using low-flow sampling techniques. The permanent monitoring well

locations, as shown in the site plan included **Figure 4,** were selected based on data from previous investigations and to evaluate plume migration in the overburden.

Off Site sample locations included one soil boring, which was subsequently completed as a temporary groundwater monitoring well, and one soil vapor sampling location. The scope of work for the off-Site investigation also included vapor intrusion assessments in the two apartment buildings located at 69 Lake Avenue. The assessments will be completed per NYSDOH guidance contingent upon site access from the property owner. To date, access to the property has not been granted.

In total, the 2020-2021 remedial investigation included:

- nine (9) surface soil samples designated as SS1 through SS9,
- 13 soil borings from ground surface to the top of bedrock designated as SB101 through SB112 and TW1,
- nine (9) groundwater monitoring wells designated as MW1 through MW9,
- one (1) temporary well designated as TW1, and
- two (2) soil vapor samples designated as VP1 and VP2.

Sample analytical results are compared to SCOs for protection of groundwater (for PCE, TCE, DCE, and vinyl chloride only) and restricted residential use (for all other compounds) under the BCP cleanup Track 2. Concentrations of SVOCs, metals, pesticides, herbicides, polychlorinated biphenyls (PCBs), and cyanide in surface and subsurface soil samples did not exceed 6 NYCRR Part 375 SCOs for restricted residential use and concentrations of per- and polyfluoroalkyl substances (PFAS) did not exceed NYSDEC guidance values. Concentrations of VOCs in surface soil samples did not exceed 6 NYCRR Part 375 protection of groundwater or restricted residential SCOs and in subsurface soil only one sample, located in the source area at a depth of 4.5 to 5.5 feet, exceeded the protection of groundwater SCO for PCE.

Groundwater monitoring events were completed on August 10-12, 2022 and August 31, 2021. Concentrations of one or more chlorinated VOCs exceeded NYS TOGS 1.1.1 groundwater standards in MW1, MW2, MW3, and MW5 during one or both sampling events, and concentrations of sodium exceeded NYS TOGS 1.1.1 standards in all monitoring wells. Groundwater VOC results are summarized in **Figure 6**. The results indicate that the groundwater VOC plume has migrated down gradient from the source area in a westerly direction. The plume appears to be stable and there is no evidence of vertical migration into bedrock or off-Site migration.

2.3 Summary of 2022-2023 Investigations

Three additional investigations were completed in 2022-2023. The objectives of the investigations were to define the limits of the proposed soil excavation and to collect samples for laboratory analysis for landfill approval and calculation of chemical oxidant dosing. The investigations were completed over three mobilizations. The need for the additional data was identified in the Remedial Investigation/Alternatives Analysis (RI/AA) Report for the selected remedy that includes source area soil excavation and *in situ* chemical oxidation (ISCO). Sample locations are described in **Table 2**. Air monitoring was conducted during all intrusive Site activities in accordance with the approved Community Air Monitoring Plan (CAMP) submitted as part of the Remedial Investigation Work Plan (RIWP). The air monitoring data is included in **Appendix A**.

2.3.1 Source Area Delineation

Seven (7) soil borings designated as SB201 through SB207 were completed with a Geoprobe on March 2, 2022 and June 20, 2022. Soil samples were collected in five-foot intervals to a maxiumum depth of 15 feet below ground surface (bgs). Soils were screened with a calibrated organic vapor meter (OVM) equipped with a photoionization detector (PID) and characterized by a Field Geologist. Screening results and soil descriptions were recorded on **Soil Boring Logs**, included in **Appendix B**. Two samples from each boring, one from the shallow fill material and another from the clay layer, were submitted to Eurofins TestAmerica Buffalo in Amherst, New York for analysis of Target Compound List (TCL) VOCs by EPA Method 8260. Laboratory analytical results are summarized in **Table 3** and shown in **Figure 7** and the laboratory analytical reports are included in **Appendix C**.

Consistent with results of the RI, shallow soils to approximately 5 to 6 feet below grade consisted of sandy silt (fill material) underlain by clay and silt. Sand was found at a depth of 4 to 5 feet near the underground utilities that service the apartment buildings. It is likely that this sand layer is backfill used as bedding for the utility lines. Concentrations of one or more VOCs exceeded SCOs at all locations with the exception of SB206, and concentrations were most elevated at SB204 located just outside the assumed footprint of the former dry cleaner. Concentrations generally diminished with depth and with distance down gradient from the source area. Vinyl chloride was detected in only one sample, SB204, from 5.5 to 6 feet bgs.

2.3.2 BCP Cleanup Track 2 Sampling

Five (5) soil borings identified as SB113 through SB117 were completed with a Geoprobe on June 20, 2022. Soil samples were collected in five-foot intervals to a maximum depth of 15 feet bgs. Soils were screened with a calibrated OVM equipped with a PID and characterized by a Field Geologist. Screening results and soil descriptions were recorded on **Soil Boring Logs**, included in **Appendix B**. Two to three samples from each boring were submitted to Eurofins Buffalo in Amherst, New York for analysis of the full suite of BCP contaminants:

- TCL VOCs – EPA Method 8260C
- TCL SVOCs – EPA Method 8270D
- Metals – EPA Methods 6010D, 6020B, 7471B, 7196A
- PCBs – EPA Method 8082A
- Pesticides and herbicides – EPA Methods 8151A, 8081B
- Cyanide – EPA Method 9012B
- PFAS – EPA Method 537M

Laboratory analytical results are summarized in **Tables 3-9** and shown in **Figure 8**, and the laboratory analytical reports are included in **Appendix C**.

Where detected, concentrations of VOCs, SVOCs, PCBs, pesticides, herbicides, cyanide, and PFAS did not exceed the applicable SCOs. Metals were detected at generally low concentrations at each location, with concentrations of barium and manganese exceeding restricted residential SCOs at SB116 from 0.5 to 2.5 feet bgs. As described in Section 2.3.4 below, the manganese results are biased high due to detections in the laboratory blank. Arsenic was detected at 18.2 mg/kg at SB117 from 0.5

to 3 feet bgs, slightly exceeding the SCO of 16 mg/kg. In the other samples from SB113 through SB117, arsenic ranged from 2.3 to 14 mg/kg. The concentrations are consistent with naturally occurring levels in soil as documented in studies published by the United States Geological Survey (USGS) and the NYSDEC and NYSDOH:

Table 2.1. Background Metals Concentrations

Metal	Arithmetic Mean Concentration[1] (mg/kg)	98th Percentile Habitat Data Set[2] (mg/kg)
Arsenic	7.4	16.7
Barium	420	278
Chromium	52	24.3
Nickel	18	37
Zinc	52	157

[1] *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States*, 1984, USGS.
[2] *Concentrations of Selected Analytes in Rural New York State Surface Soils: A Summary Report on the Statewide Rural Surface Soil Survey*, October 2006, NYSDEC and NYSDOH.

2.3.3 Landfill Precharacterization and Oxidant Demand

One sample location designated as LF1/LF2 was completed in the source area as shown in **Figure 7** in order to collect soil samples from the clay layer for landfill disposal approval. The samples were submitted to Eurofins Buffalo in Amherst, New York for analysis of TCL VOCs, pH, total petroleum hydrocarbons (TPH), flash point, reactive cyanide and sulfide, Toxicity Characteristic Leaching Procedure (TCLP) volatiles, TCLP semi-volatiles, TCLP metals, PCBs, herbicides and pesticides. Samples were also collected from this boring at depths of 8 feet bgs in the clay layer and 12-13 feet bgs in the sand and gravel for laboratory analysis of Permanganate Natural Oxidant Demand (PNOD) to calculate chemical oxidant dosing. The PNOD samples were analyzed per ASTM D7262-10(2016)e1 by Carus Corporation of LaSalle, IL. Laboratory detections are summarized in **Table 10** and the laboratory analytical reports are included in **Appendix C**.

2.3.4 Hazardous Soil Delineation Sampling

Three soil boring locations designated as DS1/LF3, DS2/LF4, and DS3/LF5 were completed on June 28, 2023 as shown in **Figure 7** in order to further delineate hazardous soils and for additional landfill pre-profiling. The samples were submitted to Eurofins Buffalo in Amherst, New York for analysis of TCL VOCs, pH, flash point, Toxicity Characteristic Leaching Procedure (TCLP) volatiles, and TCLP metals. As required by NYSDEC in response to the contained-in determination request, samples analyzed for TCL VOCs were collected from 0 to 3 feet bgs and samples analyzed for landfill pre-characterization parameters were collected from 0 to 7 feet bgs. Concentrations of VOCs were below the applicable SCOs. Laboratory detections are summarized in **Tables 3** and **10** and the laboratory analytical reports are included in **Appendix C**.

2.3.5 Data Usability

Data validation of the samples collected for BCP Track 2 sampling was completed by Jodi

Zimmerman of Vali-Data of WNY. The data usability summary report (DUSR) is included as **Appendix D**. The data was found acceptable for use with the following qualifications:

- **SB113 (15-18), SB114 (6-10), SB114 (12-16), SB115 (6-8), SB206 (6), SB207 (6-8):** select VOCs should be qualified as estimated due to internal standard criteria outside quality control (QC) limits (low) or surrogate spike recoveries outside QC limits (high, low)
- **SB113 (15-18), SB114 (6-10), SB114 (12-16), SB115 (6-8), SB206 (6), SB207 (6-8):** 2-butanone and acetone were detected in a sample blank and should be qualified
- **Equipment Blank:** phenol should be qualified as estimated due to surrogate spike recovery outside QC limits (low)
- SVOC TICs should be qualified as estimated due to detections above quantitation limits in the method blanks
- **SB113 (1-5):** Benzo(k)fluoranthene and Fluoranthene should be qualified as estimated due to matrix spike (MS)/matrix spike duplicate (MSD) criteria outside QC limits
- **SB116 (6-7.5):** Beta-BHC should be qualified as estimated due to Relative Percent Difference (RPD) outside QC limits
- **SB116 (0.5-2.5), SB117 (0.5-3):** 4,4'-DDD should be qualified as undetected at the reporting limit
- **SB113 (1-5):** Aroclor 1016 should be qualified as estimated due to RPD outside QC limits
- **SB116 (0.5-2.5)**: PFHpA and PFNA should be qualified as estimated high as they were detected above the reporting limit but below 10 times the blank concentration
- **SB113 through SB117, all samples:** manganese should be qualified as estimated high due to detection in the laboratory blanks
- **Equipment Blank:** manganese should be qualified as undetected at the reporting limit due to detection in the laboratory blanks, and select metals should be qualified as estimated due to calibration criteria outside QC limits
- **SB113 (1-5):** barium and lead should be qualified as estimated due to MS/MSD outside QC limits
- **All samples**: cyanide should be qualified as estimated due to percent recovery of laboratory control sample (LCS) samples outside QC limits (low)

The following data was found unacceptable for use:

- **SB115 (0-3), SB116 (6-7.5):** cyanide should be considered unusable due to 0% percent recovery in MS
- **Equipment Blank**: hexavalent chromium was analyzed outside hold time

Field duplicate precision was found to be acceptable for use with the following qualifications:

- Tetrachloroethene was detected in SB116 (6-7.5) but was not detected in the field duplicate.
- Beta-BHC was detected in SB116 (6-7.5) but was not detected in the field duplicate.

2.4 Conceptual Site Model

2.4.1 Soil Conditions

The results of the RI and subsequent investigations identified an area of shallow soil VOC contamination above the water table within and near the footprint of the former dry cleaner. This "source area" includes soil and fill material from ground surface to a depth of approximately 6 feet below grade. Below the shallow soils are 6 to 7 feet of laminated silt and clay that has impeded the downward migration of VOCs. Soil samples collected above the top of bedrock in the groundwater plume were non-detect for VOCs and dense non-aqueous phase liquid (DNAPL) was not found. Soil cross sections are included in **Figures 9-11**.

2.4.2 Groundwater Conditions

The groundwater plume is well defined with a two order of magnitude range in VOC concentrations and numerous non-detect samples. The 5 µg/L standard for PCE was exceeded in four monitoring wells, ranging from 15 µg/L in MW3 to 3,200 µg/L in MW2 in August 2021. The most elevated concentrations of the five target compounds were detected in MW2 located in the source area. Groundwater VOCs were non-detect in four wells located downgradient of the source area (MW4, MW6, MW7 and MW8) and the upgradient off-site well TW1. Two chlorinated VOCs were detected below standards from MW9 located on the leading edge of the groundwater plume. The footprint of the plume and magnitude of the VOC concentrations are similar in the 2020 and 2021 sampling events.

PCE was also detected in two groundwater samples collected from sumps in Building A. Based on the elevation of the sumps and the observed water level of 7.12 feet below grade, water in the sumps is being recovered from above the laminated silt and clay layer.

The plume has migrated down gradient from the source area in a westerly direction in the sand and gravel soils located below the silt and clay layer. In the groundwater plume the sand and gravel soils are found from approximately 8 feet to the assumed bedrock surface at a depth of 18 to 20 feet. Currently the plume appears to be stable and there is no evidence of vertical migration into bedrock or off-site migration.

The chemical nature of the plume has changed over time due to the reductive dechlorination of PCE to TCE, DCE, and vinyl chloride by bacteria under anaerobic conditions. The ratios of the chlorinated VOCs are similar in the source area well and down gradient plume well, which suggests that reductive dechlorination is inhibited, likely due to depletion and/or absence of electron donor. The rate of biodegradation of the VOC plume is assumed to be slow. These data indicates that the plume will persist in the absence of remediation.

2.4.3 Soil Vapor Conditions

Chlorinated VOCs have been detected in indoor air and vapor mitigation systems are operating in Buildings 1 and A. These buildings are located in close proximity to the source area and groundwater plume. Based on the findings of the RI, shallow soils in the source area and the groundwater plume are a source of vapor contamination to indoor air in the on-site buildings. Underground utilities

installed through the source area to service Buildings A, B and C, and backfill material at the Site are considered preferential pathways for vapor migration as they provide a permeable pathway above the water table from the contaminated soils to the buildings. Given that these underground utility lines do not extend beyond the on-site buildings and the limited extents of the soil and groundwater plumes as defined by samples collected at the down gradient property boundary, preferential pathways for vapor migration to off-site properties, including 69 Lake Avenue, have not been identified.

Results of the soil vapor sampling event completed on August 17, 2021 are discussed in detail in the RI/AA Report. Results of all VOCs detected were similar to background levels. TCE, DCE, and VC were not detected. PCE was detected at a concentration of 0.68 $\mu g/m^3$, below the background level of 2.5 $\mu g/m^3$.

2.5 Summary of Exposure Assessment

The following assessment has been completed in accordance with the New York State Department of Health Qualitative Human Health Exposure Assessment (Appendix 3B of DER-10). The purpose of the exposure assessment is to evaluate how people might be exposed to Site-related contaminants and to identify and characterize the potentially exposed population(s) now and under the reasonably anticipated future use of the Site. Routes of potential exposure include direct contact, ingestion, and/or inhalation of impacted media. Receptor populations include residents and on-site workers conducting remedial work or construction activities. The exposure pathway elements are summarized in Table 2.1 below:

Table 2.1. Qualitative Exposure Assessment Summary

Environmental Media & Exposure Route	Timing of Exposure	Human Exposure Assessment
Direct contact with subsurface soils	During remedial actions	Residents and Site workers may come into contact if intrusive work is completed at the Site.
Direct contact with groundwater	During remedial actions	Residents and Site workers may come into contact if intrusive work is completed at the Site.
Ingestion of groundwater	Current, during remedial actions	Contaminated water is not being used for drinking water as the area is served by public water supply. Residents or other people may come into contact if private wells are installed on the Property and used for potable or non-potable purposes (e.g. irrigation) or through contact with water discharged through the basement sump pumps.
Inhalation of air	Current, during remedial actions, post-remedy	Sub-slab depressurization systems have been installed in two on-site buildings to mitigate exposure to residents. Pending approval of the property owner a soil vapor intrusion assessment will be completed on the downgradient adjacent property.

Exposure Pathway #1 –Soil

Results of the RI indicated that target contaminant concentrations in surface soil are not of concern. The presumed source of contamination to subsurface soils is the spillage or improper disposal of dry cleaning wastes. Potentially exposed populations include those who may come into contact with subsurface soils (defined generally as more than 6 inches below grade) during intrusive work, such as remedial activities and construction activities. The primary exposure route is through direct contact with soils and subsequent dermal absorption or ingestion. As the current and anticipated future Site use is for residential apartment buildings, exposure to current and future residents can be minimized through restrictions prohibiting vegetable gardening, single-family housing, and active recreational uses. During remedial activities, Site workers will adhere to the requirements of the HASP with regard to the use of PPE and decontamination of workers and equipment. Work areas will be fenced off to restrict access to others.

Exposure Pathway #2 –Water

The assumed source of contamination to groundwater is the spillage or improper disposal of dry cleaning wastes which has contaminated soils in the vicinity of the former dry cleaner. These soils serve as an ongoing source of contamination to groundwater. There is no surface water present at the Site; Cayuga Creek is located approximately 200 feet to the southwest. There is no evidence of offsite groundwater impacts, and target chlorinated VOC concentrations in downgradient monitoring wells MW4, MW7 and MW8 as well as the offsite temporary well TW1 were non-detect. Groundwater at the Site is not used for consumption as the area is served by a public water supply; however, impacted groundwater may be encountered by Site workers during intrusive work or groundwater sampling. Future residents or Site workers may come into contact if private wells are installed on the property and used for potable or non-potable purposes (e.g. irrigation). The potential routes of exposure include ingestion and direct contact leading to dermal absorption. During remedial activities and groundwater monitoring events, Site workers will adhere to the requirements of the HASP with regard to the use of PPE and decontamination of workers and equipment. Work areas will be fenced off to restrict access during intrusive work. Purge water removed from the monitoring wells during sampling and groundwater recovered by the sump pumps in Apartment Building A will be treated with carbon filtration prior to discharge.

Exposure Pathway #3 – Air

The likely source of contaminants to indoor air is impacted groundwater. The SSD systems currently operating in Building 1 and Building A mitigate potential exposure to current and future residents via inhalation of indoor air, which is the primary route of potential exposure. Intrusive remedial work will be completed in accordance with the approved CAMP as appropriate to minimize any short-term inhalation risks to both residents and Site workers. Results of the soil vapor intrusion assessment did not identify any impact to outdoor air. Air discharge points from the remediation systems are or will be located at the appropriate distances away from potential receptors as described in Section 4.3. A vapor intrusion assessment for the offsite downgradient property at 69 Lake Avenue will be completed pending access from the property owner. Results from soil vapor samples collected from the onsite downgradient property boundary and from the offsite property to the east suggest that contamination of offsite air is not of concern.

Exposure Pathway #4 – Biota

The Site is located in a developed residential and commercial area and is predominately covered by apartment buildings and a paved parking lot which provides little to no wildlife habitat or food value. Therefore, no unacceptable ecological risks are reasonably anticipated.

3.0 REMEDIAL GOALS AND REMEDIAL ACTION OBJECTIVES

3.1 Remedial Goals

The overall remedial goals are to prevent migration of the groundwater plume and to remediate the source(s) of vapors to indoor air in protection of human health.

3.2 Remedial Action Objectives

RAOs for the remedy selection process are established from the generic SCG values for protection of groundwater or restricted residential use applicable to the contaminants identified in the RI. In consideration of potential human exposures and environmental impacts resulting from contamination identified in groundwater, RAOs are established from the generic NYS Water Quality Standard or Guidance Value identified in TOGS 1.1.1.

The RAOs for the Site include:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil
- Prevent inhalation exposure to contaminants volatilizing from soil

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater

RAOs for Environmental Protection

- Restore the groundwater aquifer to pre-release conditions, to the extent practicable
- Remove the source of groundwater contamination

Soil vapor

RAOs for Public Health Protection

- Mitigate impacts to public health from existing, or the potential for, soil vapor intrusion into buildings

Surface water and sediment are not impacted at the Site and therefore RAOs are not applicable.

Cleanup Track 2 based on restricted residential use is selected for the Site using generic SCOs for both protection of groundwater and restricted residential use. This track fully satisfies the RAOs and is fully protective of human health and the environment.

4.0 PROPOSED REMEDY

A combined remedy of shallow soil excavation in the source area, soil vapor extraction (SVE) near the underground utilities in the source area, groundwater remediation with ISCO and the continued operation of the SSD systems is the recommended remedial measure as described below. This approach will remove subsurface contamination from the Site and reduce human exposure from vapor migration in the shortest time frame while meeting the Remedial Action Objectives and BCP Cleanup Track 2 criteria. A figure showing all elements of the proposed remedy is included as **Figure 12**. The entire groundwater plume and all VOC contaminated soils at the Site are addressed with removal or active remediation. Based on volume calculations in the plume, it is estimated that 75% to 80% of the source of VOCs to indoor air in the on-site buildings will be eliminated following excavation of shallow soils and the initial permanganate injection event. With the SVE system operating and groundwater VOCs reduced to below cleanup standards with the follow up permanganate injection event(s), it is estimated that over 95% of the source of VOCs to indoor air will be eliminated and the pathways for vapors to enter the buildings removed or controlled.

4.1 Pre-Remediation Tasks and Site Preparation

The planned remedial work will be summarized in a fact sheet prepared by NYSDEC. The fact sheet will be made available to the public and the RAWP will be made available for public review and comment. Paper copies will be mailed to those who have requested it.

An updated Health and Safety Plan (HASP) is included in **Appendix E**. METI will be responsible for the health and safety of its authorized Site workers. In addition, any subcontractors will provide their own HASP(s).

Prior to beginning any intrusive activities, the locations of underground utilities will be marked by UDig NY. In addition, a utility locate survey was completed by METI during the 2022 investigation. Utility locations are shown in the site plan included as **Figure 4**. Prior to injection, EPA Form 7520-16 will be submitted to USEPA Region 2 Underground Injection Control (UIC) for review.

Where applicable, the procedures detailed in Section 3.3 through 3.8 of the Remedial Investigation Work Plan addressing air monitoring, waste management, equipment and personnel decontamination, and disposal of contaminated materials will be followed during implementation of the proposed remedy. Per the "contained-in" determination granted by NYSDEC on August 15, 2023, groundwater and the majority of the impacted soil will be managed as solid wastes; approximately 3 cubic yards of soil from 0 to 3 feet bgs in the vicinity of SB204 will be managed as hazardous waste. Temporary fencing and/or construction cones will restrict access to authorized Site workers during remedial activities. At the end of each work day, the excavation will be backfilled to the extent feasible and site access to the active work area will remain restricted. A CAMP will be implemented during all intrusive work. The CAMP is included in **Appendix F**. The contained-in determination approval letter and related correspondence is included in **Appendix G**.

4.2 Shallow Soil Excavation

As described in the RI/AA Report, once excavated and replaced with clean backfill, a significant source of VOCs to groundwater and soil vapor will be removed from the Site, providing a significant

short-term impact. Excavation will result in the removal of approximately 8.5 pounds of VOCs and the attainment of SCOs for the protection of groundwater for the target chlorinated VOCs in soil.

4.2.1 Proposed Excavation Extents

An area of shallow soil contamination above the water table has been identified in the former footprint of the dry cleaner. The overburden soils at the Site are found in three distinct depth intervals as described in Section 1.3.2. The most impacted interval is from ground surface to a depth of approximately 5-7 feet. As described in Section 2.4 this is considered the source area and is an ongoing source of chlorinated VOCs to groundwater and indoor air. The deepest interval consisting of sand and gravel soils to the assumed bedrock surface does not meet criteria for excavation as soil samples measured non-detect for VOCs and DNAPL was not found. This depth interval is located in the groundwater plume and will be more effectively treated *in situ*.

The estimated excavation area totals approximately 2,850 square feet, with an area of 2,070 square feet being excavated to a depth of 7 feet bgs (Excavation Area A) and an area of 780 square feet being excavated to a depth of 5 feet bgs (Excavation Area B) as shown in **Figure 13**. A total volume of 680 cubic yards (1,090 tons) will be excavated.

4.2.2 Excavation Methods

All excavation work will be supervised by a New York State Professional Geologist under the direct oversight of a New York State Professional Engineer. Excavated soils may be screened with an OVM; however, PID readings of previously collected samples in the source area were zero or negligible and therefore PID readings will not be used as the basis for segregating clean soils and soils for disposal. Non-hazardous soils will be excavated and loaded directly on to trucks (no staging) for off-site disposal at a permitted disposal facility. Soils from ground surface to 3 bgs in a 25 square foot area surrounding SB204 will be containerized in DOT rated 55-gallon drums or a roll off dumpster, and managed as hazardous waste for off Site disposal. Disposal documentation will be provided to NYSDEC upon receipt. Because the deepest target excavation depth extends to at or just below the groundwater interface, dewatering and water treatment will not be required. In the event that significant precipitation accumulates in the excavation and requires removal, a sump pump will be utilized to pump water from the excavation to a temporary frac tank and then transported off Site to a permitted disposal facility.

Erosion and sediment transport are expected to be insignificant due to the lack of onsite surface water, flat topography, and implementation of fugitive dust and particulate monitoring according to the CAMP. Any water applied to the excavation equipment or pavement area will be directed to flow into the excavation.

Installation of horizontal SVE wells will be completed as the excavation is backfilled as described in Section 4.3. Clean backfill material and topsoil will be transported from an off-site location, in compliance with 6 NYCRR 375-6.7(d) regulations for importing backfill and soil cover as described in Section 5.4(e) of DER-10. Sampling of imported backfill will be completed at a frequency of at least one sample for every source and one sample per 50 cubic yards of soil or sand backfill in accordance with Table 5.4(e)10 of DER-10. Gravel, rock, or stone backfill consisting of virgin material from a permitted mine or quarry may be imported without chemical testing provided that the backfill contains

less than 10% by weight material which would pass through a size 80 sieve. Documentation of the source of the fill will be provided to NYSDEC for approval before it is used on site. Once transported to the Site, the backfill will be compacted to prevent settling and the surface will be finished with asphalt and/or topsoil based on location.

4.2.3 Post-Excavation Sampling and Documentation

Confirmation soil samples will be collected from sidewalls of the excavation prior to backfilling in accordance with DER-10 Section 5.4(b). Because the target ISCO injection interval extends up to the floor of the excavation footprint, samples will not be collected from the floor of the excavation. However, samples will be collected from near the bottom of each sidewall at a frequency of one sample for every 30 linear feet of sidewall. A total of 11 samples will be collected, screened with an OVM, and submitted for laboratory analysis of TCL VOCs by EPA Method 8260. The laboratory analytical data package will be validated by a qualified third-party data validator.

Proposed locations of confirmation soil samples are shown on **Figure 13**. Sample locations are biased towards areas and depths of highest contamination identified during previous investigations.

4.3 Soil Vapor Extraction (SVE)

The locations of the underground gas and water utilities in front of Building A and through the center of the parking lot present a significant logistical challenge to soil excavation. The sanitary sewer is also assumed to be located within this utility corridor. The more permeable backfill surrounding the utilities, as shown in **Figure 10**, likely serves as a preferential pathway for vapors into Buildings 1 and A. Contamination in the backfill and soils in the vicinity of the utility corridor will be addressed with SVE.

An SVE system will treat residual concentrations in the unsaturated zone and utility corridors that are inaccessible for excavation. Horizontal screens will provide greater surface area in contact with contaminated soil, allowing for more effective treatment over a relatively large area and resulting in rapid decreases in soil gas contaminant concentrations as well as back diffusion of sorbed contaminants out of the soil matrix. Use of horizontal wells minimizes the "dead zones" that may occur between vertical wells.

Three 2-inch inner diameter (ID) horizontal wells consisting of 0.030-inch slot well screen will be installed at a depth of 4 to 5 feet bgs along the western and northern boundaries of the excavation as shown in **Figure 13**. The surrounding area will be backfilled with washed peastone to bed the screen, with a minimum of 6 inches of gravel installed under and around the screen. Geotextile fabric will be installed on top of the peastone, and the remaining area will be backfilled in the same manner as the rest of the remedial excavation as described in Section 4.2.2. Each well will be connected to solid 2-inch ID PVC pipe extending towards a manifold for connection to a regenerative blower. The manifold will include a ball valve, vacuum gauge, and air sample port for each well.

A GAST 5125-2 regenerative blower or equivalent blower capable of operating at approximately 120 SCFM at 30-40 inches of water column (in. WC) will be utilized to extract vapors. The blower will be equipped with an inlet filter, pre- and post-filter vacuum gauges, an air dilution valve, post-blower pressure gauge and an air sample port. A vapor-liquid separator will be installed in line before the

blower; however, it is anticipated that liquid recovery will be low due to asphalt cover over the SVE wells and the depth of the water table. If water is removed from the separator it will either be contained in a DOT rated drum for off site disposal or treated with carbon filtration and discharged onsite with NYSDEC approval. The equipment will be housed in a remediation shed located outside of Building 1. The system effluent will discharge to the atmosphere at least 10 feet above ground level, 10 feet away from any opening that is less than 2 feet below the exhaust point, 12 inches above the roof of any adjacent building, and 10 feet from any adjacent buildings, HVAC intakes, or supply registers. The remediation shed will be insulated to minimize noise and sound attenuating hoods will be installed on all vents. A process and instrumentation diagram (P&ID) is included as **Figure 14**, and blower specifications and SVE design calculations are attached in **Appendix H**.

It is expected that the SVE system will be activated shortly following the first ISCO injection event and will operate for one year or longer. The system will not be deactivated without prior approval from NYSDEC. Deactivation will be proposed when asymptotic low-level VOC concentrations are attained in the system effluent.

System checks will be completed weekly for the first month of operation and on a monthly basis thereafter. Within 30 days of system activation, an air sample will be collected from the system effluent and submitted for laboratory analysis of TCL VOCs by EPA Method TO-15. If emission rates of any High Toxicity Air Contaminant (HTAC) listed in 6 NYCRR Part 212-2.2 Table 2 exceed 0.1 lbs./hour or if the annual total mass emission limit is exceeded for any HTAC, vapor phase carbon filtration will be added. Projected HTAC emission rates are summarized in Table 4.1 below. Contaminant concentrations are assumed equal to the highest concentration recorded in sub-slab vapor samples collected from each apartment, and an air flow rate of 120 SCFM is assumed.

Table 4.1. Projected HTAC Emission Rates

Contaminant	Concentration ($\mu g/m^3$)	Emission Rate (lb/hr)	Emission Limit (lb/hr)	Emission Rate (lb/yr)	Emission Limit (lb/yr)
Benzene	6.7	0.000	0.011	0.026	100
PCE	3.6	0.000	0.1	0.014	1000
TCE	66	0.000	0.057	0.260	500
Carbon tetrachloride	0.88	0.000	0.011	0.003	100
1,2-dichloroethane	2.1	0.000	0.011	0.008	100

Air samples will continue to be collected and submitted for laboratory analysis of TCL VOCs on a quarterly basis while the system is operational.

4.4 *In Situ* Chemical Oxidation (ISCO)

The groundwater plume will be remediated using ISCO technology, which is effective at degrading soluble phase chlorinated VOCs, including vinyl chloride.

4.4.1 Background and Applicability

Major factors that will determine the effectiveness of the ISCO application include reaction kinetics, which are influenced by several variables including pH, contaminant concentrations, catalysts, reaction byproducts, natural organic matter and oxidant scavengers, and delivery technique. The selected oxidant, potassium permanganate, is a strong oxidizing agent that is applicable under a wide range of environmental conditions and tends to persist in the subsurface, allowing for more contaminant contact and for both advection and diffusion processes to contribute to its distribution in the subsurface.

Strongly reducing conditions generally exert higher oxidant demand, increasing the design oxidant dosing. Groundwater quality data collected during the August 2020 and August 2021 sampling events included as Appendix E of the RI/AA Report indicates that subsurface conditions within the treatment area are favorable for ISCO, ranging from slightly reducing to slightly oxidative with neutral pH:

Table 4.2. Groundwater Quality Data Summary

Sample Location	ORP (mV)	pH (SU)
MW1	96.9 - 149.6	6.87 – 6.94
MW2	(-0.8) - 80.1	6.97 - 6.98
MW3	(-69.8) – (-23.0)	7.24 - 7.28
MW5	99.9 - 111.8	7.07 – 7.19

ISCO applications can alter subsurface geochemistry, resulting in the mobilization of metals from the soil matrix. However, metals mobilization primarily occurs within the treatment zone with concentrations tending to attenuate over time. Total and dissolved phase metals concentrations in soil and groundwater at the Site are generally low, with only sodium in groundwater exceeding the NYSDEC TOGS 1.1.1 Guidance Value. Highly toxic metals, including hexavalent chromium, mercury, lead, and arsenic were not detected in groundwater samples collected during the RI. With the exception of one shallow soil sample with arsenic slightly above the SCO, these metals were not detected or were detected at concentrations below the applicable SCO in soil. Refer to Tables 9 and 16 of the RI/AA Report for laboratory analytical data.

As detailed in Section 2.3.2, soil samples were collected from 8-9 feet bgs and from 10-11 feet bgs in the target treatment area and analyzed for PNOD. Results indicated low demand in the deeper sample and moderate demand in the shallower clay sample, with PNOD concentrations ranging from 4.2 to 5.3 g/kg and from 11.3 to 13.2 g/kg in the respective samples. Results below 20 g/kg are considered feasible for permanganate ISCO.

4.4.2 Injection Design

Transport and degradation of permanganate during the injection period and for a short time after injection into the subsurface was modeled using the Conceptual Design for ISCO (CDISCO) design tool developed by the Environmental Security Technology Certification Program (ESTCP). The model simulates advective-dispersive transport of permanganate away from a central injection well represented as flow through a series of continuously stirred tank reactors. CDISCO utilizes site-

specific aquifer characteristics (porosity, hydraulic conductivity, injection interval, NOD, contaminant concentrations, etc.), injection parameters (injection flow rate, duration, oxidant concentration), and target conditions (minimum oxidant concentration and duration) to evaluate the effective radius of influence (ROI) of a single injection point and the required spacing of injection points within the treatment zone. Although the model cannot account for the daughter products of PCE, a contaminant retardation factor is used to approximate total contaminant mass present. A detailed description of the model is included as **Appendix I**. User-specified inputs are listed below:

Table 4.3. CDISCO Model Input Parameters

Input Parameter	Value	Units
Model Set Up		
Modeling Duration	20	days
Time Step	1	day
Model Length	20	ft
Target # Days to Calculate ROI	2-15 **[2]**	days
Minimum Oxidant Concentration to Calculate ROI	50-300 **[150]**	mg/L
Hydrogeologic Characteristics		
Top of Injection Interval	6	ft bgs
Bottom of Injection Interval	16	ft bgs
Aquifer Thickness	10	ft
Thickness of Mobile Zone	2-8 **[5]**	ft
Porosity	0.35	L/L
Longitudinal Dispersivity	2.0	ft
Hydraulic Conductivity (k)	7.00	ft/day
Depth to Water Table	6.39	ft
Soil and NOD Characteristics		
Bulk Density	1.60	kg/L
Total NOD	4.2 – 5.3 **[4.5]**	g MnO_4/kg
Fraction Instantaneous	0.05-0.2 **[0.1]**	
2nd Order Slow NOD Consumption Rate	0.001 - 0.010 **[0.001]**	L/mmol-d
Oxidant Information		
Name of Oxidant	K MnO_4	
Molecular Weight	158.03	g/mol
Initial Oxidant Concentration	0	mg/L
Contaminant Information		
Name of Contaminant	PCE	
Molecular Weight	166	g/mol
Initial Contaminant Concentration	0.69	mg/L
Molar Ratio of Oxidant to Contaminant Consumed	1.33	mol/mol
Contaminant Retardation Factor	5	
Injection Parameters		
Injection Duration per Point	1	days
Contaminant Concentration	0	mMol/L
Oxidant Concentration	5,000-50,000 **[40,000]**	mg/L
Injection Rate for Direct Push Probe Injection		
Injection Rate	7	gpm/probe
Hours per Day Injected	4	hr/day
Injection Rate Used for Model and Design	1,570	gpd/probe
Injection Design Factor		
Injection ROI Overlap Factor	1.5	
Total Additional Injection Events Planned	1	event

1. Depth to Water = average of MW1, MW2, MW3, and MW5 during the 8/10/20 and 8/31/21 monitoring events
2. Initial contaminant concentration = average of MW1, MW2, MW3, and MW5 and associated duplicates during the 8/10/20 and 8/31/21 monitoring events
3. Injection Rate for sand/heterogeneous soil types <15 feet bgs
4. Yellow shaded parameters were varied for sensitivity analysis. Selected values are in bold.

Results show that the estimated ROI of a single injection point is approximately 12 feet. Using a design ROI of 12 feet, 14 points spaced throughout the treatment zone are required as shown in **Figure 15**. Actual ROI measured in the field may vary depending on soil permeability and background oxidant demand at each location and depth interval. The ISCO treatment zone covers the entire groundwater plume and the contaminated soils to the north and west of the excavation. Therefore, all locations with contaminated soil and/or groundwater samples are addressed with the remediation design.

A total of 2,725 pounds of potassium permanganate will be injected laterally at discrete depths into the subsurface via the 14 injection points. Each injection point will receive 580 gallons of a 4% solution divided into three discrete intervals. Although this volume represents only 5% of the treatment area pore volume, it is unlikely that the formation will accept additional volume, particularly in the shallow intervals of the injection points located in unpaved areas. To reduce the likelihood of surfacing and/or daylighting of oxidant, the deeper injection intervals will each receive 215 gallons of permanganate solution and the shallow interval in the clay layer will receive 150 gallons (approximately 25% of the total volume per point). A relatively low concentration of oxidant is appropriate given the lack of significant NAPL mass, the solubility of the contaminants, and the potential impacts of overdosing, which include the excess formation of manganese dioxide, mobilization of metals, and potential impacts to nearby Cayuga Creek.

4.4.3 Injection Methods

Permanganate injections will be completed through direct-push batch injections using a Geoprobe® and injection tooling to disperse the oxidant laterally into the formation. Direct push allows for injection points to be offset from one injection event to the next and for adjustments to injection locations based on observations in the field during the initial application. Direct push is appropriate given the relatively shallow extent of the contamination. Injection will be completed at discrete intervals using the "bottom-up" method.

Where excavation extends to 7 feet bgs (Excavation Area A), injection will be completed in the sand and gravel soils at approximately 16 and 13 feet below grade and in the clay layer at approximately 9 feet below grade. In all other areas, including those where excavation extends to 5 feet bgs, injection will be completed in the sand and gravel soils at approximately 15 and 11 feet below grade and in the clay layer at approximately 7 feet below grade, which is the approximate average depth to groundwater within the treatment zone. The total length of the injection interval is 7 feet within the footprint of Excavation Area A and 8 feet in all other areas. Treatment depths and intervals may be modified slightly based on Site conditions and the results of the remedial excavation to minimize loss of oxidant to the imported backfill.

The following injection parameters will be tracked and recorded at regular intervals during the injection:

- Injection pressure
- Injection flow rate
- Injectate volume/concentration

Health and safety measures will be undertaken per the HASP during injection. Engineering controls and appropriate PPE will be employed, particularly during handling and mixing of oxidants.

Groundwater samples will be collected from monitoring wells within and outside of the target treatment zone prior to injection and one, four, and ten months post-injection in conjunction with the proposed quarterly monitoring events described in Section 4.7. Additional monitoring events may be completed if necessary or if useful for design of a follow-up injection. Samples will be submitted for laboratory analysis as follows:

Table 4.4. ISCO Monitoring Parameters

Parameter(s)	Method	Baseline	During Injection	Post-Injection
Permanganate	SM 4500-$KMnO_4$			X
Color	N/A (Field)	X	X	X
pH	N/A (Field)	X	X	X
ORP	N/A (Field)	X	X	X
Specific Conductivity	N/A (Field)	X	X	X
TCL VOCs	8260	[a]		X
Chloride	300.0	X		X
Metals	6010C, 6020B, 7196A, 7470A	[a]		X

[a] Data collected during RI is considered indicative of baseline conditions.

A field sheet template is included as **Appendix J.**

4.4.4 Milestones, Metrics, and Endpoints

Sufficient distribution of permanganate throughout the target treatment area is considered the target endpoint for the first injection. Color change and/or a permanganate concentration of 150 mg/L or greater in MW2 and MW5 will demonstrate sufficient distribution in the subsurface. The basement sumps will also be visually monitored for color change at regular intervals pending access from the apartment tenants.

At least six months following the initial injection, a second injection event may be required. Multiple applications are preferred over single large applications as they allow for adequate time for passive diffusion of oxidant into the aquifer matrix and for the collection of post-injection monitoring data that can be used to refine the target area and oxidant dosing. The required number of injections will not exceed three events to achieve the maximum practical extent of contaminant reduction. The time required between injections is site-specific and will be informed by the post-injection monitoring data.

Following evaluation of the second injection event, the groundwater conditions will be monitored under the Groundwater Monitoring Plan.

4.5 Site Restoration

All areas of the Site that are disturbed during implementation of the remedial program will be restored to pre-remediation conditions with respect to topography, hydrology, and vegetation to the extent practical. If impacted during site work, asphalt will be repaired or replaced, and unpaved areas will be restored with topsoil and grass seed. Injection borings will be decommissioned by grouting in place with hydrated bentonite.

4.6 Institutional and Engineering Controls

The selected remedy for the Site will include the continued operation of the SVE system and the SSD systems in Buildings 1 and A as engineering controls. The systems will remain functional until the selected remedy is completed, and indoor air testing indicates that vapor intrusion is no longer occurring (for the SSD systems) or system effluent analytical results show asymptotic low-level recovery (for the SVE system). System operation and maintenance parameters will be the subject of a Site Management Plan (SMP) as described in Section 5.3. The systems will not be deactivated without prior approval from NYSDEC and NYSDOH. It is anticipated that the SVE system will operate for less than five years. Engineering controls also include a Groundwater Monitoring Plan for long-term monitoring of the groundwater plume using the network of nine groundwater monitoring wells.

Institutional controls will be in the form of an environmental easement as identified in ECL §71-3605. The easement will name the state, acting through the NYSDEC, as grantee and will contain a complete description of the use restrictions and engineering controls to which the property is subject. The easement will be enforceable in perpetuity, or until it is extinguished by the commissioner. 65 Lake Avenue LLC will ensure that the easement is recorded and indexed in Erie County.

4.7 Groundwater Monitoring

A groundwater monitoring program utilizing the existing network of nine monitoring wells will be implemented in order to assess the efficacy of all components of the remedial program in its entirety. Groundwater samples will be collected prior to beginning remediation activities and then on a quarterly basis beginning after the first ISCO injection event is completed. Monitoring may continue according to this schedule, or at a reduced frequency if appropriate and with NYSDEC approval, following attainment of the Certificate of Completion (COC).

During each monitoring event, static groundwater levels will be measured at each of the monitoring wells. Groundwater samples will then be collected using low flow sampling techniques. The wells will be purged and field measurements of pH, specific conductivity, temperature and turbidity will be recorded and monitored for stabilization prior to sampling. Per the "contained-in" determination from NYSDEC, purge water will not be managed as a hazardous waste and will be treated with carbon filtration prior to discharge onsite.

If insufficient groundwater is available, new dedicated disposable bailers may be used to collect the groundwater samples. Groundwater samples will be placed in pre-cleaned laboratory-provided sample bottles, labeled and preserved in accordance with USEPA SW-846 methodology, and transported under chain-of-custody to a NYSDOH ELAP certified analytical laboratory. The samples will be

analyzed for Target Compound List (TCL) VOCs by EPA Method 8260. A field sheet template is included in **Appendix J**.

At the conclusion of the groundwater monitoring program and with NYSDEC approval, the monitoring wells will be decommissioned in accordance with CP-43: *Commissioner's Policy on Groundwater Monitoring Well Decommissioning*. Well decommissioning records will be provided to NYSDEC.

5.0 DOCUMENTATION AND REPORTING

Documentation of all remedial activities will be completed by METI in accordance with Section 5.7 and 5.8 of DER-10 and submitted to NYSDEC in electronic format.

5.1 Field Oversight/Construction Monitoring

Daily reports during remedial activities will include the following information where applicable:

- Weather and Site conditions;
- Sampling locations and sample designations;
- Photodocumentation;
- Excavation locations and depths;
- Soil PID readings;
- Truck loads/estimated volumes of soil removed from the Site and backfill brought in to the Site;
- SVE well installation details;
- SVE system settings and operating parameters, including vacuum readings and valve settings;
- Injection locations and depths;
- Injection data (pressures, flow rates, volume/concentration);
- Groundwater quality data;
- Any deviations from the proposed scope of work (to be promptly communicated to NYSDEC).

Daily reports will be submitted to the NYSDEC project manager via email during active remedial action. A summary of the daily reports and CAMP data collected during remedial activities will be included with the Final Engineering Report (FER). A template of the daily field report form is included in **Appendix J**.

5.2 Groundwater Monitoring Reports

Periodic groundwater monitoring reports summarizing the progress of the remedial actions will be submitted on a semi-annual basis. The reports will include tabulated data summaries, data summary figures and groundwater elevation contour map(s), and a discussion and interpretation of results.

5.3 Site Management Plan

An SMP will be prepared to manage remaining contamination at the Site and the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required for the deed restriction at the Site. The SMP will be prepared in accordance with DER-10 and NYSDEC guidance. At a minimum, the SMP will include:

- Background and Site description;
- Summary of remedial investigations and remedial activities;
- Descriptions of ICs and ECs;

- Inspections and notifications;
- Contingency plans and response procedures;
- Site monitoring details;
- Operation and maintenance plans;
- Reporting schedule.

The SMP will be approved by NYSDEC prior to approval of the FER.

5.4 Final Engineering Report

All remedial actions undertaken at the Site will be documented in the FER. The FER will be prepared following the remedial excavation, ISCO injection, startup of the SVE system, and the first post-injection monitoring event. The FER will be certified by a New York State Professional Engineer and will include the following:

- Background and Site description;
- As-built drawings of the remediation areas;
- Documentation of imported fill and soil disposal;
- Laboratory analytical data packages and DUSR of confirmation soil samples;
- Tabulated data summaries;
- Photodocumentation of remedial activities;
- A description of any deviations from the RAWP and associated corrective measures.

6.0 PROJECT SCHEDULE

Excavation and SVE system installation activities are expected to be completed in August/September of 2023, with ISCO of the groundwater plume immediately following. The remedial work would be completed on an accelerated schedule of approximately two (2) weeks to minimize disturbance to the residents of the Site. With approval of the FER expected by the end of November 2023, it is anticipated that the COC would be issued before the end of 2023. Remedial work may continue during the subsequent year (post-COC) with a second ISCO injection event, operation of the SVE and implementation of the Groundwater Management Plan. The SSD systems will continue to operate during this time. An updated Project Schedule is included as **Table 11.** A figure showing all elements of the proposed remedy is provided as **Figure 12.**

7.0 REFERENCES

Matrix Environmental Technologies Inc. *Remedial Investigation/Alternatives Analysis Report*. January 14, 2022.

Matrix Environmental Technologies Inc. *Remedial Investigation Work Plan*. June 12, 2020.

Matrix Environmental Technologies Inc. *Sub-Slab Depressurization Systems Start-Up Report and Operation & Maintenance Plan*. February 16, 2022.

New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.

New York State Department of Environmental Conservation. *Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs*. January 2020.

New York State Department of Environmental Conservation and New York State Department of Health. *Concentrations of Selected Analytes in Rural New York State Surface Soils: A Summary Report on the Statewide Rural Surface Soil Survey*. October 2006.

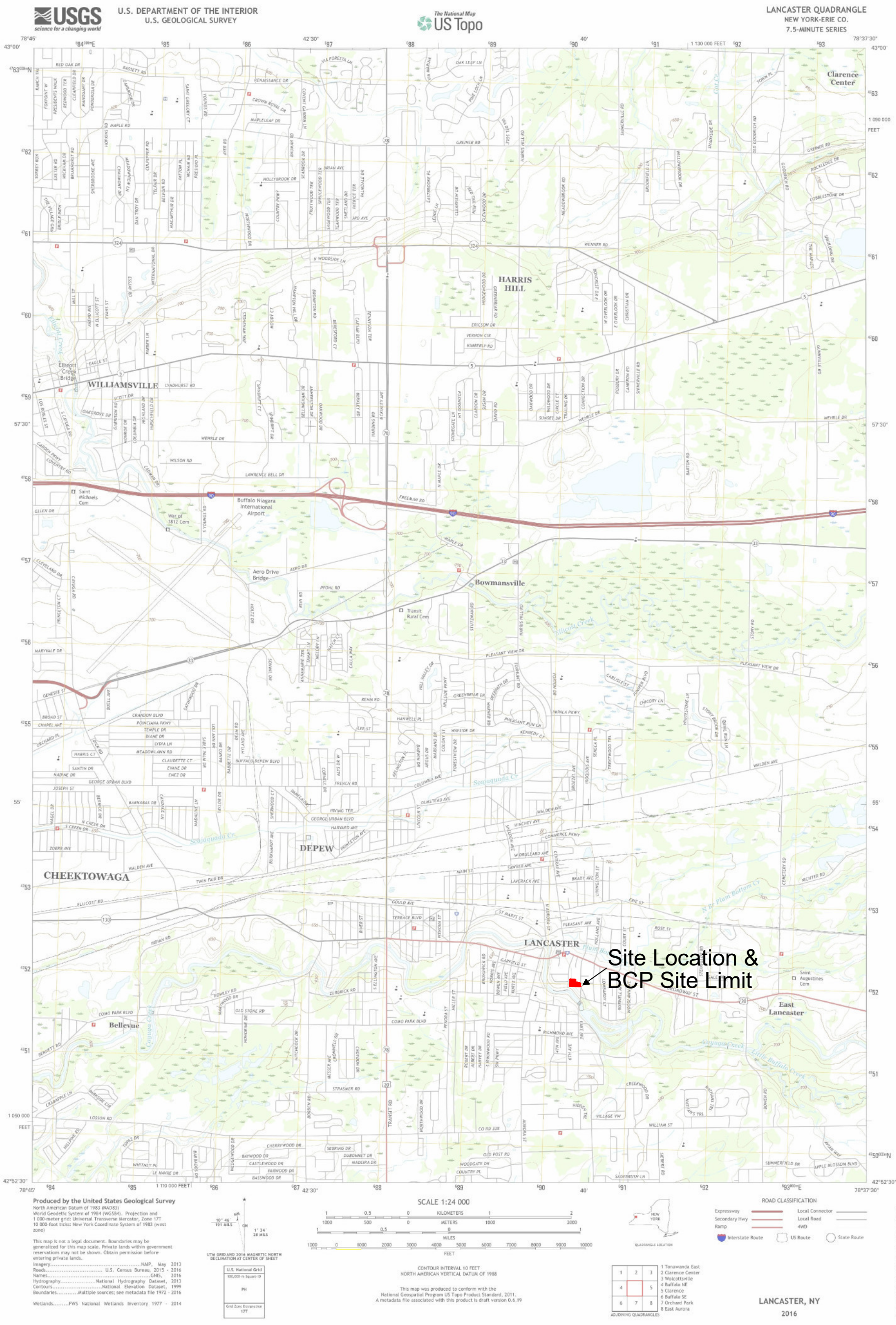
New York State Department of Health. *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. October 2006.

Shacklette, Hansford T. and Josephine G. Boerngen, U.S. Geological Survey. *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States*. 1984.

United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Erie County, New York*. December 1986.

FIGURES

FIGURE:	TITLE:	PROJECT NAME / LOCATION:	REVISION		PROJECT MGR:	PREPARED FOR:	PREPARED BY:
1	Site Location Map	Lakeside Village Apartments 65-67 Lake Avenue Lancaster, New York BCP Site No. C915344	BY	DATE	SLM	65 Lake Avenue LLC	MATRIX ENVIRONMENTAL TECHNOLOGIES INC. 3730 California Road P.O. Box 427 Orchard Park, NY 14127 p:716.662.0745 www.matrixbiotech.com
DATE: N/A			CMC	5/16/19	DESIGNED BY: CMC		
PROJECT NO.: 18-046			CMC	1/23/20	REVIEWED BY: MMW		
					DRAWN BY: CMC		
			SCALE IN FEET: AS NOTED 0				



30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

Notes:

1. Base maps adapted from Erie County Department of Environment Planning Office of GIS
2. Site boundaries correspond with tax boundaries for SBL #115.27-1-22.21 at 65 Lake Ave. and #115.27-1-23.11 at 67 Lake Ave.

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	1/23/20

SCALE IN FEET: NOT TO SCALE

0

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

BCP Site Limits

DATE: NA

PROJECT NO.: 18-046

FIGURE: 2

PREPARED BY:
MATRIX
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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	3/19/20

SCALE IN FEET: NOT TO SCALE
0

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
Aerial View
Site Plan

DATE: NA

PROJECT NO.: 18-046

FIGURE: 3

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

LEGEND

Monitoring Well Location

Building C

MW6

59 Lake Ave

MW9

MW1

MW5

UNDERGROUND ELECTRIC UTILITY

UNDERGROUND COMMUNICATIONS UTILITY

Building B

UNDERGROUND GAS UTILITY

UNDERGROUND WATER UTILITY

FORMER DRY CLEANER (APPROXIMATE)

67 Lake Ave

MW2

MW3

UNDERGROUND STORM SEWER

Lake Ave

MW7

Building A

Building 1

65 Lake Ave

MW4

MW8

BCP Site Limit

Concrete Berm

69 Lake Ave

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION	
BY	DATE
CMC	10/14/22

SCALE IN FEET: 1" = 20'

0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

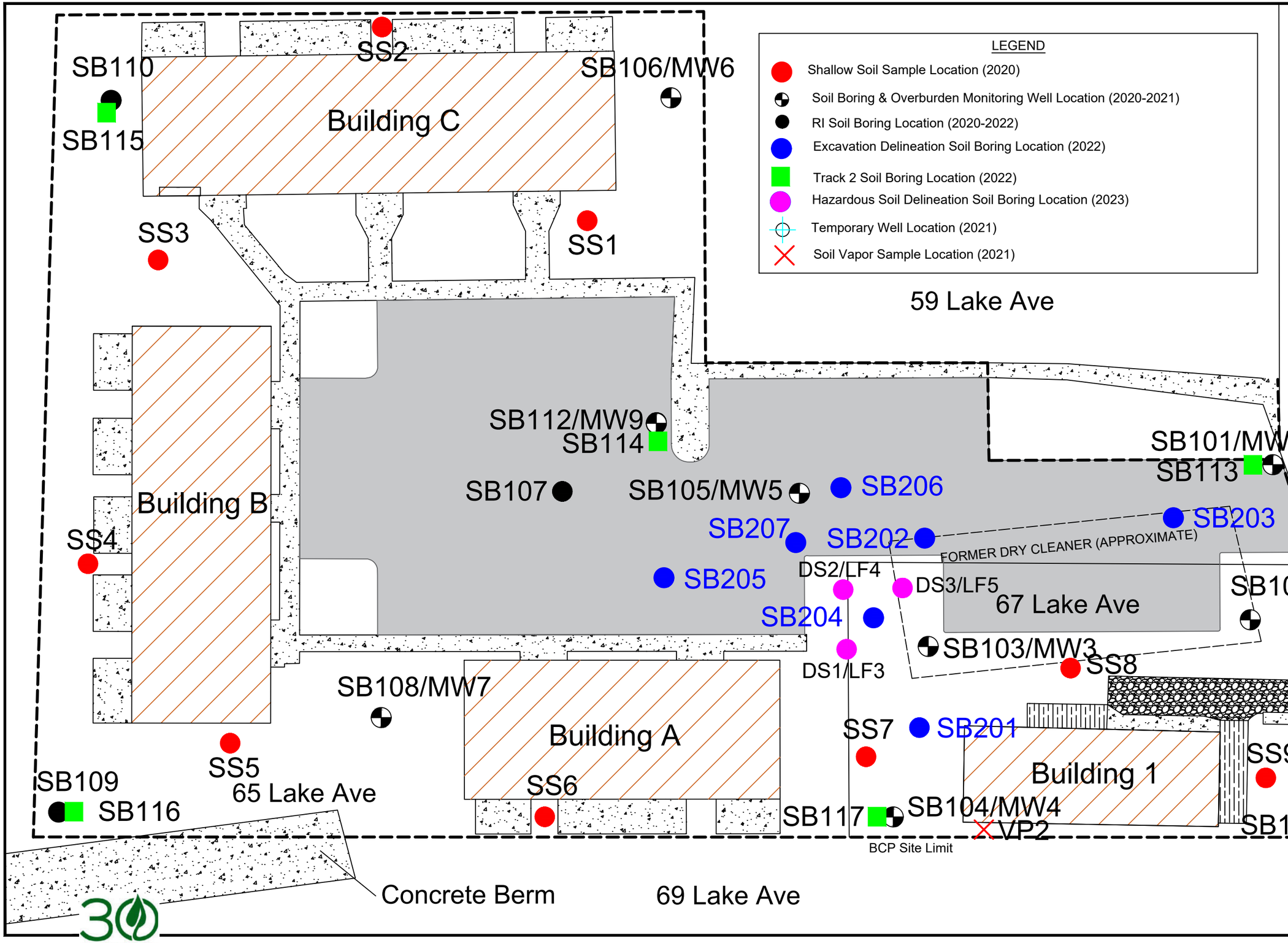
TITLE:

SITE PLAN

DATE:

PROJECT NO.: 18-046

FIGURE: 4



PREPARED BY:
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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	7/17/23

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
REMEDIAL INVESTIGATION SAMPLING LOCATIONS

DATE: AS NOTED

PROJECT NO.: 18-046

FIGURE: 5

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

LEGEND

Monitoring Well Location

Temporary Well Location

Sample ID
Sampling Date
PCE Concentration (ug/L) (WQS = 5 ug/L)
TCE Concentration (ug/L) (WQS = 5 ug/L)
cis-1,2-DCE Concentration (ug/L) (WQS = 5 ug/L)
trans-1,2-DCE Concentration (ug/L) (WQS = 5 ug/L)
Vinyl Chloride Concentration (ug/L) (WQS = 2 ug/L)

ND = Not Detected

Shading indicates that concentration exceeds NYS TOGS 1.1.1 Water Quality Standard.

Building C

MW6	
8/12/20	8/31/21
ND	ND
ND	ND
ND	ND
ND	ND
ND	ND

MW9
8/31/21
ND
ND
1.3
ND
ND

59 Lake Ave

MW5	
8/11/20	8/31/21
480	580
33	30
140	56
5.3	ND
ND	ND

MW1 / MW1 DUP		
8/11/20	8/11/20	8/31/21
180	150	85
2.3	2.2	0.93
ND	ND	ND
ND	ND	ND
ND	ND	ND

TW1
8/31/21
ND
ND
ND
ND
ND

Building B

MW7	
8/12/20	8/31/21
ND	ND
ND	ND
ND	ND
ND	ND
ND	ND

MW3 / MW3 DUP		
8/11/20	8/31/21	8/31/21
2.9	15	16
1.2	18	19
ND	23	24
ND	1.3	1.3
ND	1.7	1.9

FORMER DRY CLEANER (APPROXIMATE)

67 Lake Ave

MW2	
8/10/20	8/31/21
2,200	3,200
160	160
670	830
11	ND
20	ND

Building A

65 Lake Ave

MW4	
8/10/20	8/31/21
ND	ND
ND	ND
ND	ND
ND	ND
ND	ND

ilding

MW8	
8/10/20	8/31/21
ND	ND
ND	ND
ND	ND
ND	ND
ND	ND

BCP Site

Concrete Berm

69 Lake Ave

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	11/16/22

SCALE IN FEET: 1" = 20'

0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

Groundwater VOC Concentrations

DATE: AS NOTED

PROJECT NO.: 18-046

FIGURE: 6

LEGEND

- Soil Boring & Overburden Monitoring Well Location (2020-2021)
- Soil Boring Location (2020-2021)
- Soil Boring Location (2022)
- Soil Boring Location (2023)

NOTE: Results are shown only for samples used to delineate the area of impacted soil. Compounds exceeding the SCO are highlighted.

Sample ID
Sample Depth (ft below grade)
Total VOC Concentration (mg/kg)
PCE Concentration (mg/kg) (PGSCO = 1.3 mg/kg)
TCE Concentration (mg/kg) (PGSCO = 0.47 mg/kg)
cis-1,2-DCE Concentration (mg/kg) (PGSCO = 0.25 mg/kg)
trans-1,2-DCE Concentration (mg/kg) (PGSCO = 0.19 mg/kg)
Vinyl Chloride Concentration (mg/kg) (PGSCO = 0.02 mg/kg)

SB204	
(2.75-3.2)	(5.5-6)
30.3	1.077
19	0.026 J
7.0	ND
3.0	0.990
1.3	0.028
ND	0.033

SB206	
(2)	(6)
0.670	0.0053
0.670	0.0053
ND	ND
ND	ND
ND	ND
ND	ND

DS3	LF5
(0-3)	(0-7)
0.0236	0.480
0.0016	0.480
ND	ND
ND	ND
ND	ND
ND	ND

SB203	
(2-2.5)	(5-5.5)
1.6	0.486
1.6	0.23
ND	0.037
ND	0.16
ND	0.013
ND	ND

SB207	
(1-3)	(6-6.5)
3.40	0.0431
3.40	ND
ND	ND
ND	0.0061
ND	ND
ND	ND

SB202	
(2-2.5)	(6-6.5)
8.98	3.833
8.8	2.9
0.18 J	0.71
ND	0.21
ND	0.013
ND	ND

SB205	
(1.5)	(6-6.5)
0.49	8.26
0.49	8.1
ND	0.16
ND	ND
ND	ND
ND	ND

DS2	LF4
(0-3)	(0-7)
0.0106	0.371
0.0018	0.130
ND	0.016
ND	0.210
ND	0.015
ND	ND

DS1	LF3
(0-3)	(0-7)
0.00069	0.505
0.00069	0.470
ND	0.019
ND	0.016
ND	ND
ND	ND

SB201	
(1.8-2.3)	(6-6.5)
2.565	0.084
1.8	0.084
ND	ND
ND	ND
ND	ND
ND	ND

LF1
(6)
4.21
2.50
1.20
0.370
0.14
ND

SB102		
(4.5'-5.5')	(9.8'-10.5')	(19.6'-20.0')
5.4	0.164	ND
3.4	0.035	ND
0.34	0.011	ND
1.3	0.086	ND
ND	0.0022	ND
ND	ND	ND

SB110 · Building C · SB112/MW9 · SB107 · SB105/MW5 · SB206 · SB207 · SB202 · SB203 · TW1 · SB205 · DS2/LF4 · DS3/LF5 · SB204 · DS1/LF3 · SB102/MW2 · 67 Lake Ave · SB103/MW3 · LF1/LF2 · SB101/MW1 · Lake Ave · Building B · SB109 · 65 Lake Ave · SB201 · SB104/MW4 · SB111/MW8 · Concrete

UNDERGROUND WATER · UNDERGROUND ELECTRIC UTILITY · UNDERGROUND COMMUNICATIONS UTILITY · FORMER DRY CLEANER (APPROXIMATE)

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM
DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC

REVISION

BY	DATE
CMC	7/20/23

SCALE IN FEET: 1" = 20' (0 – 20)

PROJECT NAME / LOCATION:

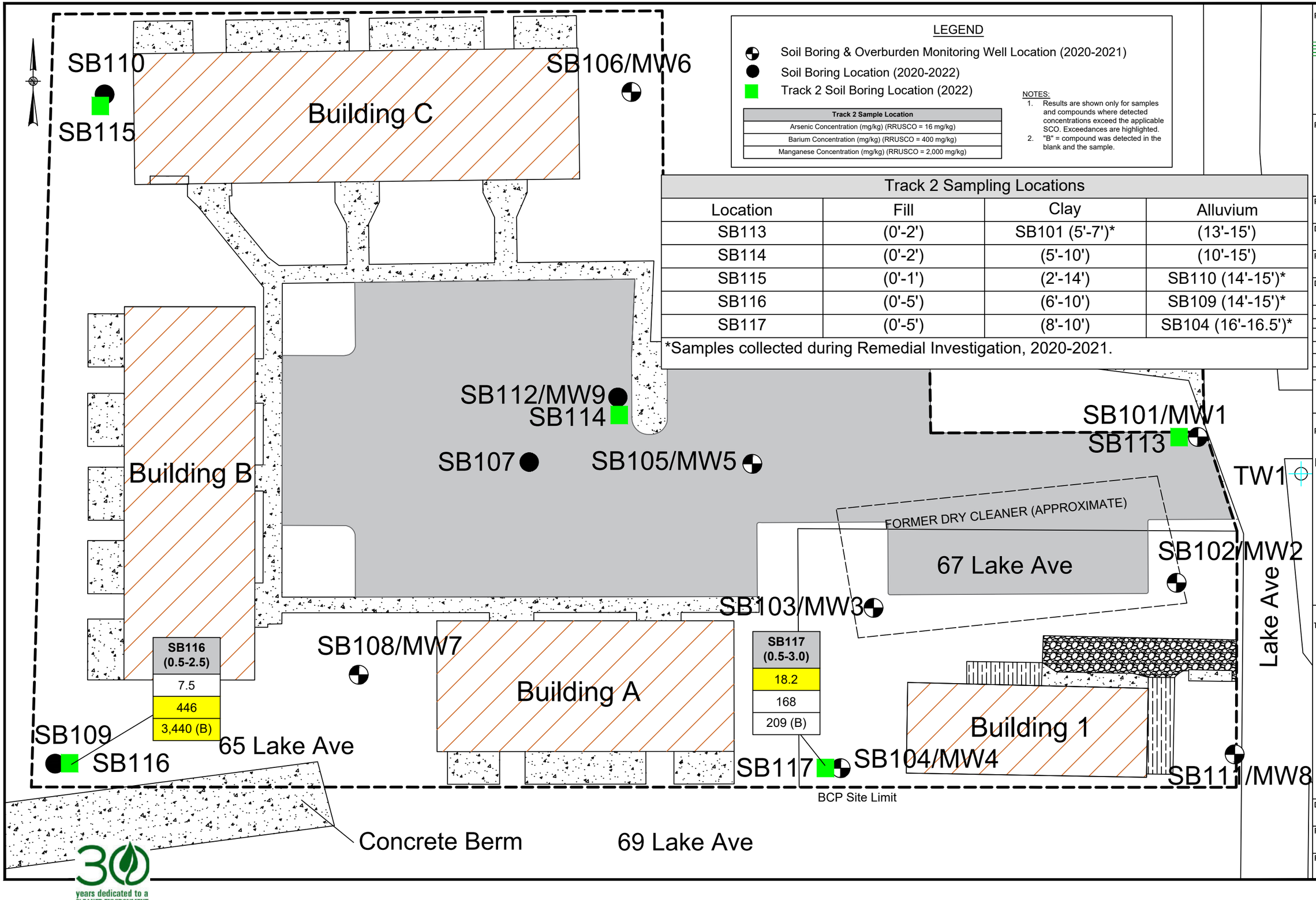
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

VOC Concentrations in Soil

DATE: AS NOTED
PROJECT NO.: 18-046
FIGURE: 7



LEGEND

- Soil Boring & Overburden Monitoring Well Location (2020-2021)
- Soil Boring Location (2020-2022)
- Track 2 Soil Boring Location (2022)

Track 2 Sample Location
Arsenic Concentration (mg/kg) (RRUSCO = 16 mg/kg)
Barium Concentration (mg/kg) (RRUSCO = 400 mg/kg)
Manganese Concentration (mg/kg) (RRUSCO = 2,000 mg/kg)

NOTES:
1. Results are shown only for samples and compounds where detected concentrations exceed the applicable SCO. Exceedances are highlighted.
2. "B" = compound was detected in the blank and the sample.

Track 2 Sampling Locations

Location	Fill	Clay	Alluvium
SB113	(0'-2')	SB101 (5'-7')*	(13'-15')
SB114	(0'-2')	(5'-10')	(10'-15')
SB115	(0'-1')	(2'-14')	SB110 (14'-15')*
SB116	(0'-5')	(6'-10')	SB109 (14'-15')*
SB117	(0'-5')	(8'-10')	SB104 (16'-16.5')*

*Samples collected during Remedial Investigation, 2020-2021.

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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM
DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC

REVISION

BY	DATE
CMC	6/2/22

SCALE IN FEET: 1" = 20'
0 20

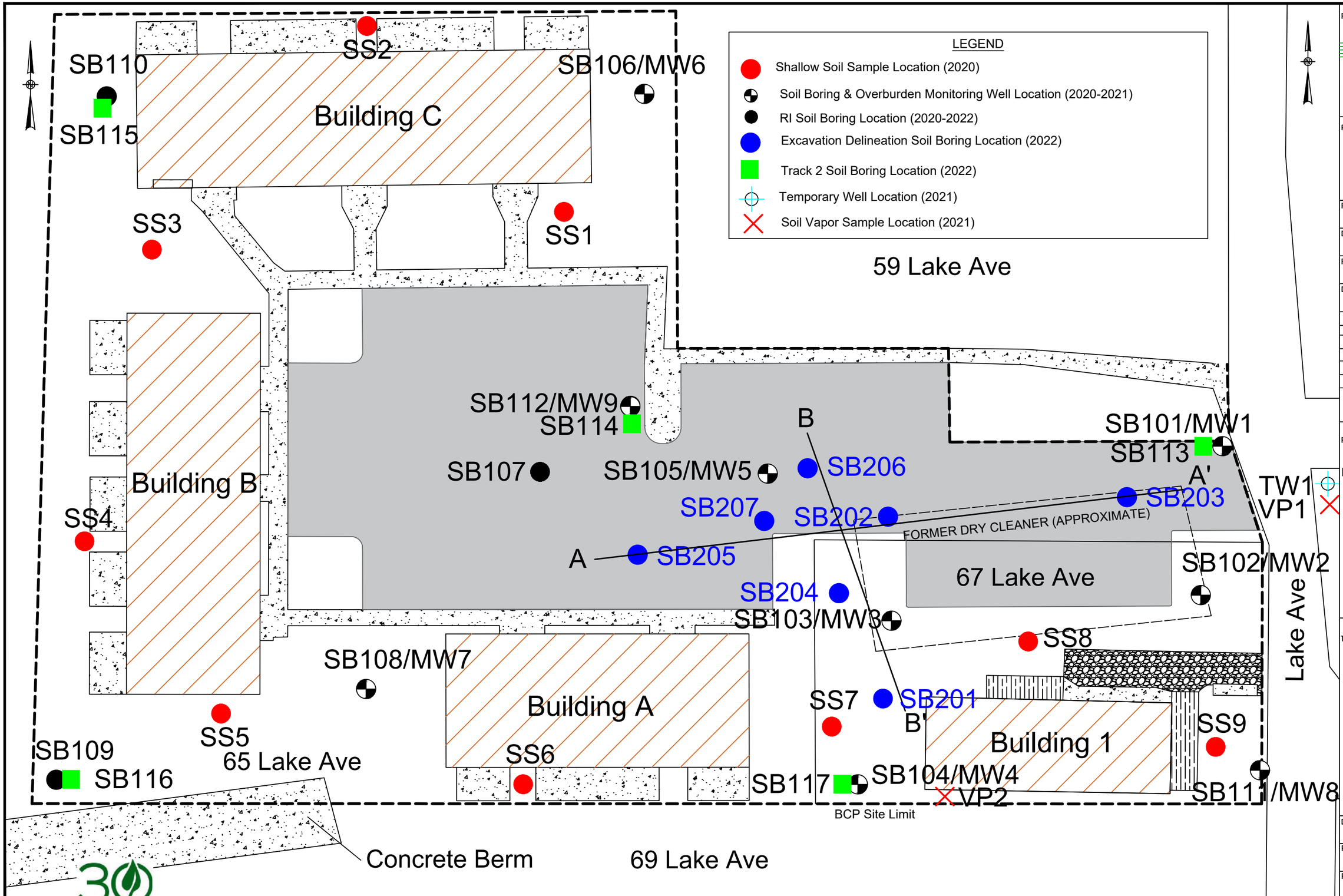
PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
Soil Boring Locations for Track 2 Sampling and Select Laboratory Analytical Results

DATE: June 20, 2022
PROJECT NO.: 18-046
FIGURE: 8

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021



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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	12/1/22

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

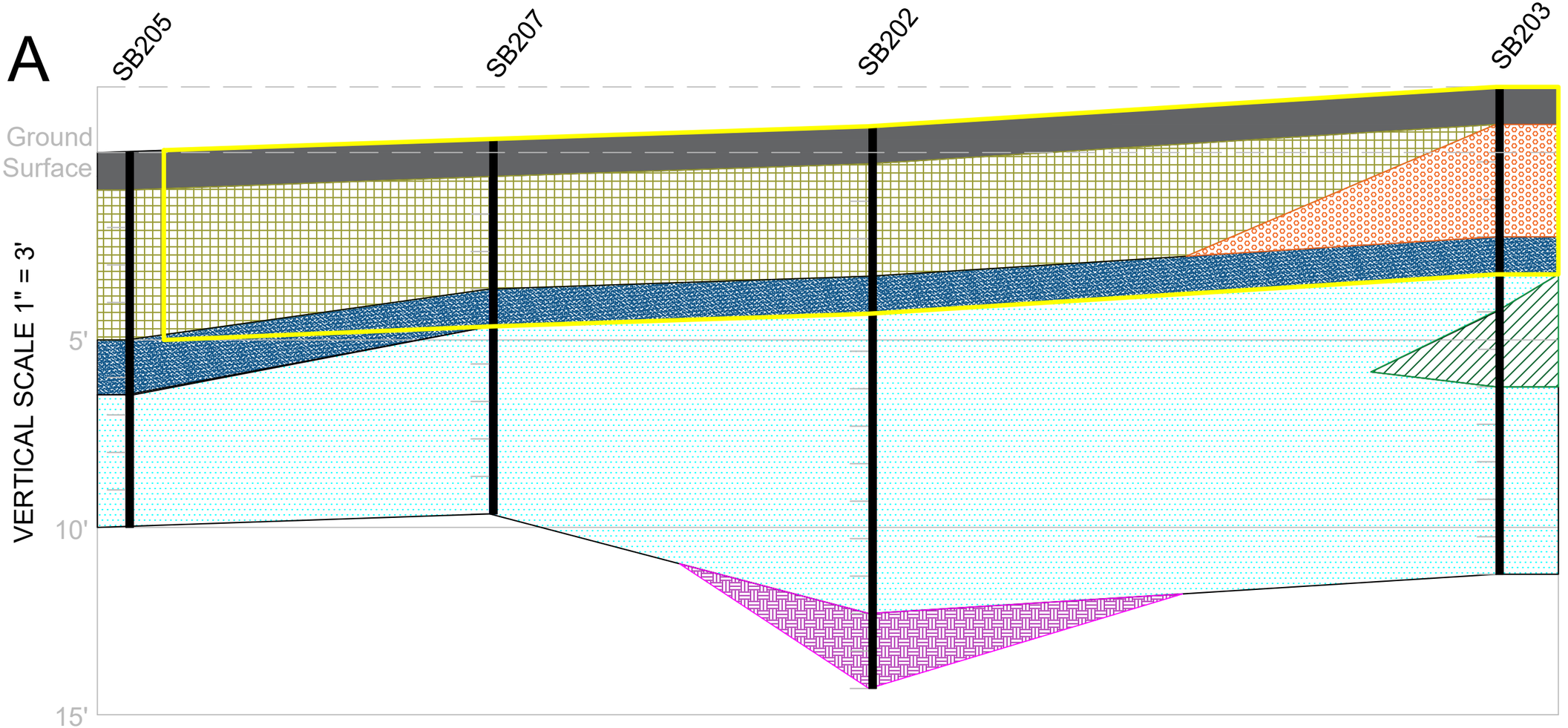
TITLE:
CROSS SECTIONAL REFERENCES

DATE: AS NOTED

PROJECT NO.: 18-046

FIGURE: 9

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021



LEGEND

- = EXCAVATION BOUNDARY
- = ASPHALT OVER GRAVEL
- = SILTY SAND (FILL MATERIAL)
- = SAND
- = SILTY SAND
- = CLAY AND SILT
- = GRAVELLY SAND (UTILITY LINE BEDDING)
- = GRAVELLY SAND

For detailed soil descriptions, see soil boring logs.

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	12/6/22

SCALE IN FEET: AS NOTED
0

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

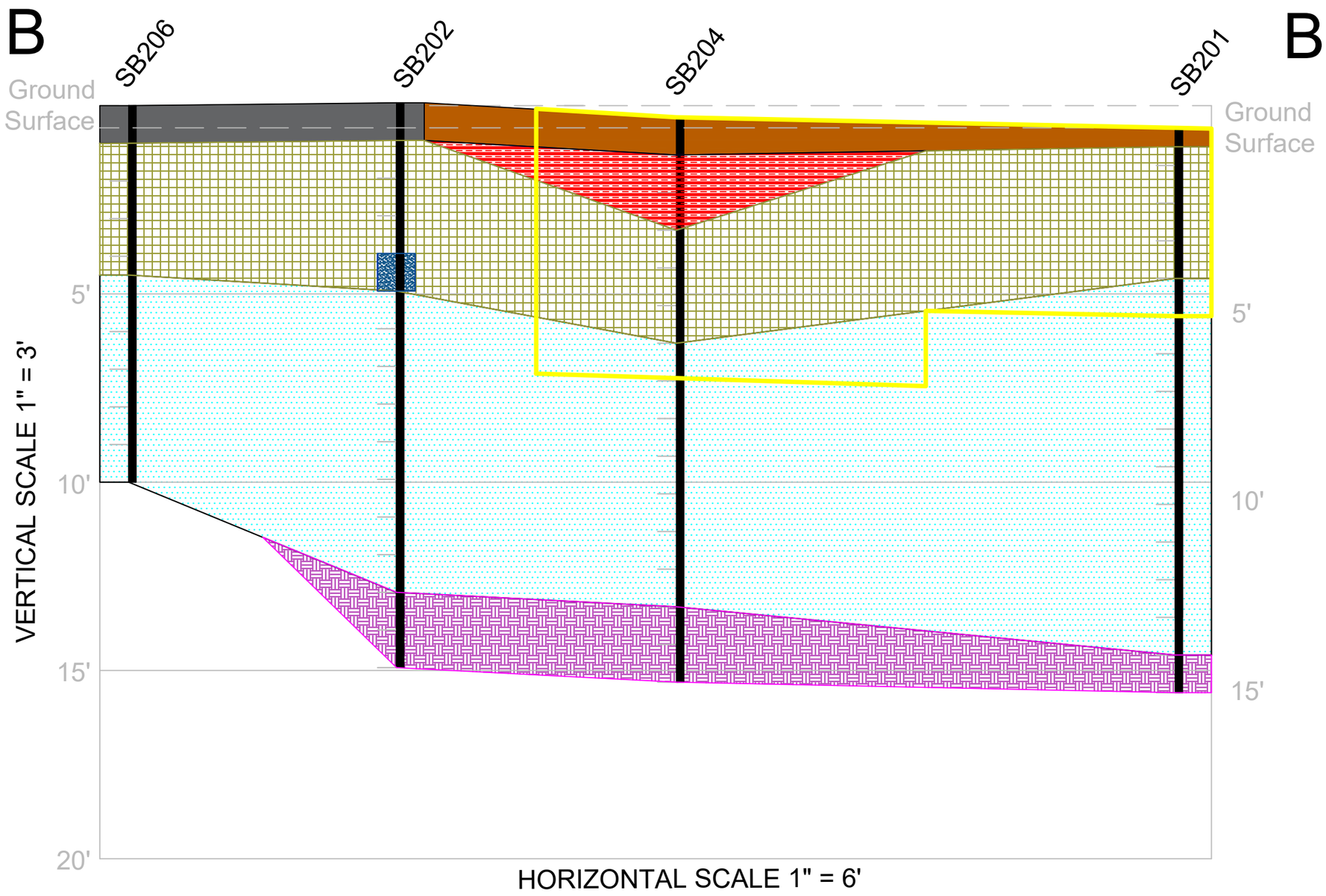
BCP Site No. C915344

TITLE:
SOIL CROSS SECTION
A - A'

DATE:

PROJECT NO.: 18-046

FIGURE: 10



LEGEND

- = EXCAVATION BOUNDARY
- = ASPHALT OVER GRAVEL
- = SILTY SAND (FILL MATERIAL)
- = CLAY
- = TOPSOIL
- = CLAY AND SILT
- = GRAVELLY SAND (UTILITY LINE BEDDING)
- = GRAVELLY SAND

For detailed soil descriptions, see soil boring logs.

PREPARED BY:
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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	3/30/23

SCALE IN FEET: AS NOTED
0

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

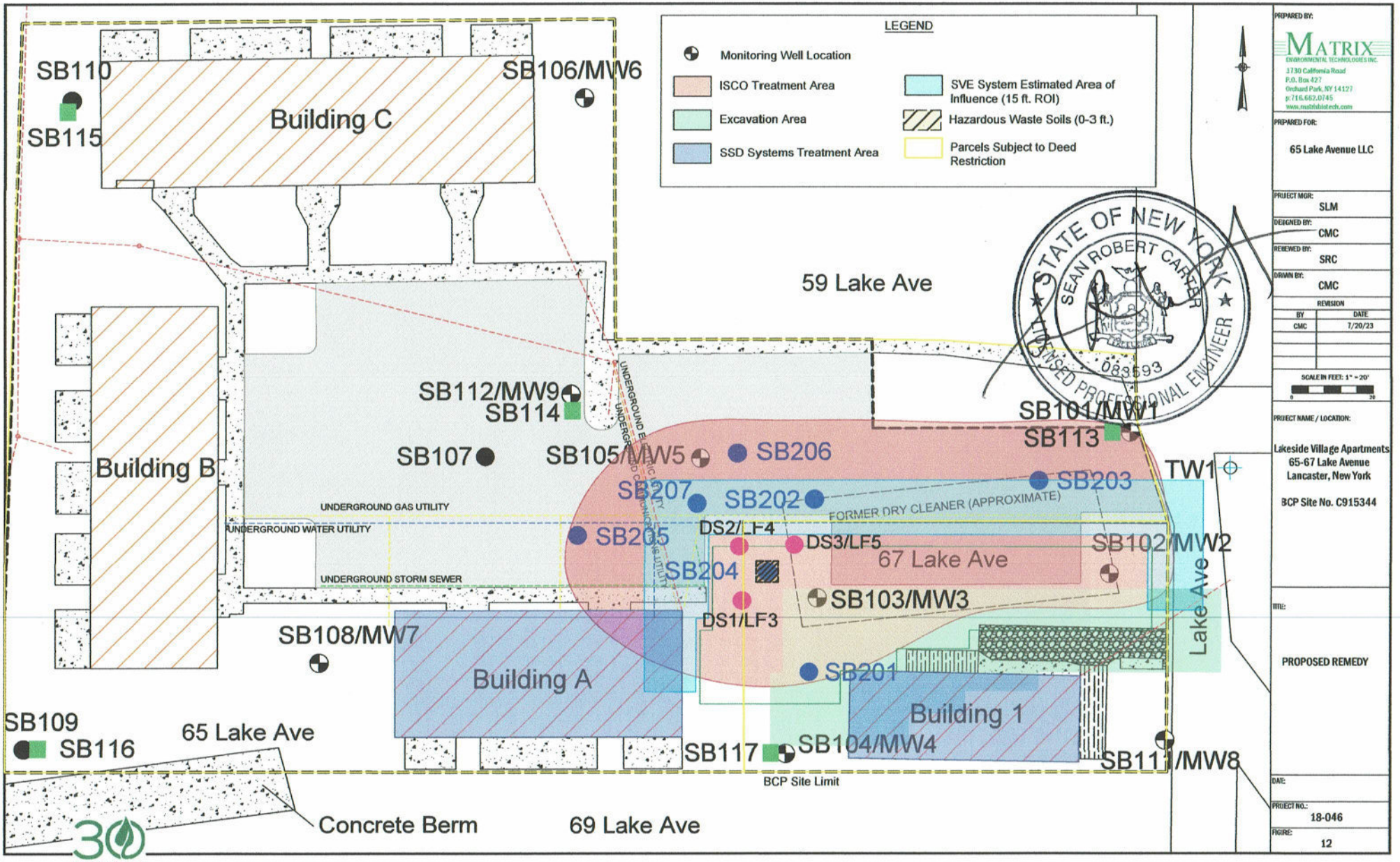
TITLE:
SOIL CROSS SECTION
B - B'

DATE:

PROJECT NO.: 18-046

FIGURE: 11

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021



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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM
DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC

REVISION	
BY	DATE
CMC	7/20/23

SCALE IN FEET: 1" = 20'

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

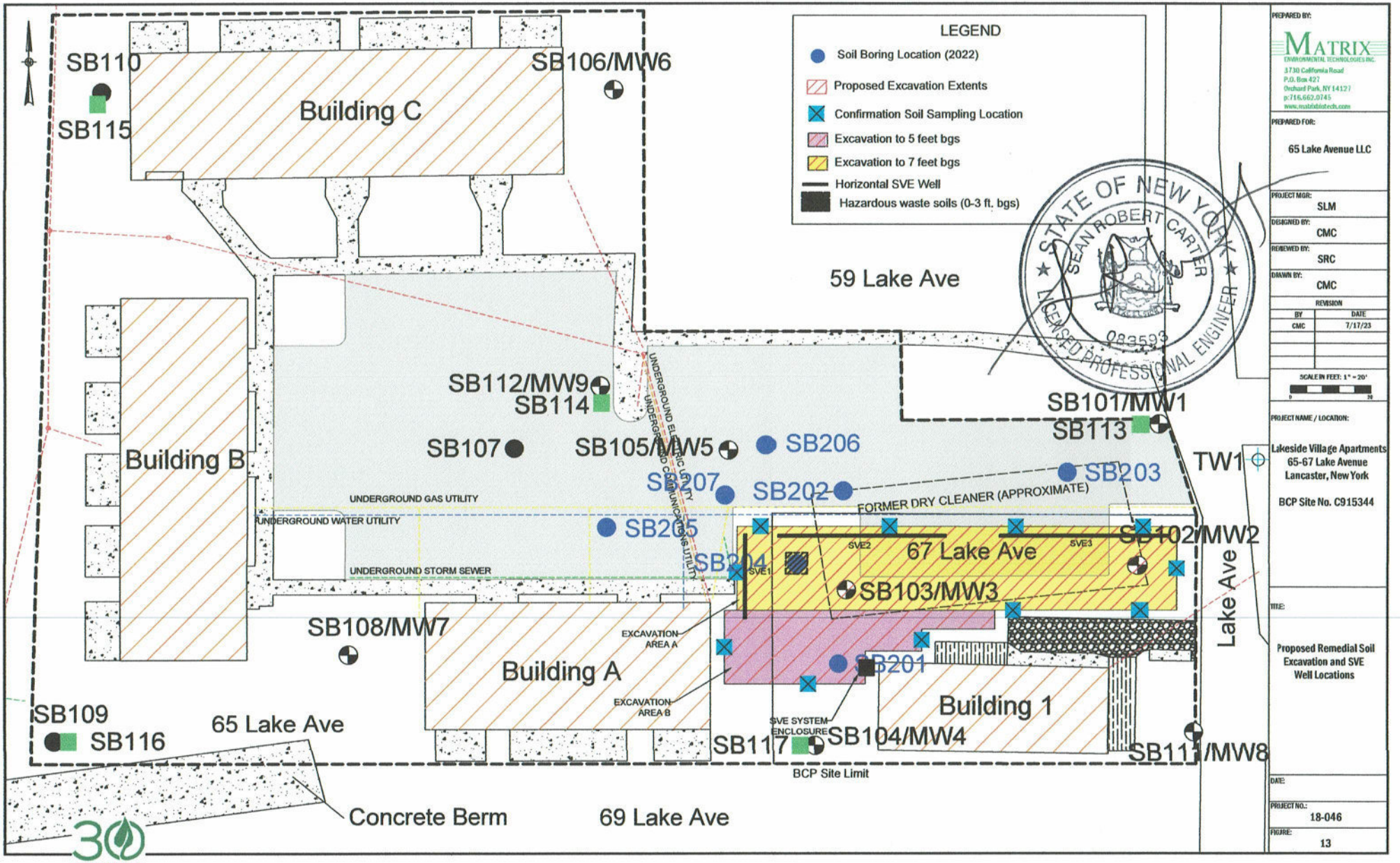
TITLE:
PROPOSED REMEDY

DATE:

PROJECT NO.: 18-046

FIGURE: 12

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021


LEGEND
Soil Boring Location (2022)
Proposed Excavation Extents
Confirmation Soil Sampling Location
Excavation to 5 feet bgs
Excavation to 7 feet bgs
Horizontal SVE Well
Hazardous waste soils (0-3 ft. bgs)
SB110
SB115
SB106/MW6
Building C
59 Lake Ave
SB112/MW9
SB114
SB101/MW1
SB113
SB107
SB105/MW5
SB206
SB203
TW1
Building B
SB207
SB202
FORMER DRY CLEANER (APPROXIMATE)
UNDERGROUND GAS UTILITY
UNDERGROUND WATER UTILITY
UNDERGROUND STORM SEWER
UNDERGROUND ELECTRIC UTILITY
UNDERGROUND COMMUNICATIONS UTILITY
SB205
SB204
SVE1
SVE2
SVE3
67 Lake Ave
SB102/MW2
SB103/MW3
Lake Ave
SB108/MW7
EXCAVATION AREA A
Building A
SB201
EXCAVATION AREA B
SB109
SB116
65 Lake Ave
SVE SYSTEM ENCLOSURE
SB117
SB104/MW4
Building 1
SB111/MW8
BCP Site Limit
Concrete Berm
69 Lake Ave
STATE OF NEW YORK
SEAN ROBERT CARTER
083593
LICENSED PROFESSIONAL ENGINEER
PREPARED BY:
MATRIX ENVIRONMENTAL TECHNOLOGIES INC.
3730 California Road
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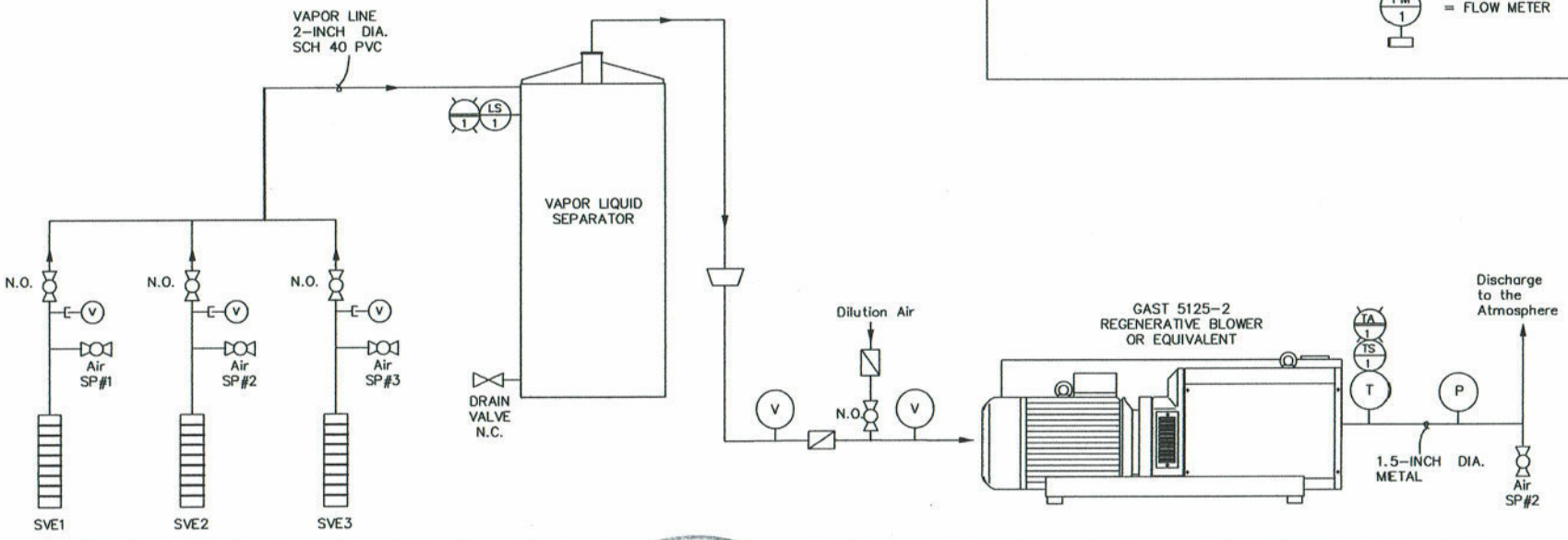
Orchard Park, NY 14127
p:716.662.0745
www.matrixbiotech.com
PREPARED FOR:
65 Lake Avenue LLC
PROJECT MGR: SLM
DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC
REVISION
BY | DATE
CMC | 7/17/23
SCALE IN FEET: 1" = 20'
PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
BCP Site No. C915344
TITLE:
Proposed Remedial Soil Excavation and SVE Well Locations
DATE:
PROJECT NO.: 18-046
FIGURE: 13
30 years dedicated to a CLEANER ENVIRONMENT 1991-2021



LEGEND

- = GATE VALVE
- = BALL VALVE
- = QUICK DISCONNECT
- = REDUCER
- = FILTER
- T = TEMPERATURE GAUGE
- V = VACUUM GAUGE
- P = PRESSURE GAUGE
- TS 1 = SWITCH
- TA 1 = ALARM
- FM 1 = FLOW METER

PREPARED BY:
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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	1/19/23

SCALE IN FEET: N/A

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

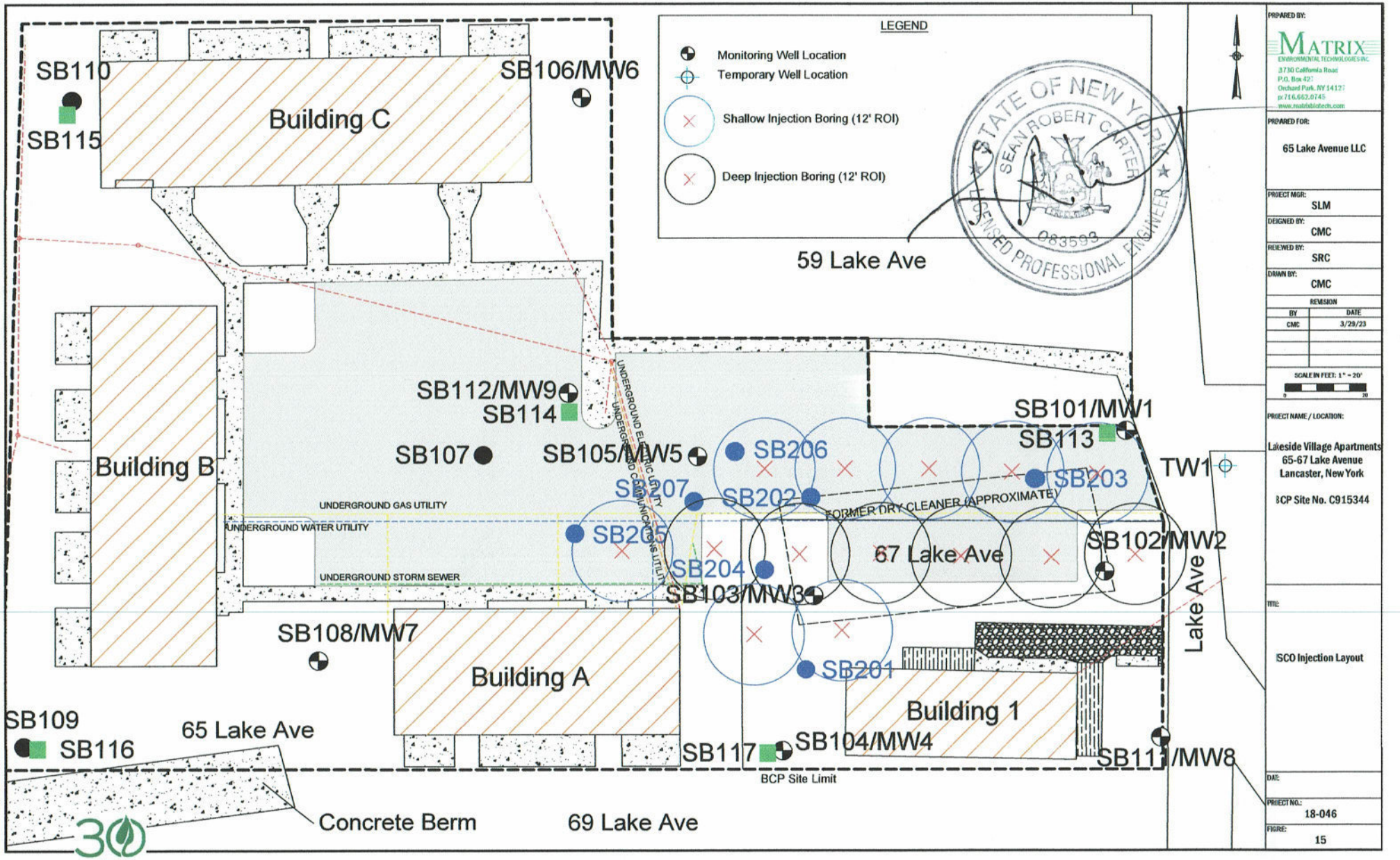
TITLE:
SVE SYSTEM
PROCESS &
INSTRUMENTATION
DIAGRAM

DATE:

PROJECT NO.: 18-046

FIGURE: 14

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021


LEGEND
Monitoring Well Location
Temporary Well Location
Shallow Injection Boring (12' ROI)
Deep Injection Boring (12' ROI)
SB110
SB115
SB106/MW6
Building C
59 Lake Ave
SB112/MW9
SB114
SB107
SB105/MW5
SB206
SB207
SB202
SB203
SB205
SB204
SB103/MW3
SB101/MW1
SB113
TW1
SB102/MW2
67 Lake Ave
Lake Ave
Building B
UNDERGROUND GAS UTILITY
UNDERGROUND WATER UTILITY
UNDERGROUND STORM SEWER
UNDERGROUND ELECTRIC UTILITY
UNDERGROUND COMMUNICATIONS UTILITY
FORMER DRY CLEANER (APPROXIMATE)
SB108/MW7
Building A
SB201
Building 1
SB109
SB116
65 Lake Ave
SB117
SB104/MW4
SB111/MW8
BCP Site Limit
Concrete Berm
69 Lake Ave
STATE OF NEW YORK
SEAN ROBERT CARTER
083598
LICENSED PROFESSIONAL ENGINEER
PREPARED BY:
MATRIX
ENVIRONMENTAL TECHNOLOGIES INC.
3730 California Road
P.O. Box 427
Orchard Park, NY 14127
p: 716.662.0745
www.matrixbiotech.com
PREPARED FOR:
65 Lake Avenue LLC
PROJECT MGR: SLM
DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC
REVISION
BY CMC
DATE 3/29/23
SCALE IN FEET: 1" = 20'
PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
BCP Site No. C915344
TITLE:
SCO Injection Layout
DATE:
PROJECT NO.: 18-046
FIGURE: 15
30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

TABLES

Table 1
Sample Locations Summary

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Sample ID	Sample Matrix	Soil Sample Depth	Sample Date(s)	Laboratory Analysis	Regulatory Standards Exceeded?	Table Reference
SS1	Soil	0-2 in. (0-6 in. for VOCs)	7/20/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS2	Soil	0-2 in. (0-6 in. for VOCs)	8/3/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS3	Soil	0-2 in. (0-6 in. for VOCs)	7/20/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS4	Soil	0-2 in. (0-6 in. for VOCs)	7/23/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS5	Soil	0-2 in. (0-6 in. for VOCs)	7/21/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS6	Soil	0-2 in. (0-6 in. for VOCs)	7/21/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS7	Soil	0-2 in. (0-6 in. for VOCs)	7/20/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS8	Soil	0-2 in. (0-6 in. for VOCs)	7/20/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SS9	Soil	0-2 in. (0-6 in. for VOCs)	7/20/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SB101	Soil	5.0-7.0 ft.	7/21/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SB102	Soil	4.5-5.5 ft.	7/21/2020	VOCs	YES	Table 7, RI/AA Report
		9.8-10.5 ft.		VOCs	NO	Table 7, RI/AA Report
		19.6-20.0 ft.		VOCs	NO	Table 7, RI/AA Report
SB103	Soil	19.5 ft.	7/22/2020	VOCs	NO	Table 7, RI/AA Report
SB104	Soil	16.0-16.5 ft.	7/23/2020	VOCs	NO	Table 7, RI/AA Report
SB105	Soil	15.5-17.0 ft.	7/23/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SB106	Soil	19.5-20.0 ft.	7/27/2020	VOCs	NO	Table 7, RI/AA Report
SB107	Soil	18.0-18.5 ft.	7/28/2020	VOCs	NO	Table 7, RI/AA Report
SB108	Soil	17.0-18.0 ft.	7/27/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report

Table 1
Sample Locations Summary

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Sample ID	Sample Matrix	Soil Sample Depth	Sample Date(s)	Laboratory Analysis	Regulatory Standards Exceeded?	Table Reference
SB109	Soil	14.0-15.0 ft.	7/28/2020	BCP Full Suite	NO	Table 7-13, RI/AA Report
SB110	Soil	14.0-15.0 ft.	7/28/2020	VOCs	NO	Table 7, RI/AA Report
SB111	Soil	17.5 ft.	7/22/2020	VOCs	NO	Table 7, RI/AA Report
SB112	Soil	5.7 ft.	8/16/2021	VOCs	NO	Table 7, RI/AA Report
SB113	Soil	1.0-5.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
		15.0-18.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
SB114	Soil	0.5-2.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
		6.0-10.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
		12.0-16.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
SB115	Soil	0.0-3.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
		6.0-8.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
SB116	Soil	0.5-2.5 ft.	6/20/2022	BCP Full Suite	YES	Tables 3-9, RAWP
		6.0-7.5 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
SB117	Soil	0.5-3.0 ft.	6/20/2022	BCP Full Suite	YES	Tables 3-9, RAWP
		8.0-10.0 ft.	6/20/2022	BCP Full Suite	NO	Tables 3-9, RAWP
SB201	Soil	1.8-2.3 ft.	3/2/2022	VOCs	YES	Table 3, RAWP
		6.0-6.5 ft.	3/2/2022	VOCs	NO	Table 3, RAWP
SB202	Soil	2.0-2.5 ft.	3/2/2022	VOCs	YES	Table 3, RAWP
		6.0-6.5 ft.	3/2/2022	VOCs	YES	Table 3, RAWP

Table 1
Sample Locations Summary

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Sample ID	Sample Matrix	Soil Sample Depth	Sample Date(s)	Laboratory Analysis	Regulatory Standards Exceeded?	Table Reference
SB203	Soil	2.0-2.5 ft.	3/2/2022	VOCs	YES	Table 3, RAWP
		5.0-5.5 ft.	3/2/2022	VOCs	NO	Table 3, RAWP
SB204	Soil	2.75-3.2 ft.	3/2/2022	VOCs	YES	Table 3, RAWP
		5.5-6.0 ft.	3/2/2022	VOCs	YES	Table 3, RAWP
SB205	Soil	1.5 ft.	6/20/2022	VOCs	NO	Table 3, RAWP
		7.0 ft.	6/20/2022	VOCs	YES	Table 3, RAWP
SB206	Soil	2.0 ft.	6/20/2022	VOCs	NO	Table 3, RAWP
		6.0 ft.	6/20/2022	VOCs	NO	Table 3, RAWP
SB207	Soil	1.0-3.0 ft.	6/20/2022	VOCs	YES	Table 3, RAWP
		6.0-8.0 ft.	6/20/2022	VOCs	NO	Table 3, RAWP
LF1/LF2	Soil	5.0-11.0 ft.	3/2/2022	Landfill Pre-Characterization, PNOD, VOCs	YES	Table 10, RAWP
MW1	Water		8/11/2020	BCP Full Suite	YES	Table 14-20, RI/AA Report
			8/31/2021	VOCs	YES	Table 14, RI/AA Report
MW2	Water		8/10/2020	VOCs	YES	Table 14, RI/AA Report
			8/31/2021	VOCs	YES	Table 14, RI/AA Report
MW3	Water		8/11/2020	VOCs	NO	Table 14, RI/AA Report
			8/31/2021	VOCs	YES	Table 14, RI/AA Report

Table 1
Sample Locations Summary

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Sample ID	Sample Matrix	Soil Sample Depth	Sample Date(s)	Laboratory Analysis	Regulatory Standards Exceeded?	Table Reference
MW4	Water		8/10/2020	VOCs	NO	Table 14, RI/AA Report
			8/31/2021	VOCs	NO	Table 14, RI/AA Report
MW5	Water		8/11/2020	BCP Full Suite	YES	Table 14-20, RI/AA Report
			8/31/2021	VOCs	YES	Table 14, RI/AA Report
MW6	Water		8/12/2020	VOCs	NO	Table 14, RI/AA Report
			8/31/2021	VOCs	NO	Table 14, RI/AA Report
MW7	Water		8/12/2020	BCP Full Suite	NO	Table 14-20, RI/AA Report
			8/31/2021	VOCs	NO	Table 14, RI/AA Report
MW8	Water		8/10/2020	VOCs	NO	Table 14, RI/AA Report
			8/31/2021	VOCs	NO	Table 14, RI/AA Report
MW9	Water		8/31/2021	VOCs	NO	Table 14, RI/AA Report
TW1	Water		8/31/2021	VOCs	NO	Table 14, RI/AA Report
VP1	Soil Vapor		8/17/2021	VOCs	NO	Table 21, RI/AA Report
VP2	Soil Vapor		8/17/2021	VOCs	NO	Table 21, RI/AA Report
DS1/LF3	Soil	0-7 ft.	6/28/2023	Landfill Pre-Characterization, VOCs	NO	Tables 3 & 10, RAWP
DS2/LF4	Soil	0-7 ft.	6/28/2023	Landfill Pre-Characterization, VOCs	NO	Tables 3 & 10, RAWP
DS3/LF5	Soil	0-7 ft.	6/28/2023	Landfill Pre-Characterization, VOCs	NO	Tables 3 & 10, RAWP

Table 2
2022-2023 Soil Boring Locations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Well ID	Latitude (°N)	Longitude (°W)
SB201	42.89648	-78.66824
SB202	42.89663	-78.66824
SB203	42.89663	-78.66801
SB204	42.89658	-78.66828
SB205	42.89659	-78.66845
SB206	42.89666	-78.66829
SB207	42.89662	-78.66835
LF1	42.89655	-78.66799
LF2	42.89655	-78.66798
SB113	42.89666	-78.66791
SB114	42.89670	-78.66849
SB115	42.89692	-78.66897
SB116	42.89647	-78.66895
SB117	42.89642	-78.66825
DS1/LF3	42.896561	-78.66830
DS2/LF4	42.896597	-78.66830
DS3/LF5	42.896597	-78.66826

Table 3
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB201 (1.8-2.3)		SB201 (6-6.5)		SB202 (2-2.5)		SB202 (6-6.5)		SB203 (2-2.5)	
		Sampling Date	3/2/2022		3/2/2022		3/2/2022		3/2/2022		3/2/2022	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND	
Acetone	0.05	**100**	0.37	J	ND		ND		ND		ND	
cis-1,2-Dichloroethene	**0.25**	100	ND		ND		ND		0.210		ND	
Cyclohexane	NA	**NA**	0.095		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	0.300		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	1.800		0.084		8.800		2.900		1.600	
trans-1,2-Dichloroethene	**0.19**	100	ND		ND		ND		0.013	J	ND	
Trichloroethene	**0.47**	21	ND		ND		0.180	J	0.710		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		ND		ND		ND	
		Total	**2.565**		**0.084**		**8.980**		**3.833**		**1.6000**	

Table 3 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB203 (5-5.5)		SB204 (2.75-3.2)		SB204 (5.5-6.0)		LF1		SB205 (1.5)	
		Sampling Date	3/2/2022		3/2/2022		3/2/2022		3/2/2022		6/20/2022	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND	
Acetone	0.05	**100**	ND		ND		ND		ND		ND	
cis-1,2-Dichloroethene	**0.25**	100	0.160		3.0		0.990		0.370		ND	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	0.046	J	ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	0.230		19		0.026	J	2.50		0.490	
trans-1,2-Dichloroethene	**0.19**	100	0.013	J	1.3		0.028	J	0.14		ND	
Trichloroethene	**0.47**	21	0.037	J	7.0		ND		1.2		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		0.033	J	ND		ND	
		Total	**0.486**		**30.3**		**1.077**		**4.21**		**0.49**	

Table 3 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB205 (7)		SB206 (2)		SB206 (6)		SB207 (1-3)		SB207 (6-8)	
		Sampling Date	6/20/2022		6/20/2022		6/20/2022		6/20/2022		6/20/2022	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		0.004	J
Acetone	0.05	**100**	ND		ND		0.0053	J	ND		0.024	
cis-1,2-Dichloroethene	**0.25**	100	ND		ND		ND		ND		0.0061	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		0.009	J
Methylcyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	8.100		0.670		ND		3.400		ND	
trans-1,2-Dichloroethene	**0.19**	100	ND		ND		ND		ND		ND	
Trichloroethene	**0.47**	21	0.160		ND		ND		ND		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		ND		ND		ND	
		Total	**8.260**		**0.670**		**0.0053**		**3.40**		**0.0431**	

Table 3 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)	
		Sampling Date	**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		0.004	J	ND	
Acetone	0.05	**100**	ND		0.012	J	ND		0.027		0.0063	J
Benzene	0.06	**4.8**	ND		0.00046	J	ND		ND		ND	
Carbon disulfide	2.7	**NA**	ND		ND		ND		0.0051		ND	
Cyclohexane	NA	**NA**	ND		0.0016	J	ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	ND		0.00094		ND		ND		ND	
Tetrachloroethene	**1.3**	19	0.410		ND		0.140		ND		ND	
Toluene	0.7	**100**	ND		0.0019	JT	ND		ND		ND	
Xylenes, Total	**1.6**	**100**	ND		0.0011	JT	ND		ND		ND	
		Total	**0.410**		**0.017**		**0.140**		**0.036**		**0.0063**	

Table 3 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB115 (0-3)		SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
		Sampling Date	6/20/2022		6/20/2022		6/20/2022		6/20/2022		6/20/2022		6/20/2022	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND		ND	
Acetone	0.05	**100**	ND		0.0058	J	ND		ND		ND		ND	
Benzene	0.06	**4.8**	ND		ND		ND		ND		ND		ND	
Carbon disulfide	2.7	**NA**	ND		ND		ND		ND		ND		ND	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		0.051	J	ND	
Methyl acetate	NA	**NA**	ND		ND		0.140	J	ND		0.130	J	ND	
Methylcyclohexane	NA	**NA**	ND		ND		0.027	J	ND		0.150		ND	
Tetrachloroethene	**1.3**	19	ND		ND		0.140		0.00054	J	0.092		ND	
Toluene	0.7	**100**	ND		ND		ND		ND		0.031	J	ND	
Xylenes, Total	**1.6**	**100**	ND		ND		ND		ND		ND		ND	
		Total	**ND**		**0.0058**		**0.307**		**0.00054**		**0.454**		**ND**	

NOTES:
1. Analytical testing for VOCs via EPA Method 8260C by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected; NA = Not Applicable
4. Regulatory standards and results are shown for detected compounds only.
5. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
6. "J" = estimated value
7. The applicable SCO (Protection of Groundwater or Restricted Residential) for each compound is shaded.
8. Yellow highlighted values exceed the applicable Protection of Groundwater SCO or Restricted Residential SCO.

Table 3 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	DS-1 (0-3)		DS-2 (0-3)		DS-3 (0-3)	
		Sampling Date	**6/28/2023**		**6/28/2023**		**6/28/2023**	
Acetone	0.05	**100**	ND		0.0088	J	0.022	
Tetrachloroethene	**1.3**	19	0.00069	J	0.0018	J	0.0016	J
		Total	**0.00069**		**0.0106**		**0.0236**	

NOTES:
1. Analytical testing for VOCs via EPA Method 8260C by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected; NA = Not Applicable
4. Regulatory standards and results are shown for detected compounds only.
5. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
6. "J" = estimated value
7. The applicable SCO (Protection of Groundwater or Restricted Residential) for each compound is shaded.
8. Yellow highlighted values exceed the applicable Protection of Groundwater SCO or Restricted Residential SCO.

Table 4
Soil SVOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)	
BENZO(A)ANTHRACENE	1	ND		ND		0.044	J	ND		ND		ND	
BENZO(A)PYRENE	1	ND		ND		0.066	J	ND		ND		ND	
BENZO(B)FLUORANTHENE	1	ND		ND		0.110	J	ND		ND		0.043	J
BENZO(G,H,I)PERYLENE	100	ND		ND		0.047	J	ND		ND		ND	
BENZO(K)FLUORANTHENE	3.9	ND		ND		0.03	J	ND		ND		ND	
CHRYSENE	3.9	ND		ND		0.095	J	ND		ND		ND	
DIBENZ(A,H)ANTHRACENE	0.33	ND		ND		ND		ND		ND		ND	
FLUORANTHENE	100	ND		ND		0.23		ND		ND		0.068	J
INDENO(1,2,3-C,D)PYRENE	0.5	ND		ND		0.04	J	ND		ND		ND	
PHENANTHRENE	100	ND		ND		0.11	J	ND		ND		ND	
PYRENE	100	ND		ND		0.21		ND		ND		0.061	J
	Total	**ND**		**ND**		**0.982**		**ND**		**ND**		**0.172**	

Table 4 (Continued)
Soil SVOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
BENZO(A)ANTHRACENE	1	ND		0.03	J	ND		0.15	J	ND	
BENZO(A)PYRENE	1	ND		0.031	J	ND		0.18	J	ND	
BENZO(B)FLUORANTHENE	1	ND		0.044	J	ND		0.55		ND	
BENZO(G,H,I)PERYLENE	100	ND		ND		ND		0.58		ND	
BENZO(K)FLUORANTHENE	3.9	ND		ND		ND		0.14	J	ND	
CHRYSENE	3.9	ND		ND		ND		0.19	J	ND	
DIBENZ(A,H)ANTHRACENE	0.33	ND		ND		ND		0.13	J	ND	
FLUORANTHENE	100	ND		0.052	J	ND		0.12	J	ND	
INDENO(1,2,3-C,D)PYRENE	0.5	ND		ND		ND		0.50		ND	
PHENANTHRENE	100	ND		0.029	J	ND		0.087	J	ND	
PYRENE	100	ND		0.049	J	ND		0.10	J	ND	
	Total	**ND**		**0.24**		**ND**		**2.73**		**ND**	

NOTES:
1. Analytical testing for SVOCs via EPA Method 8270D by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected
4. NA = Not Applicable
5. Regulatory standards and results are shown for detected compounds only.
6. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
7. "J" = estimated value

Table 5
Soil Inorganics Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Analytical Method	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)	
Cr (Hexavalent)	7196A	110	ND		ND		ND		ND		ND		ND	
CR(Trivalent)	CALC	180	15.8		8.9		10.6		27		6.8		14.9	
Mercury	7471B	0.81	0.034		0.014		0.059		0.02	J	0.01	J	0.047	
Arsenic	6020B	16	7.2		4.8		4		9.9		2.3		6.8	
Barium	6010D	400	58.8	T	28.1		42		125		26.7		47.6	
Beryllium	6020B	72	0.78		0.3		0.34		0.93		0.2	J	0.56	
Cadmium	6020B	4.3	0.21	J	0.19	J	0.12	J	0.063	J	0.077	J	0.24	
Copper	6010D	270	28.3		14.8		12.4		17.2		6.7		23.6	
Lead	6010D	400	108	T	6.9		24.6		16.3		4.7		22.1	
Manganese	6010D	2,000	732	B	201	B	179	B	518	B	184	B	366	B
Nickel	6010D	310	24.5		21.9		12		30.1		9.1		24.7	
Selenium	6020B	180	ND		0.53	J	ND		ND		ND		ND	
Silver	6020B	180	ND		ND		ND		ND		ND		ND	
Zinc	6010D	10,000	71.8		39.8		50.1		59.1		18.1		70.1	

Table 5 (Continued)
Soil Inorganics Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Analytical Method	Restricted-Residential Use SCO	SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB116 DUP (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
Cr (Hexavalent)	7196A	110	ND		ND		ND		ND		ND		ND	
CR(Trivalent)	CALC	180	24.3		15.9		20.6		23		14.5		16.7	
Mercury	7471B	0.81	0.014	J	0.081		0.022		0.025		0.17		0.012	J
Arsenic	6020B	16	14		7.5		9.5		5.3		18.2		9.6	
Barium	6010D	400	92		446		75.6		84.8		168		73.2	
Beryllium	6020B	72	0.84		0.58		0.74		0.76		1.3		0.60	
Cadmium	6020B	4.3	0.095	J	1.3		0.085	J	0.064	J	0.22	J	0.12	J
Copper	6010D	270	23.7		15.8		22.4		18.1		36.6		19.8	
Lead	6010D	400	15.6		43.5		14.1		11.6		92.4		12.7	
Manganese	6010D	2,000	462	B	3440	B	305	B	296	B	209	B	484	B
Nickel	6010D	310	34.1		24.2		27.7		26.9		31.6		26	
Selenium	6020B	180	ND		ND		ND		ND		0.5	J	ND	
Silver	6020B	180	ND		ND		ND		ND		ND		ND	
Zinc	6010D	10,000	64.3		113		69		61.6		63.6		48.9	

NOTES:

1. Analytical testing via EPA Methods 6010D, 6020B, 7471B, 7196A by Eurofins Buffalo as noted.
2. Results present in mg/kg.
3. ND = Not Detected
4. NA = Not Applicable
5. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
6. "J" = estimated value; "B" = compound was detected in the blank and sample
7. Yellow highlighted values exceed the applicable Restricted Residential SCO.

Table 6
Soil Herbicides and Pesticides Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)	
2,4,5-TP (Silvex)	100	ND		ND		ND		ND		ND		ND	
Aldrin	0.097	ND		ND		ND		ND		ND		0.00089	J
Alpha-BHC	0.48	ND		ND		ND		ND		ND		ND	
a-Chlordane	4.2	ND		ND		ND		ND		ND		ND	
Endosulfan I	24	ND		ND		ND		ND		ND		ND	
beta-BHC	0.36	ND		ND		ND		ND		ND		ND	
Endosulfan II	24	ND		ND		ND		ND		ND		ND	
delta-BHC	100	ND		ND		ND		ND		ND		ND	
Dieldrin	0.2	ND		ND		ND		ND		ND		ND	
Endosulfan Sulfate	24	ND		ND		ND		ND		ND		ND	
Endrin	11	ND		ND		ND		ND		ND		ND	
gamma-BHC	1.3	ND		ND		ND		ND		ND		ND	
Heptachlor	2.1	ND		ND		ND		ND		ND		ND	
p,p'-DDD	13	ND		ND		ND		ND		ND		ND	
p,p'-DDE	8.9	ND		ND		ND		ND		ND		0.0012	J
p,p'-DDT	7.9	ND		ND		ND		ND		ND		0.00086	J

Table 6 (Continued)
Soil Herbicides and Pesticides Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB116 DUP (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
2,4,5-TP (Silvex)	100	ND		ND		ND		ND		ND		ND	
Aldrin	0.097	ND		ND		ND		ND		ND		ND	
Alpha-BHC	0.48	ND		ND		ND		ND		ND		ND	
a-Chlordane	4.2	ND		ND		ND		ND		ND		ND	
Endosulfan I	24	ND		ND		ND		ND		ND		ND	
beta-BHC	0.36	ND		ND		0.00067	J	ND		ND		ND	
Endosulfan II	24	ND		ND		ND		ND		ND		ND	
delta-BHC	100	ND		ND		ND		ND		ND		ND	
Dieldrin	0.2	ND		ND		ND		ND		ND		ND	
Endosulfan Sulfate	24	ND		ND		ND		ND		ND		ND	
Endrin	11	ND		ND		ND		ND		ND		ND	
gamma-BHC	1.3	ND		ND		ND		ND		0.00055	J	ND	
Heptachlor	2.1	ND		ND		ND		ND		ND		ND	
p,p'-DDD	13	ND		0.00063	J	ND		ND		0.00064	J	ND	
p,p'-DDE	8.9	ND		0.0017	J	ND		ND		0.00074	J	ND	
p,p'-DDT	7.9	ND		0.0016	J	ND		ND		0.0011	J	ND	

NOTES:

1. Analytical testing for herbicides via EPA Method 8151A and for pesticides via EPA Method 8081B by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected; NA = Not Applicable
4. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
5. "J" = estimated value

Table 7
Soil PCB Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)		SB115 (6-8)	
PCB-1016	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1221	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1232	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1242	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1248	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1254	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1260	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1262	1	ND		ND		ND		ND		ND		ND		ND	
PCB-1268	1	ND		ND		ND		ND		ND		ND		ND	

Table 7 (Continued)
Soil PCB Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted-Residential Use SCO	SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB116 DUP (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
PCB-1016	1	ND		ND		ND		ND		ND	
PCB-1221	1	ND		ND		ND		ND		ND	
PCB-1232	1	ND		ND		ND		ND		ND	
PCB-1242	1	ND		ND		ND		ND		ND	
PCB-1248	1	ND		ND		ND		ND		ND	
PCB-1254	1	ND		ND		ND		ND		ND	
PCB-1260	1	ND		ND		ND		ND		ND	
PCB-1262	1	ND		ND		ND		ND		ND	
PCB-1268	1	ND		ND		ND		ND		ND	

NOTES:
1. Analytical testing for PCBs via EPA Method 8082A by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected
4. Soil Cleanup Objectives (SCOs) from NYCRR Part 375

Table 8
Soil Cyanide Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)	
27	ND		0.66		ND		ND		ND		ND	

Restricted-Residential Use SCO	SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB116 DUP (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
27	ND		ND		ND		ND		ND		1.3	

NOTES:
1. Analytical testing for cyanide via EPA Method 9012B by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected
4. Soil Cleanup Objectives (SCOs) from NYCRR Part 375

Table 9
Soil PFAS Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Restricted Residential Use Guidance Value	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)		SB115 (0-3)	
1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	NA	ND		ND		ND		ND		ND		ND	
1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	NA	ND		ND		ND		ND		ND		ND	
2-(N-methyl perfluorooctanesulfonamido) acetic acid	NA	ND		ND		ND		ND		ND		ND	
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROBUTANESULFONIC ACID	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROBUTYRIC ACID (PFBA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUORODECANE SULFONIC ACID	NA	ND		ND		ND		ND		ND		ND	
PERFLUORODECANOIC ACID (PFDA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUORODODECANOIC ACID (PFDoA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROHEPTANE SULFONATE (PFHpS)	NA	ND		ND		ND		ND		ND		ND	
Perfluoroheptanoic Acid (PFHpA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROHEXANESULFONIC ACID	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROHEXANOIC ACID (PFHxA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUORONONANOIC ACID	NA	ND		ND		ND		ND		ND		0.043	J
Perfluorooctane Sulfonamide (FOSA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROOCTANE SULFONIC ACID	44	ND		ND		ND		ND		ND		0.21	J
Perfluorooctanoic acid (PFOA)	33	ND		ND		ND		ND		ND		0.12	J
PERFLUOROPENTANOIC ACID (PFPeA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROTETRADECANOIC ACID (PFTeA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROTRIDECANOIC ACID (PFTriA)	NA	ND		ND		ND		ND		ND		ND	
PERFLUOROUNDECANOIC ACID (PFUnA)	NA	ND		ND		ND		ND		ND		ND	

Table 9 (Continued)
Soil PFAS Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB116 DUP (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ND		ND		ND		ND		ND		ND	
1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ND		ND		ND		ND		ND		ND	
2-(N-methyl perfluorooctanesulfonamido) acetic acid	ND		ND		ND		ND		ND		ND	
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	ND		ND		ND		ND		ND		ND	
PERFLUOROBUTANESULFONIC ACID	ND		ND		ND		ND		ND		ND	
PERFLUOROBUTYRIC ACID (PFBA)	ND		ND		ND		ND		ND		ND	
PERFLUORODECANE SULFONIC ACID	ND		ND		ND		ND		ND		ND	
PERFLUORODECANOIC ACID (PFDA)	ND		ND		ND		ND		ND		ND	
PERFLUORODODECANOIC ACID (PFDoA)	ND		ND		ND		ND		ND		ND	
PERFLUOROHEPTANE SULFONATE (PFHpS)	ND		ND		ND		ND		ND		ND	
Perfluoroheptanoic Acid (PFHpA)	ND		0.045	J	ND		ND		ND		ND	
PERFLUOROHEXANESULFONIC ACID	ND		ND		ND		ND		ND		ND	
PERFLUOROHEXANOIC ACID (PFHxA)	ND		ND		ND		ND		ND		ND	
PERFLUORONONANOIC ACID	ND		0.056	J	ND		ND		ND		ND	
Perfluorooctane Sulfonamide (FOSA)	ND		ND		ND		ND		ND		ND	
PERFLUOROOCTANE SULFONIC ACID	ND		0.52		ND		ND		ND		ND	
Perfluorooctanoic acid (PFOA)	ND		0.17	J	ND		ND		0.12	J	ND	
PERFLUOROPENTANOIC ACID (PFPeA)	ND		0.090	J	ND		ND		0.068	J	ND	
PERFLUOROTETRADECANOIC ACID (PFTeA)	ND		ND		ND		ND		ND		ND	
PERFLUOROTRIDECANOIC ACID (PFTriA)	ND		ND		ND		ND		ND		ND	
PERFLUOROUNDECANOIC ACID (PFUnA)	ND		0.034	J	ND		ND		ND		ND	

NOTES:

1. Analytical testing for PFOA/PFOS via EPA Method 537M by Eurofins Buffalo.
2. Results present in ug/kg.
3. ND = Not Detected
4. NYSDEC Guidance Values from *Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs* , June 2021.

Table 10
Landfill Precharacterization Analytical Results

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	ANALYTICAL METHOD	UNITS	LF1 (5-7)		LF2 (10-11)		LF3 (0-7)		LF4 (0-7)		LF5 (0-7)	
Tetrachloroethene (TCLP)	8260C TCLP	mg/L	0.011		0.014		ND		ND		ND	
Trichloroethene (TCLP)		mg/L	0.011		ND		ND		ND		ND	
Barium (TCLP)	6010C TCLP	mg/L	0.75	J	0.63	J	0.92	J^2	1.0	J^2	0.67	J^2
Cadmium (TCLP)		mg/L	0.0018	J	0.00086	J	0.0028		0.0013	J	0.0015	J
Lead (TCLP)		mg/L	0.0075	J	0.011	J	0.0047	J	0.0078	J	0.0035	J
Flashpoint	1010A	Degrees F	>175		>175		98.0		>176		>176	
pH	9045D	SU	8.8	HF	9.2	HF	8.3	HF	8.4	HF	8.3	HF
Temperature		Degrees C	19.8	HF	19.9	HF	18.5	HF	18.5	HF	18.5	HF
GRO [C6-C10]	8015D	mg/kg	1.8		1.8		NA		NA		NA	
DRO [C10-C28]		mg/kg	9.6	J	28		NA		NA		NA	
cis-1,2-Dichloroethene	8260C	ug/kg	370		NA		16	J	210		ND	
Tetrachloroethene		ug/kg	2500		NA		470		130		480	
trans-1,2-Dichloroethene		ug/kg	140		NA		ND		15	J	ND	
Trichloroethene		ug/kg	1200		NA		19	J	16	J	ND	

PARAMETER	ANALYTICAL METHOD	UNITS	LF1 (8-9)		LF2 (10-11)	
Permanganate Natural Oxidant Demand	ASTM D7262010 Test Method A	g/kg	13.2		5.3	
			12.4		4.5	
			11.3		4.2	

NOTES:

1. Analytical testing by Eurofins TestAmerica Buffalo and Carus Corporation.
2. ND = Not Detected; "NA" = Not Analyzed
3. "J" = approximate value; "HF" = field parameter with a holding time of 15 minutes; "^2" = calibration blank outside acceptance limits
4. LF3 is referred to as "LANDFILL PROFILE 1", LF4 is referred to as "LANDFILL PROFILE 2", and LF5 is referred to as "LANFDILL PROFILE 3" in the analytical report.

TABLE 11
Project Schedule
Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, NY
NYSDEC Brownfield Cleanup Program Site #C915344

Task	2023																																																			
	January					February				March				April					May				June				July					August				September				October					November				December			
	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24
Remedial Action Work Plan (RAWP)																																																				
Submittal of RAWP																																																				
NYSDEC Review																																																				
RAWP Comments and Revisions																																																				
NYSDEC Review																																																				
RAWP Approval																																																				
Cleanup Action																																																				
Site Management Plan (SMP) & Final Engineering Report (FER)																																																				
Submittal of SMP																																																				
NYSDEC Review of SMP																																																				
SMP Comments and Revisions																																																				
NYSDEC Review of SMP																																																				
SMP Approval																																																				
Submittal of FER																																																				
NYSDEC Review of FER																																																				
FER Comments and Revisions																																																				
NYSDEC Review of FER																																																				
FER Approval and Notice of Issuance of Certificate of Completion (COC)																																																				

APPENDIX A

CAMP Data

22/03/02 10:36

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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-919498
Unit Firmware Ver	V2.16

Running Mode	Hygiene Mode
Datalog Mode	Auto
Diagnostic Mode	No
Stop Reason	Battery Low

Site ID	BMS00000
User ID	UPWINDO1

Begin	3/2/2022 10:36
End	3/2/2022 15:36
Sample Period(s)	900
Number of Records	19

Sensor	PID(ppm)
Sensor SN	S023030241V7
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	2000
STEL Alarm	100
TWA Alarm	50
Measurement Gas	Custom1
Calibration Time	2/28/2022 14:05
Peak	0
Min	0
Average	0

****

Datalog

Index	Date/Time	PID(ppm) (Min)	PID(ppm) (Avg)	PID(ppm) (Max)	PID(ppm) (Real)
1	3/2/2022 10:51	0	0	0	0
2	3/2/2022 11:06	0	0	0	0
3	3/2/2022 11:21	0	0	0	0
4	3/2/2022 11:36	0	0	0	0
5	3/2/2022 11:51	0	0	0	0
6	3/2/2022 12:06	0	0	0	0
7	3/2/2022 12:21	0	0	0	0
8	3/2/2022 12:36	0	0	0	0
9	3/2/2022 12:51	0	0	0	0
10	3/2/2022 13:06	0	0	0	0
11	3/2/2022 13:21	0	0	0	0
12	3/2/2022 13:36	0	0	0	0
13	3/2/2022 13:51	0	0	0	0
14	3/2/2022 14:06	0	0	0	0
15	3/2/2022 14:21	0	0	0	0
16	3/2/2022 14:36	0	0	0	0
17	3/2/2022 14:51	0	0	0	0
18	3/2/2022 15:06	0	0	0	0
19	3/2/2022 15:21	0	0	0	0
Peak		0	0	0	0
Min		0	0	0	0
Average		0	0	0	0

****

Index	Date/Time	PID(ppm) (TWA)	PID(ppm) (STEL)
1	3/2/2022 10:51	0	0
2	3/2/2022 11:06	0	0
3	3/2/2022 11:21	0	0
4	3/2/2022 11:36	0	0
5	3/2/2022 11:51	0	0
6	3/2/2022 12:06	0	0
7	3/2/2022 12:21	0	0
8	3/2/2022 12:36	0	0
9	3/2/2022 12:51	0	0
10	3/2/2022 13:06	0	0
11	3/2/2022 13:21	0	0
12	3/2/2022 13:36	0	0
13	3/2/2022 13:51	0	0
14	3/2/2022 14:06	0	0
15	3/2/2022 14:21	0	0
16	3/2/2022 14:36	0	0
17	3/2/2022 14:51	0	0
18	3/2/2022 15:06	0	0
19	3/2/2022 15:21	0	0

UPWIND SAMPLING LOCATION

22/03/02 10:22

****

Summary

Unit Name	MiniRAE 3000 +(PGM-7320)
Unit SN	592-601229
Unit Firmware Ver	V2.22A

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Power Down

Site ID	RAE00000
User ID	USER0000

Begin	3/2/2022 10:22
End	3/2/2022 16:52
Sample Period(s)	60
Number of Records	389

Sensor	PID(ppm)
Sensor SN	S023030914B3
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	2000
STEL Alarm	250
TWA Alarm	100
Measurement Gas	Isobutylene
Calibration Time	2/23/2022 13:56
Peak	1.5
Min	0.2
Average	0.8

****

Datalog

		PID(ppm)	PID(ppm)	PID(ppm)	PID(ppm)
Index	Date/Time	(Min)	(Avg)	(Max)	(Real)
1	3/2/2022 10:23	0.2	0.4	0.4	0.4
2	3/2/2022 10:24	0.2	0.4	0.5	0.4
3	3/2/2022 10:25	0.2	0.4	0.5	0.3
4	3/2/2022 10:26	0.3	0.4	0.4	0.3
5	3/2/2022 10:27	0.3	0.3	0.4	0.4

6	3/2/2022 10:28	0.3	0.3	0.4	0.3
7	3/2/2022 10:29	0.2	0.3	0.4	0.4
8	3/2/2022 10:30	0.2	0.3	0.4	0.3
9	3/2/2022 10:31	0.2	0.3	0.4	0.3
10	3/2/2022 10:32	0.3	0.3	0.4	0.3
11	3/2/2022 10:33	0.2	0.3	0.4	0.3
12	3/2/2022 10:34	0.2	0.3	0.4	0.3
13	3/2/2022 10:35	0.1	0.3	0.4	0.3
14	3/2/2022 10:36	0.2	0.3	0.4	0.3
15	3/2/2022 10:37	0.3	0.3	0.4	0.3
16	3/2/2022 10:38	0.2	0.3	0.4	0.3
17	3/2/2022 10:39	0.3	0.3	0.4	0.4
18	3/2/2022 10:40	0.2	0.3	0.4	0.3
19	3/2/2022 10:41	0.2	0.3	0.4	0.3
20	3/2/2022 10:42	0.2	0.3	0.4	0.2
21	3/2/2022 10:43	0.2	0.3	0.4	0.3
22	3/2/2022 10:44	0.2	0.3	0.4	0.3
23	3/2/2022 10:45	0.2	0.3	0.4	0.3
24	3/2/2022 10:46	0.2	0.3	0.4	0.3
25	3/2/2022 10:47	0.2	0.3	0.4	0.4
26	3/2/2022 10:48	0.2	0.3	0.4	0.4
27	3/2/2022 10:49	0.2	0.3	0.4	0.3
28	3/2/2022 10:50	0.2	0.3	0.4	0.3
29	3/2/2022 10:51	0.3	0.3	0.4	0.3
30	3/2/2022 10:52	0.2	0.3	0.4	0.3
31	3/2/2022 10:53	0.2	0.3	0.4	0.4
32	3/2/2022 10:54	0.3	0.3	0.4	0.3
33	3/2/2022 10:55	0.3	0.3	0.4	0.3
34	3/2/2022 10:56	0.3	0.3	0.4	0.3
35	3/2/2022 10:57	0.2	0.3	0.4	0.4
36	3/2/2022 10:58	0.3	0.4	0.4	0.4
37	3/2/2022 10:59	0.3	0.4	0.4	0.3
38	3/2/2022 11:00	0.3	0.4	0.4	0.4
39	3/2/2022 11:01	0.3	0.4	0.4	0.3
40	3/2/2022 11:02	0.3	0.4	0.4	0.4
41	3/2/2022 11:03	0.2	0.4	0.4	0.3
42	3/2/2022 11:04	0.3	0.4	0.4	0.4
43	3/2/2022 11:05	0.3	0.4	0.4	0.4
44	3/2/2022 11:06	0.3	0.4	0.5	0.4
45	3/2/2022 11:07	0.3	0.4	0.6	0.5
46	3/2/2022 11:08	0.3	0.4	0.6	0.4
47	3/2/2022 11:09	0.3	0.4	0.6	0.4
48	3/2/2022 11:10	0.3	0.6	0.7	0.6
49	3/2/2022 11:11	0.3	0.4	0.6	0.4
50	3/2/2022 11:12	0.3	0.4	0.4	0.4
51	3/2/2022 11:13	0.4	0.4	0.7	0.5
52	3/2/2022 11:14	0.4	0.5	0.7	0.6

53	3/2/2022 11:15	0.3	0.4	0.4	0.4
54	3/2/2022 11:16	0.4	0.5	0.7	0.5
55	3/2/2022 11:17	0.4	0.4	0.6	0.5
56	3/2/2022 11:18	0.4	0.5	0.5	0.4
57	3/2/2022 11:19	0.4	0.4	0.5	0.4
58	3/2/2022 11:20	0.4	0.5	0.7	0.5
59	3/2/2022 11:21	0.4	0.5	0.7	0.7
60	3/2/2022 11:22	0.4	0.5	0.7	0.7
61	3/2/2022 11:23	0.5	0.6	0.8	0.6
62	3/2/2022 11:24	0.4	0.5	0.7	0.4
63	3/2/2022 11:25	0.4	0.4	0.5	0.4
64	3/2/2022 11:26	0.4	0.4	0.5	0.4
65	3/2/2022 11:27	0.4	0.5	0.6	0.5
66	3/2/2022 11:28	0.4	0.5	0.6	0.5
67	3/2/2022 11:29	0.4	0.5	0.5	0.5
68	3/2/2022 11:30	0.4	0.5	0.5	0.5
69	3/2/2022 11:31	0.4	0.5	0.7	0.5
70	3/2/2022 11:32	0.4	0.5	0.7	0.7
71	3/2/2022 11:33	0.4	0.5	0.7	0.5
72	3/2/2022 11:34	0.4	0.5	0.5	0.4
73	3/2/2022 11:35	0.4	0.5	0.6	0.5
74	3/2/2022 11:36	0.4	0.5	0.6	0.4
75	3/2/2022 11:37	0.4	0.5	0.6	0.5
76	3/2/2022 11:38	0.5	0.6	0.7	0.6
77	3/2/2022 11:39	0.4	0.5	0.7	0.5
78	3/2/2022 11:40	0.4	0.5	0.6	0.6
79	3/2/2022 11:41	0.5	0.5	0.6	0.6
80	3/2/2022 11:42	0.5	0.5	0.6	0.5
81	3/2/2022 11:43	0.4	0.5	0.6	0.4
82	3/2/2022 11:44	0.4	0.5	0.6	0.5
83	3/2/2022 11:45	0.5	0.6	0.8	0.6
84	3/2/2022 11:46	0.5	0.5	0.7	0.5
85	3/2/2022 11:47	0.4	0.5	0.6	0.6
86	3/2/2022 11:48	0.5	0.6	0.6	0.5
87	3/2/2022 11:49	0.5	0.5	0.6	0.5
88	3/2/2022 11:50	0.5	0.6	0.6	0.6
89	3/2/2022 11:51	0.5	0.6	0.7	0.5
90	3/2/2022 11:52	0.5	0.6	0.7	0.5
91	3/2/2022 11:53	0.5	0.6	0.7	0.6
92	3/2/2022 11:54	0.6	0.6	0.7	0.6
93	3/2/2022 11:55	0.5	0.6	0.7	0.7
94	3/2/2022 11:56	0.5	0.6	0.7	0.6
95	3/2/2022 11:57	0.5	0.6	0.7	0.6
96	3/2/2022 11:58	0.5	0.6	0.7	0.6
97	3/2/2022 11:59	0.6	0.6	0.7	0.6
98	3/2/2022 12:00	0.6	0.6	0.7	0.6
99	3/2/2022 12:01	0.6	0.6	0.7	0.6

100	3/2/2022 12:02	0.6	0.6	0.7	0.6
101	3/2/2022 12:03	0.6	0.6	0.7	0.6
102	3/2/2022 12:04	0.5	0.6	0.7	0.6
103	3/2/2022 12:05	0.6	0.6	0.7	0.7
104	3/2/2022 12:06	0.6	0.6	0.7	0.7
105	3/2/2022 12:07	0.6	0.6	0.7	0.6
106	3/2/2022 12:08	0.6	0.6	0.7	0.6
107	3/2/2022 12:09	0.5	0.6	0.7	0.6
108	3/2/2022 12:10	0.5	0.6	0.7	0.6
109	3/2/2022 12:11	0.6	0.6	0.7	0.6
110	3/2/2022 12:12	0.6	0.6	0.7	0.6
111	3/2/2022 12:13	0.5	0.6	0.7	0.6
112	3/2/2022 12:14	0.6	0.6	0.7	0.6
113	3/2/2022 12:15	0.5	0.6	0.7	0.6
114	3/2/2022 12:16	0.6	0.6	0.7	0.7
115	3/2/2022 12:17	0.5	0.6	0.8	0.7
116	3/2/2022 12:18	0.5	0.7	0.8	0.6
117	3/2/2022 12:19	0.6	0.7	0.8	0.7
118	3/2/2022 12:20	0.5	0.7	0.8	0.6
119	3/2/2022 12:21	0.6	0.7	0.9	0.8
120	3/2/2022 12:22	0.7	0.8	0.9	0.8
121	3/2/2022 12:23	0.6	0.7	0.8	0.7
122	3/2/2022 12:24	0.6	0.7	1	0.7
123	3/2/2022 12:25	0.5	0.6	0.7	0.6
124	3/2/2022 12:26	0.5	0.6	0.6	0.6
125	3/2/2022 12:27	0.5	0.6	0.6	0.6
126	3/2/2022 12:28	0.5	0.6	0.7	0.6
127	3/2/2022 12:29	0.6	0.6	0.7	0.6
128	3/2/2022 12:30	0.6	0.6	0.7	0.6
129	3/2/2022 12:31	0.6	0.6	0.7	0.6
130	3/2/2022 12:32	0.5	0.6	0.7	0.6
131	3/2/2022 12:33	0.6	0.6	0.7	0.7
132	3/2/2022 12:34	0.6	0.7	0.7	0.7
133	3/2/2022 12:35	0.6	0.6	0.7	0.6
134	3/2/2022 12:36	0.6	0.7	0.7	0.7
135	3/2/2022 12:37	0.6	0.6	0.7	0.7
136	3/2/2022 12:38	0.6	0.6	0.7	0.6
137	3/2/2022 12:39	0.6	0.6	0.7	0.6
138	3/2/2022 12:40	0.6	0.7	0.7	0.6
139	3/2/2022 12:41	0.6	0.7	0.7	0.7
140	3/2/2022 12:42	0.6	0.7	0.7	0.6
141	3/2/2022 12:43	0.6	0.6	0.7	0.6
142	3/2/2022 12:44	0.6	0.7	0.7	0.7
143	3/2/2022 12:45	0.6	0.6	0.7	0.6
144	3/2/2022 12:46	0.5	0.6	0.7	0.6
145	3/2/2022 12:47	0.6	0.6	0.7	0.6
146	3/2/2022 12:48	0.6	0.7	0.7	0.7

147	3/2/2022 12:49	0.6	0.6	0.7	0.7
148	3/2/2022 12:50	0.5	0.6	0.7	0.6
149	3/2/2022 12:51	0.6	0.7	0.8	0.7
150	3/2/2022 12:52	0.6	0.6	0.7	0.7
151	3/2/2022 12:53	0.6	0.7	0.7	0.6
152	3/2/2022 12:54	0.6	0.6	0.7	0.6
153	3/2/2022 12:55	0.6	0.6	0.7	0.7
154	3/2/2022 12:56	0.5	0.7	0.7	0.7
155	3/2/2022 12:57	0.6	0.6	0.7	0.6
156	3/2/2022 12:58	0.6	0.7	0.7	0.7
157	3/2/2022 12:59	0.6	0.7	0.7	0.7
158	3/2/2022 13:00	0.6	0.7	0.7	0.7
159	3/2/2022 13:01	0.6	0.7	0.7	0.7
160	3/2/2022 13:02	0.6	0.7	0.8	0.8
161	3/2/2022 13:03	0.6	0.7	0.7	0.7
162	3/2/2022 13:04	0.6	0.7	0.9	0.8
163	3/2/2022 13:05	0.7	0.8	0.9	0.8
164	3/2/2022 13:06	0.7	0.8	0.8	0.7
165	3/2/2022 13:07	0.7	0.8	0.9	0.8
166	3/2/2022 13:08	0.8	0.8	0.8	0.8
167	3/2/2022 13:09	0.8	0.8	0.8	0.8
168	3/2/2022 13:10	0.8	0.8	0.8	0.8
169	3/2/2022 13:11	0.8	0.8	0.9	0.8
170	3/2/2022 13:12	0.8	0.9	0.9	0.9
171	3/2/2022 13:13	0.8	0.9	0.9	0.9
172	3/2/2022 13:14	0.9	0.9	0.9	0.9
173	3/2/2022 13:15	0.8	0.9	0.9	0.9
174	3/2/2022 13:16	0.9	0.9	0.9	0.9
175	3/2/2022 13:17	0.9	0.9	0.9	0.9
176	3/2/2022 13:18	0.9	0.9	0.9	0.9
177	3/2/2022 13:19	0.9	0.9	0.9	0.9
178	3/2/2022 13:20	0.9	0.9	0.9	0.9
179	3/2/2022 13:21	0.8	0.9	0.9	0.9
180	3/2/2022 13:22	0.8	0.9	1	0.9
181	3/2/2022 13:23	0.8	0.9	1	1
182	3/2/2022 13:24	0.9	0.9	1	0.9
183	3/2/2022 13:25	0.8	0.9	0.9	0.8
184	3/2/2022 13:26	0.8	0.9	1	0.9
185	3/2/2022 13:27	0.9	0.9	0.9	0.9
186	3/2/2022 13:28	0.8	0.9	1	0.8
187	3/2/2022 13:29	0.8	0.9	1	0.9
188	3/2/2022 13:30	0.8	0.9	1	0.9
189	3/2/2022 13:31	0.8	0.9	0.9	0.9
190	3/2/2022 13:32	0.9	0.9	0.9	0.9
191	3/2/2022 13:33	0.8	0.9	0.9	0.9
192	3/2/2022 13:34	0.8	0.9	0.9	0.9
193	3/2/2022 13:35	0.8	0.9	0.9	0.9

194	3/2/2022 13:36	0.8	0.9	0.9	0.8
195	3/2/2022 13:37	0.8	0.9	0.9	0.9
196	3/2/2022 13:38	0.8	0.9	0.9	0.9
197	3/2/2022 13:39	0.7	0.9	1	0.9
198	3/2/2022 13:40	0.8	0.9	0.9	0.9
199	3/2/2022 13:41	0.8	0.9	1	0.9
200	3/2/2022 13:42	0.8	0.9	0.9	0.8
201	3/2/2022 13:43	0.8	0.8	0.9	0.8
202	3/2/2022 13:44	0.8	0.8	0.9	0.9
203	3/2/2022 13:45	0.8	0.8	0.9	0.9
204	3/2/2022 13:46	0.8	0.9	0.9	0.9
205	3/2/2022 13:47	0.7	0.8	1	0.8
206	3/2/2022 13:48	0.6	0.8	0.9	0.8
207	3/2/2022 13:49	0.7	0.9	1	0.7
208	3/2/2022 13:50	0.7	0.8	1	0.8
209	3/2/2022 13:51	0.6	0.8	0.9	0.8
210	3/2/2022 13:52	0.6	0.8	0.9	0.8
211	3/2/2022 13:53	0.7	0.8	1	0.9
212	3/2/2022 13:54	0.7	0.8	1	0.7
213	3/2/2022 13:55	0.7	0.8	1	0.8
214	3/2/2022 13:56	0.7	0.8	1	0.9
215	3/2/2022 13:57	0.7	0.8	1	0.8
216	3/2/2022 13:58	0.6	0.8	0.9	0.6
217	3/2/2022 13:59	0.6	0.8	1	0.8
218	3/2/2022 14:00	0.7	0.9	1	0.8
219	3/2/2022 14:01	0.6	0.8	1	0.8
220	3/2/2022 14:02	0.7	0.8	0.9	0.8
221	3/2/2022 14:03	0.7	0.8	0.8	0.8
222	3/2/2022 14:04	0.7	0.8	0.8	0.8
223	3/2/2022 14:05	0.7	0.8	0.8	0.8
224	3/2/2022 14:06	0.8	0.8	0.8	0.8
225	3/2/2022 14:07	0.8	0.8	0.8	0.8
226	3/2/2022 14:08	0.8	0.8	0.8	0.8
227	3/2/2022 14:09	0.8	0.8	0.9	0.8
228	3/2/2022 14:10	0.5	0.8	0.9	0.9
229	3/2/2022 14:11	0.7	0.9	0.9	0.9
230	3/2/2022 14:12	0.9	0.9	0.9	0.9
231	3/2/2022 14:13	0.9	0.9	0.9	0.9
232	3/2/2022 14:14	0.9	0.9	0.9	0.9
233	3/2/2022 14:15	0.9	0.9	0.9	0.9
234	3/2/2022 14:16	0.9	0.9	0.9	0.9
235	3/2/2022 14:17	0.9	0.9	1	0.9
236	3/2/2022 14:18	0.9	0.9	1	1
237	3/2/2022 14:19	0.9	0.9	1	0.9
238	3/2/2022 14:20	0.9	0.9	0.9	0.9
239	3/2/2022 14:21	0.9	0.9	0.9	0.9
240	3/2/2022 14:22	0.9	0.9	1	0.9

241	3/2/2022 14:23	0.7	0.9	1	0.8
242	3/2/2022 14:24	0.7	0.9	1	0.8
243	3/2/2022 14:25	0.8	0.8	1	0.8
244	3/2/2022 14:26	0.7	0.8	1	0.9
245	3/2/2022 14:27	0.8	0.9	1	0.9
246	3/2/2022 14:28	0.8	0.8	0.9	0.9
247	3/2/2022 14:29	0.7	0.8	1	0.8
248	3/2/2022 14:30	0.8	0.8	0.9	0.9
249	3/2/2022 14:31	0.7	0.8	0.9	0.8
250	3/2/2022 14:32	0.8	0.8	1	0.9
251	3/2/2022 14:33	0.8	0.8	0.9	0.9
252	3/2/2022 14:34	0.7	0.8	1	0.8
253	3/2/2022 14:35	0.7	0.9	1	0.8
254	3/2/2022 14:36	0.7	0.8	0.9	0.9
255	3/2/2022 14:37	0.9	0.9	1	0.9
256	3/2/2022 14:38	0.9	0.9	1	1
257	3/2/2022 14:39	1	1	1	1
258	3/2/2022 14:40	1	1	1	1
259	3/2/2022 14:41	1	1	1	1
260	3/2/2022 14:42	1	1	1	1
261	3/2/2022 14:43	0.9	1	1.1	0.9
262	3/2/2022 14:44	0.8	0.9	1	0.9
263	3/2/2022 14:45	0.8	0.9	1	0.9
264	3/2/2022 14:46	0.8	0.9	0.9	0.9
265	3/2/2022 14:47	0.8	0.9	1	0.8
266	3/2/2022 14:48	0.8	0.9	1	1
267	3/2/2022 14:49	0.8	0.9	1	1
268	3/2/2022 14:50	0.8	0.9	1	1
269	3/2/2022 14:51	0.9	0.9	1	1
270	3/2/2022 14:52	0.8	0.9	1	1
271	3/2/2022 14:53	0.8	0.9	1	0.9
272	3/2/2022 14:54	0.9	0.9	1	1
273	3/2/2022 14:55	0.8	0.9	1	0.9
274	3/2/2022 14:56	0.9	1	1	1
275	3/2/2022 14:57	1	1	1	1
276	3/2/2022 14:58	1	1	1	1
277	3/2/2022 14:59	0.8	0.9	1.1	0.9
278	3/2/2022 15:00	0.7	0.9	1.1	0.9
279	3/2/2022 15:01	0.9	0.9	1	1
280	3/2/2022 15:02	1	1	1	1
281	3/2/2022 15:03	1	1	1	1
282	3/2/2022 15:04	0.9	0.9	1.1	0.9
283	3/2/2022 15:05	0.9	0.9	1	0.9
284	3/2/2022 15:06	0.9	1	1	1
285	3/2/2022 15:07	0.9	0.9	1.1	1
286	3/2/2022 15:08	0.9	1	1	1
287	3/2/2022 15:09	0.9	1	1.1	1

288	3/2/2022 15:10	0.9	1	1	1
289	3/2/2022 15:11	0.9	0.9	1	1
290	3/2/2022 15:12	0.9	1	1.1	0.9
291	3/2/2022 15:13	0.9	1	1	0.9
292	3/2/2022 15:14	0.9	1	1	1
293	3/2/2022 15:15	0.9	0.9	1	1
294	3/2/2022 15:16	0.9	1	1	0.9
295	3/2/2022 15:17	0.8	0.9	1.1	0.9
296	3/2/2022 15:18	0.9	0.9	1	1
297	3/2/2022 15:19	0.9	1	1	1
298	3/2/2022 15:20	0.9	1	1	1
299	3/2/2022 15:21	0.9	1	1	0.9
300	3/2/2022 15:22	0.9	1	1	1
301	3/2/2022 15:23	0.9	1	1.1	1
302	3/2/2022 15:24	0.9	1	1	1
303	3/2/2022 15:25	1	1	1	1
304	3/2/2022 15:26	0.9	1	1	0.9
305	3/2/2022 15:27	0.9	1	1.1	1
306	3/2/2022 15:28	1	1	1.1	1
307	3/2/2022 15:29	1	1	1.1	1.1
308	3/2/2022 15:30	1	1	1.1	1
309	3/2/2022 15:31	1	1	1	1
310	3/2/2022 15:32	0.9	1	1.1	1.1
311	3/2/2022 15:33	0.9	1	1.1	1
312	3/2/2022 15:34	1	1	1.1	1
313	3/2/2022 15:35	1	1	1.1	1.1
314	3/2/2022 15:36	1	1.1	1.1	1
315	3/2/2022 15:37	1	1.1	1.1	1
316	3/2/2022 15:38	1	1	1.1	1
317	3/2/2022 15:39	1	1.1	1.1	1.1
318	3/2/2022 15:40	1	1.1	1.1	1
319	3/2/2022 15:41	1	1	1.1	1.1
320	3/2/2022 15:42	1	1.1	1.1	1
321	3/2/2022 15:43	1	1	1.1	1
322	3/2/2022 15:44	1	1.1	1.1	1.1
323	3/2/2022 15:45	1	1.1	1.1	1.1
324	3/2/2022 15:46	1	1.1	1.2	1.1
325	3/2/2022 15:47	1	1.1	1.1	1.1
326	3/2/2022 15:48	1	1.1	1.2	1.2
327	3/2/2022 15:49	1	1.1	1.2	1.2
328	3/2/2022 15:50	1	1.1	1.2	1.1
329	3/2/2022 15:51	1	1.1	1.2	1
330	3/2/2022 15:52	1	1.2	1.3	1.2
331	3/2/2022 15:53	1	1.1	1.2	1.2
332	3/2/2022 15:54	1.1	1.2	1.3	1.2
333	3/2/2022 15:55	1	1.2	1.3	1.2
334	3/2/2022 15:56	1.1	1.2	1.3	1.2

335	3/2/2022 15:57	1	1.2	1.4	1.2
336	3/2/2022 15:58	1.1	1.2	1.3	1.2
337	3/2/2022 15:59	1.1	1.2	1.3	1.3
338	3/2/2022 16:00	1.1	1.2	1.3	1.2
339	3/2/2022 16:01	1.2	1.2	1.4	1.2
340	3/2/2022 16:02	1.1	1.3	1.4	1.2
341	3/2/2022 16:03	1.1	1.2	1.3	1.3
342	3/2/2022 16:04	1.2	1.3	1.4	1.2
343	3/2/2022 16:05	1.1	1.3	1.4	1.3
344	3/2/2022 16:06	1.2	1.3	1.4	1.3
345	3/2/2022 16:07	1.2	1.3	1.4	1.3
346	3/2/2022 16:08	1.2	1.3	1.3	1.2
347	3/2/2022 16:09	1.2	1.3	1.4	1.3
348	3/2/2022 16:10	1.2	1.3	1.4	1.3
349	3/2/2022 16:11	1.2	1.3	1.4	1.4
350	3/2/2022 16:12	1.2	1.3	1.4	1.3
351	3/2/2022 16:13	1.2	1.3	1.5	1.2
352	3/2/2022 16:14	1.3	1.3	1.5	1.3
353	3/2/2022 16:15	1.2	1.3	1.5	1.4
354	3/2/2022 16:16	1.2	1.3	1.4	1.4
355	3/2/2022 16:17	1.3	1.3	1.4	1.3
356	3/2/2022 16:18	1.3	1.3	1.4	1.3
357	3/2/2022 16:19	1.3	1.4	1.5	1.4
358	3/2/2022 16:20	1.3	1.4	1.4	1.4
359	3/2/2022 16:21	1.3	1.4	1.4	1.4
360	3/2/2022 16:22	1.3	1.4	1.5	1.4
361	3/2/2022 16:23	1.3	1.4	1.5	1.4
362	3/2/2022 16:24	1.3	1.4	1.4	1.4
363	3/2/2022 16:25	1.3	1.4	1.5	1.4
364	3/2/2022 16:26	1.3	1.4	1.5	1.4
365	3/2/2022 16:27	1.3	1.4	1.4	1.3
366	3/2/2022 16:28	1.3	1.4	1.5	1.4
367	3/2/2022 16:29	1.3	1.4	1.5	1.4
368	3/2/2022 16:30	1.3	1.4	1.5	1.4
369	3/2/2022 16:31	1.3	1.4	1.5	1.4
370	3/2/2022 16:32	1.3	1.4	1.5	1.4
371	3/2/2022 16:33	1.3	1.4	1.5	1.4
372	3/2/2022 16:34	1.3	1.4	1.5	1.4
373	3/2/2022 16:35	1.3	1.4	1.5	1.4
374	3/2/2022 16:36	1.3	1.4	1.5	1.5
375	3/2/2022 16:37	1.3	1.4	1.5	1.4
376	3/2/2022 16:38	1.3	1.4	1.5	1.5
377	3/2/2022 16:39	1.3	1.4	1.5	1.3
378	3/2/2022 16:40	1.3	1.4	1.5	1.4
379	3/2/2022 16:41	1.3	1.4	1.5	1.5
380	3/2/2022 16:42	1.3	1.4	1.5	1.4
381	3/2/2022 16:43	1.3	1.4	1.5	1.4

382	3/2/2022 16:44	1.3	1.4	1.5	1.4
383	3/2/2022 16:45	1.3	1.4	1.5	1.4
384	3/2/2022 16:46	1.3	1.4	1.5	1.4
385	3/2/2022 16:47	1.4	1.4	1.5	1.4
386	3/2/2022 16:48	1.3	1.4	1.5	1.4
387	3/2/2022 16:49	1.4	1.4	1.6	1.4
388	3/2/2022 16:50	1.3	1.4	1.5	1.4
389	3/2/2022 16:51	1.4	1.4	1.5	1.4
Peak		1.4	1.4	1.6	1.5
Min		0.1	0.3	0.4	0.2
Average		0.7	0.8	0.9	0.8
**********					
TWA/STEL					
		PID(ppm)	PID(ppm)		
Index	Date/Time	(TWA)	(STEL)		
1	3/2/2022 10:23	0	---		
2	3/2/2022 10:24	0	---		
3	3/2/2022 10:25	0	---		
4	3/2/2022 10:26	0	---		
5	3/2/2022 10:27	0	---		
6	3/2/2022 10:28	0	---		
7	3/2/2022 10:29	0	---		
8	3/2/2022 10:30	0	---		
9	3/2/2022 10:31	0	---		
10	3/2/2022 10:32	0	---		
11	3/2/2022 10:33	0	---		
12	3/2/2022 10:34	0	---		
13	3/2/2022 10:35	0	---		
14	3/2/2022 10:36	0	---		
15	3/2/2022 10:37	0	0.3		
16	3/2/2022 10:38	0	0.3		
17	3/2/2022 10:39	0	0.3		
18	3/2/2022 10:40	0	0.3		
19	3/2/2022 10:41	0	0.3		
20	3/2/2022 10:42	0	0.3		
21	3/2/2022 10:43	0	0.3		
22	3/2/2022 10:44	0	0.3		
23	3/2/2022 10:45	0	0.3		
24	3/2/2022 10:46	0	0.3		
25	3/2/2022 10:47	0	0.3		
26	3/2/2022 10:48	0	0.3		
27	3/2/2022 10:49	0	0.3		
28	3/2/2022 10:50	0	0.3		
29	3/2/2022 10:51	0	0.3		
30	3/2/2022 10:52	0	0.3		
31	3/2/2022 10:53	0	0.3		

32	3/2/2022 10:54	0	0.3		
33	3/2/2022 10:55	0	0.3		
34	3/2/2022 10:56	0	0.3		
35	3/2/2022 10:57	0	0.3		
36	3/2/2022 10:58	0	0.4		
37	3/2/2022 10:59	0	0.4		
38	3/2/2022 11:00	0	0.4		
39	3/2/2022 11:01	0	0.4		
40	3/2/2022 11:02	0	0.4		
41	3/2/2022 11:03	0	0.4		
42	3/2/2022 11:04	0	0.4		
43	3/2/2022 11:05	0	0.4		
44	3/2/2022 11:06	0	0.4		
45	3/2/2022 11:07	0	0.4		
46	3/2/2022 11:08	0	0.4		
47	3/2/2022 11:09	0	0.4		
48	3/2/2022 11:10	0	0.4		
49	3/2/2022 11:11	0	0.4		
50	3/2/2022 11:12	0	0.4		
51	3/2/2022 11:13	0	0.4		
52	3/2/2022 11:14	0	0.4		
53	3/2/2022 11:15	0	0.5		
54	3/2/2022 11:16	0	0.5		
55	3/2/2022 11:17	0	0.5		
56	3/2/2022 11:18	0	0.5		
57	3/2/2022 11:19	0	0.5		
58	3/2/2022 11:20	0	0.5		
59	3/2/2022 11:21	0	0.5		
60	3/2/2022 11:22	0	0.5		
61	3/2/2022 11:23	0	0.5		
62	3/2/2022 11:24	0	0.5		
63	3/2/2022 11:25	0	0.5		
64	3/2/2022 11:26	0.1	0.5		
65	3/2/2022 11:27	0.1	0.5		
66	3/2/2022 11:28	0.1	0.5		
67	3/2/2022 11:29	0.1	0.5		
68	3/2/2022 11:30	0.1	0.5		
69	3/2/2022 11:31	0.1	0.5		
70	3/2/2022 11:32	0.1	0.5		
71	3/2/2022 11:33	0.1	0.5		
72	3/2/2022 11:34	0.1	0.5		
73	3/2/2022 11:35	0.1	0.6		
74	3/2/2022 11:36	0.1	0.5		
75	3/2/2022 11:37	0.1	0.5		
76	3/2/2022 11:38	0.1	0.5		
77	3/2/2022 11:39	0.1	0.5		
78	3/2/2022 11:40	0.1	0.5		

79	3/2/2022 11:41	0.1	0.5		
80	3/2/2022 11:42	0.1	0.6		
81	3/2/2022 11:43	0.1	0.5		
82	3/2/2022 11:44	0.1	0.5		
83	3/2/2022 11:45	0.1	0.6		
84	3/2/2022 11:46	0.1	0.6		
85	3/2/2022 11:47	0.1	0.6		
86	3/2/2022 11:48	0.1	0.5		
87	3/2/2022 11:49	0.1	0.5		
88	3/2/2022 11:50	0.1	0.6		
89	3/2/2022 11:51	0.1	0.6		
90	3/2/2022 11:52	0.1	0.6		
91	3/2/2022 11:53	0.1	0.6		
92	3/2/2022 11:54	0.1	0.6		
93	3/2/2022 11:55	0.1	0.6		
94	3/2/2022 11:56	0.1	0.6		
95	3/2/2022 11:57	0.1	0.6		
96	3/2/2022 11:58	0.1	0.6		
97	3/2/2022 11:59	0.1	0.6		
98	3/2/2022 12:00	0.1	0.6		
99	3/2/2022 12:01	0.1	0.6		
100	3/2/2022 12:02	0.1	0.6		
101	3/2/2022 12:03	0.1	0.6		
102	3/2/2022 12:04	0.1	0.6		
103	3/2/2022 12:05	0.1	0.6		
104	3/2/2022 12:06	0.1	0.6		
105	3/2/2022 12:07	0.1	0.7		
106	3/2/2022 12:08	0.1	0.7		
107	3/2/2022 12:09	0.1	0.7		
108	3/2/2022 12:10	0.1	0.7		
109	3/2/2022 12:11	0.1	0.7		
110	3/2/2022 12:12	0.1	0.7		
111	3/2/2022 12:13	0.1	0.7		
112	3/2/2022 12:14	0.1	0.7		
113	3/2/2022 12:15	0.1	0.7		
114	3/2/2022 12:16	0.1	0.7		
115	3/2/2022 12:17	0.1	0.7		
116	3/2/2022 12:18	0.1	0.7		
117	3/2/2022 12:19	0.1	0.7		
118	3/2/2022 12:20	0.1	0.7		
119	3/2/2022 12:21	0.1	0.7		
120	3/2/2022 12:22	0.1	0.7		
121	3/2/2022 12:23	0.1	0.7		
122	3/2/2022 12:24	0.1	0.7		
123	3/2/2022 12:25	0.1	0.7		
124	3/2/2022 12:26	0.1	0.7		
125	3/2/2022 12:27	0.1	0.7		

126	3/2/2022 12:28	0.1	0.7		
127	3/2/2022 12:29	0.1	0.7		
128	3/2/2022 12:30	0.1	0.7		
129	3/2/2022 12:31	0.1	0.7		
130	3/2/2022 12:32	0.1	0.7		
131	3/2/2022 12:33	0.1	0.7		
132	3/2/2022 12:34	0.1	0.7		
133	3/2/2022 12:35	0.1	0.7		
134	3/2/2022 12:36	0.1	0.7		
135	3/2/2022 12:37	0.1	0.7		
136	3/2/2022 12:38	0.1	0.7		
137	3/2/2022 12:39	0.1	0.7		
138	3/2/2022 12:40	0.1	0.7		
139	3/2/2022 12:41	0.1	0.7		
140	3/2/2022 12:42	0.1	0.7		
141	3/2/2022 12:43	0.1	0.7		
142	3/2/2022 12:44	0.1	0.7		
143	3/2/2022 12:45	0.1	0.7		
144	3/2/2022 12:46	0.2	0.7		
145	3/2/2022 12:47	0.2	0.7		
146	3/2/2022 12:48	0.2	0.7		
147	3/2/2022 12:49	0.2	0.7		
148	3/2/2022 12:50	0.2	0.7		
149	3/2/2022 12:51	0.2	0.7		
150	3/2/2022 12:52	0.2	0.7		
151	3/2/2022 12:53	0.2	0.7		
152	3/2/2022 12:54	0.2	0.7		
153	3/2/2022 12:55	0.2	0.7		
154	3/2/2022 12:56	0.2	0.7		
155	3/2/2022 12:57	0.2	0.7		
156	3/2/2022 12:58	0.2	0.7		
157	3/2/2022 12:59	0.2	0.7		
158	3/2/2022 13:00	0.2	0.7		
159	3/2/2022 13:01	0.2	0.7		
160	3/2/2022 13:02	0.2	0.7		
161	3/2/2022 13:03	0.2	0.7		
162	3/2/2022 13:04	0.2	0.7		
163	3/2/2022 13:05	0.2	0.7		
164	3/2/2022 13:06	0.2	0.7		
165	3/2/2022 13:07	0.2	0.8		
166	3/2/2022 13:08	0.2	0.8		
167	3/2/2022 13:09	0.2	0.8		
168	3/2/2022 13:10	0.2	0.8		
169	3/2/2022 13:11	0.2	0.8		
170	3/2/2022 13:12	0.2	0.8		
171	3/2/2022 13:13	0.2	0.8		
172	3/2/2022 13:14	0.2	0.8		

173	3/2/2022 13:15	0.2	0.9		
174	3/2/2022 13:16	0.2	0.9		
175	3/2/2022 13:17	0.2	0.9		
176	3/2/2022 13:18	0.2	0.9		
177	3/2/2022 13:19	0.2	0.9		
178	3/2/2022 13:20	0.2	0.9		
179	3/2/2022 13:21	0.2	0.9		
180	3/2/2022 13:22	0.2	0.9		
181	3/2/2022 13:23	0.2	0.9		
182	3/2/2022 13:24	0.2	0.9		
183	3/2/2022 13:25	0.2	0.9		
184	3/2/2022 13:26	0.2	1		
185	3/2/2022 13:27	0.2	1		
186	3/2/2022 13:28	0.2	1		
187	3/2/2022 13:29	0.2	1		
188	3/2/2022 13:30	0.2	1		
189	3/2/2022 13:31	0.2	1		
190	3/2/2022 13:32	0.2	1		
191	3/2/2022 13:33	0.2	1		
192	3/2/2022 13:34	0.2	1		
193	3/2/2022 13:35	0.2	1		
194	3/2/2022 13:36	0.2	0.9		
195	3/2/2022 13:37	0.2	0.9		
196	3/2/2022 13:38	0.2	0.9		
197	3/2/2022 13:39	0.2	0.9		
198	3/2/2022 13:40	0.2	0.9		
199	3/2/2022 13:41	0.2	0.9		
200	3/2/2022 13:42	0.2	0.9		
201	3/2/2022 13:43	0.2	0.9		
202	3/2/2022 13:44	0.2	0.9		
203	3/2/2022 13:45	0.2	0.9		
204	3/2/2022 13:46	0.3	0.9		
205	3/2/2022 13:47	0.3	0.9		
206	3/2/2022 13:48	0.3	0.9		
207	3/2/2022 13:49	0.3	0.9		
208	3/2/2022 13:50	0.3	0.9		
209	3/2/2022 13:51	0.3	0.9		
210	3/2/2022 13:52	0.3	0.9		
211	3/2/2022 13:53	0.3	0.9		
212	3/2/2022 13:54	0.3	0.9		
213	3/2/2022 13:55	0.3	0.9		
214	3/2/2022 13:56	0.3	0.9		
215	3/2/2022 13:57	0.3	0.9		
216	3/2/2022 13:58	0.3	0.9		
217	3/2/2022 13:59	0.3	0.9		
218	3/2/2022 14:00	0.3	0.9		
219	3/2/2022 14:01	0.3	0.8		

220	3/2/2022 14:02	0.3	0.8		
221	3/2/2022 14:03	0.3	0.8		
222	3/2/2022 14:04	0.3	0.8		
223	3/2/2022 14:05	0.3	0.8		
224	3/2/2022 14:06	0.3	0.8		
225	3/2/2022 14:07	0.3	0.8		
226	3/2/2022 14:08	0.3	0.8		
227	3/2/2022 14:09	0.3	0.8		
228	3/2/2022 14:10	0.3	0.9		
229	3/2/2022 14:11	0.3	0.9		
230	3/2/2022 14:12	0.3	0.9		
231	3/2/2022 14:13	0.3	0.9		
232	3/2/2022 14:14	0.3	0.9		
233	3/2/2022 14:15	0.3	0.9		
234	3/2/2022 14:16	0.3	0.9		
235	3/2/2022 14:17	0.3	0.9		
236	3/2/2022 14:18	0.3	0.9		
237	3/2/2022 14:19	0.3	0.9		
238	3/2/2022 14:20	0.3	0.9		
239	3/2/2022 14:21	0.3	0.9		
240	3/2/2022 14:22	0.3	0.9		
241	3/2/2022 14:23	0.3	0.9		
242	3/2/2022 14:24	0.3	0.9		
243	3/2/2022 14:25	0.3	0.9		
244	3/2/2022 14:26	0.3	0.9		
245	3/2/2022 14:27	0.3	0.9		
246	3/2/2022 14:28	0.3	0.9		
247	3/2/2022 14:29	0.3	0.9		
248	3/2/2022 14:30	0.3	0.9		
249	3/2/2022 14:31	0.3	0.9		
250	3/2/2022 14:32	0.3	0.9		
251	3/2/2022 14:33	0.3	0.9		
252	3/2/2022 14:34	0.3	0.9		
253	3/2/2022 14:35	0.3	0.9		
254	3/2/2022 14:36	0.3	0.9		
255	3/2/2022 14:37	0.3	0.9		
256	3/2/2022 14:38	0.3	0.9		
257	3/2/2022 14:39	0.3	0.9		
258	3/2/2022 14:40	0.3	0.9		
259	3/2/2022 14:41	0.3	1		
260	3/2/2022 14:42	0.4	1		
261	3/2/2022 14:43	0.4	1		
262	3/2/2022 14:44	0.4	1		
263	3/2/2022 14:45	0.4	1		
264	3/2/2022 14:46	0.4	1		
265	3/2/2022 14:47	0.4	1		
266	3/2/2022 14:48	0.4	1		

267	3/2/2022 14:49	0.4	1		
268	3/2/2022 14:50	0.4	1		
269	3/2/2022 14:51	0.4	1		
270	3/2/2022 14:52	0.4	1		
271	3/2/2022 14:53	0.4	1		
272	3/2/2022 14:54	0.4	1		
273	3/2/2022 14:55	0.4	1		
274	3/2/2022 14:56	0.4	1		
275	3/2/2022 14:57	0.4	1		
276	3/2/2022 14:58	0.4	1		
277	3/2/2022 14:59	0.4	1		
278	3/2/2022 15:00	0.4	1		
279	3/2/2022 15:01	0.4	1		
280	3/2/2022 15:02	0.4	1		
281	3/2/2022 15:03	0.4	1		
282	3/2/2022 15:04	0.4	1		
283	3/2/2022 15:05	0.4	1		
284	3/2/2022 15:06	0.4	1		
285	3/2/2022 15:07	0.4	1		
286	3/2/2022 15:08	0.4	1		
287	3/2/2022 15:09	0.4	1		
288	3/2/2022 15:10	0.4	1		
289	3/2/2022 15:11	0.4	1		
290	3/2/2022 15:12	0.4	1		
291	3/2/2022 15:13	0.4	1		
292	3/2/2022 15:14	0.4	1		
293	3/2/2022 15:15	0.4	1		
294	3/2/2022 15:16	0.4	1		
295	3/2/2022 15:17	0.4	1		
296	3/2/2022 15:18	0.4	1		
297	3/2/2022 15:19	0.4	1		
298	3/2/2022 15:20	0.4	1		
299	3/2/2022 15:21	0.4	1		
300	3/2/2022 15:22	0.4	1		
301	3/2/2022 15:23	0.4	1		
302	3/2/2022 15:24	0.4	1		
303	3/2/2022 15:25	0.4	1		
304	3/2/2022 15:26	0.4	1		
305	3/2/2022 15:27	0.4	1		
306	3/2/2022 15:28	0.4	1		
307	3/2/2022 15:29	0.4	1		
308	3/2/2022 15:30	0.4	1		
309	3/2/2022 15:31	0.4	1		
310	3/2/2022 15:32	0.5	1.1		
311	3/2/2022 15:33	0.5	1.1		
312	3/2/2022 15:34	0.5	1.1		
313	3/2/2022 15:35	0.5	1.1		

314	3/2/2022 15:36	0.5	1.1		
315	3/2/2022 15:37	0.5	1.1		
316	3/2/2022 15:38	0.5	1.1		
317	3/2/2022 15:39	0.5	1.1		
318	3/2/2022 15:40	0.5	1.1		
319	3/2/2022 15:41	0.5	1.1		
320	3/2/2022 15:42	0.5	1.1		
321	3/2/2022 15:43	0.5	1.1		
322	3/2/2022 15:44	0.5	1.1		
323	3/2/2022 15:45	0.5	1.1		
324	3/2/2022 15:46	0.5	1.1		
325	3/2/2022 15:47	0.5	1.1		
326	3/2/2022 15:48	0.5	1.1		
327	3/2/2022 15:49	0.5	1.1		
328	3/2/2022 15:50	0.5	1.1		
329	3/2/2022 15:51	0.5	1.1		
330	3/2/2022 15:52	0.5	1.2		
331	3/2/2022 15:53	0.5	1.2		
332	3/2/2022 15:54	0.5	1.2		
333	3/2/2022 15:55	0.5	1.2		
334	3/2/2022 15:56	0.5	1.2		
335	3/2/2022 15:57	0.5	1.2		
336	3/2/2022 15:58	0.5	1.2		
337	3/2/2022 15:59	0.5	1.2		
338	3/2/2022 16:00	0.5	1.2		
339	3/2/2022 16:01	0.5	1.3		
340	3/2/2022 16:02	0.5	1.3		
341	3/2/2022 16:03	0.5	1.3		
342	3/2/2022 16:04	0.5	1.3		
343	3/2/2022 16:05	0.5	1.3		
344	3/2/2022 16:06	0.5	1.3		
345	3/2/2022 16:07	0.5	1.3		
346	3/2/2022 16:08	0.5	1.3		
347	3/2/2022 16:09	0.5	1.3		
348	3/2/2022 16:10	0.5	1.3		
349	3/2/2022 16:11	0.5	1.3		
350	3/2/2022 16:12	0.5	1.3		
351	3/2/2022 16:13	0.6	1.3		
352	3/2/2022 16:14	0.6	1.4		
353	3/2/2022 16:15	0.6	1.4		
354	3/2/2022 16:16	0.6	1.4		
355	3/2/2022 16:17	0.6	1.4		
356	3/2/2022 16:18	0.6	1.4		
357	3/2/2022 16:19	0.6	1.4		
358	3/2/2022 16:20	0.6	1.4		
359	3/2/2022 16:21	0.6	1.4		
360	3/2/2022 16:22	0.6	1.4		

361	3/2/2022 16:23	0.6	1.4		
362	3/2/2022 16:24	0.6	1.4		
363	3/2/2022 16:25	0.6	1.4		
364	3/2/2022 16:26	0.6	1.5		
365	3/2/2022 16:27	0.6	1.4		
366	3/2/2022 16:28	0.6	1.5		
367	3/2/2022 16:29	0.6	1.5		
368	3/2/2022 16:30	0.6	1.5		
369	3/2/2022 16:31	0.6	1.5		
370	3/2/2022 16:32	0.6	1.5		
371	3/2/2022 16:33	0.6	1.5		
372	3/2/2022 16:34	0.6	1.5		
373	3/2/2022 16:35	0.6	1.5		
374	3/2/2022 16:36	0.6	1.5		
375	3/2/2022 16:37	0.6	1.5		
376	3/2/2022 16:38	0.6	1.5		
377	3/2/2022 16:39	0.6	1.5		
378	3/2/2022 16:40	0.6	1.5		
379	3/2/2022 16:41	0.6	1.5		
380	3/2/2022 16:42	0.6	1.5		
381	3/2/2022 16:43	0.6	1.5		
382	3/2/2022 16:44	0.6	1.5		
383	3/2/2022 16:45	0.6	1.5		
384	3/2/2022 16:46	0.6	1.5		
385	3/2/2022 16:47	0.7	1.5		
386	3/2/2022 16:48	0.7	1.5		
387	3/2/2022 16:49	0.7	1.5		
388	3/2/2022 16:50	0.7	1.5		
389	3/2/2022 16:51	0.7	1.5		

WORK AREA SAMPLING LOCATION

22/03/02 09:06

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Summary

Unit Name	MiniRAE 3000(PGM-7320)
Unit SN	592-922263
Unit Firmware Ver	V2.22A

Running Mode	Hygiene Mode
Datalog Mode	Manual
Diagnostic Mode	No
Stop Reason	Power Down

Site ID	RAE00000
User ID	USER0000

Begin	3/2/2022 9:06
End	3/2/2022 15:37
Sample Period(s)	60
Number of Records	390

Sensor	PID(ppm)
Sensor SN	S023030305U9
Measure Type	Min; Avg; Max; Real
Span	100
Span 2	1000
Low Alarm	50
High Alarm	100
Over Alarm	2000
STEL Alarm	25
TWA Alarm	10
Measurement Gas	Isobutylene
Calibration Time	2/23/2022 12:51
Peak	0
Min	0
Average	0

****

Datalog

		PID(ppm)	PID(ppm)	PID(ppm)	PID(ppm)
Index	Date/Time	(Min)	(Avg)	(Max)	(Real)
1	3/2/2022 9:07	0	0	0	0
2	3/2/2022 9:08	0	0	0	0
3	3/2/2022 9:09	0	0	0	0
4	3/2/2022 9:10	0	0	0	0
5	3/2/2022 9:11	0	0	0	0
6	3/2/2022 9:12	0	0	0	0
7	3/2/2022 9:13	0	0	0	0
8	3/2/2022 9:14	0	0	0	0
9	3/2/2022 9:15	0	0	0	0
10	3/2/2022 9:16	0	0	0	0
11	3/2/2022 9:17	0	0	0	0
12	3/2/2022 9:18	0	0	0	0
13	3/2/2022 9:19	0	0	0	0
14	3/2/2022 9:20	0	0	0	0
15	3/2/2022 9:21	0	0	0	0
16	3/2/2022 9:22	0	0	0	0
17	3/2/2022 9:23	0	0	0	0
18	3/2/2022 9:24	0	0	0	0
19	3/2/2022 9:25	0	0	0	0
20	3/2/2022 9:26	0	0	0	0
21	3/2/2022 9:27	0	0	0	0
22	3/2/2022 9:28	0	0	0	0
23	3/2/2022 9:29	0	0	0	0
24	3/2/2022 9:30	0	0	0	0
25	3/2/2022 9:31	0	0	0	0
26	3/2/2022 9:32	0	0	0	0
27	3/2/2022 9:33	0	0	0	0
28	3/2/2022 9:34	0	0	0	0
29	3/2/2022 9:35	0	0	0	0
30	3/2/2022 9:36	0	0	0	0
31	3/2/2022 9:37	0	0	0	0
32	3/2/2022 9:38	0	0	0	0
33	3/2/2022 9:39	0	0	0	0
34	3/2/2022 9:40	0	0	0	0
35	3/2/2022 9:41	0	0	0	0
36	3/2/2022 9:42	0	0	0	0
37	3/2/2022 9:43	0	0	0	0
38	3/2/2022 9:44	0	0	0	0
39	3/2/2022 9:45	0	0	0	0
40	3/2/2022 9:46	0	0	0	0
41	3/2/2022 9:47	0	0	0	0
42	3/2/2022 9:48	0	0	0	0
43	3/2/2022 9:49	0	0	0	0
44	3/2/2022 9:50	0	0	0	0

45	3/2/2022 9:51	0	0	0	0
46	3/2/2022 9:52	0	0	0	0
47	3/2/2022 9:53	0	0	0	0
48	3/2/2022 9:54	0	0	0	0
49	3/2/2022 9:55	0	0	0	0
50	3/2/2022 9:56	0	0	0	0
51	3/2/2022 9:57	0	0	0	0
52	3/2/2022 9:58	0	0	0	0
53	3/2/2022 9:59	0	0	0	0
54	3/2/2022 10:00	0	0	0	0
55	3/2/2022 10:01	0	0	0	0
56	3/2/2022 10:02	0	0	0	0
57	3/2/2022 10:03	0	0	0	0
58	3/2/2022 10:04	0	0	0	0
59	3/2/2022 10:05	0	0	0	0
60	3/2/2022 10:06	0	0	0	0
61	3/2/2022 10:07	0	0	0	0
62	3/2/2022 10:08	0	0	0	0
63	3/2/2022 10:09	0	0	0	0
64	3/2/2022 10:10	0	0	0	0
65	3/2/2022 10:11	0	0	0	0
66	3/2/2022 10:12	0	0	0	0
67	3/2/2022 10:13	0	0	0	0
68	3/2/2022 10:14	0	0	0	0
69	3/2/2022 10:15	0	0	0	0
70	3/2/2022 10:16	0	0	0	0
71	3/2/2022 10:17	0	0	0	0
72	3/2/2022 10:18	0	0	0	0
73	3/2/2022 10:19	0	0	0	0
74	3/2/2022 10:20	0	0	0	0
75	3/2/2022 10:21	0	0	0	0
76	3/2/2022 10:22	0	0	0	0
77	3/2/2022 10:23	0	0	0	0
78	3/2/2022 10:24	0	0	0	0
79	3/2/2022 10:25	0	0	0	0
80	3/2/2022 10:26	0	0	0	0
81	3/2/2022 10:27	0	0	0	0
82	3/2/2022 10:28	0	0	0	0
83	3/2/2022 10:29	0	0	0	0
84	3/2/2022 10:30	0	0	0	0
85	3/2/2022 10:31	0	0	0	0
86	3/2/2022 10:32	0	0	0	0
87	3/2/2022 10:33	0	0	0	0
88	3/2/2022 10:34	0	0	0	0
89	3/2/2022 10:35	0	0	0	0
90	3/2/2022 10:36	0	0	0	0
91	3/2/2022 10:37	0	0	0	0

92	3/2/2022 10:38	0	0	0	0
93	3/2/2022 10:39	0	0	0	0
94	3/2/2022 10:40	0	0	0	0
95	3/2/2022 10:41	0	0	0	0
96	3/2/2022 10:42	0	0	0	0
97	3/2/2022 10:43	0	0	0	0
98	3/2/2022 10:44	0	0	0	0
99	3/2/2022 10:45	0	0	0	0
100	3/2/2022 10:46	0	0	0	0
101	3/2/2022 10:47	0	0	0	0
102	3/2/2022 10:48	0	0	0	0
103	3/2/2022 10:49	0	0	0	0
104	3/2/2022 10:50	0	0	0	0
105	3/2/2022 10:51	0	0	0	0
106	3/2/2022 10:52	0	0	0	0
107	3/2/2022 10:53	0	0	0	0
108	3/2/2022 10:54	0	0	0	0
109	3/2/2022 10:55	0	0	0	0
110	3/2/2022 10:56	0	0	0	0
111	3/2/2022 10:57	0	0	0	0
112	3/2/2022 10:58	0	0	0	0
113	3/2/2022 10:59	0	0	0	0
114	3/2/2022 11:00	0	0	0	0
115	3/2/2022 11:01	0	0	0	0
116	3/2/2022 11:02	0	0	0	0
117	3/2/2022 11:03	0	0	0	0
118	3/2/2022 11:04	0	0	0	0
119	3/2/2022 11:05	0	0	0	0
120	3/2/2022 11:06	0	0	0	0
121	3/2/2022 11:07	0	0	0	0
122	3/2/2022 11:08	0	0	0	0
123	3/2/2022 11:09	0	0	0	0
124	3/2/2022 11:10	0	0	0	0
125	3/2/2022 11:11	0	0	0	0
126	3/2/2022 11:12	0	0	0	0
127	3/2/2022 11:13	0	0	0	0
128	3/2/2022 11:14	0	0	0	0
129	3/2/2022 11:15	0	0	0	0
130	3/2/2022 11:16	0	0	0	0
131	3/2/2022 11:17	0	0	0	0
132	3/2/2022 11:18	0	0	0	0
133	3/2/2022 11:19	0	0	0	0
134	3/2/2022 11:20	0	0	0	0
135	3/2/2022 11:21	0	0	0	0
136	3/2/2022 11:22	0	0	0	0
137	3/2/2022 11:23	0	0	0	0
138	3/2/2022 11:24	0	0	0	0

139	3/2/2022 11:25	0	0	0	0
140	3/2/2022 11:26	0	0	0	0
141	3/2/2022 11:27	0	0	0	0
142	3/2/2022 11:28	0	0	0	0
143	3/2/2022 11:29	0	0	0	0
144	3/2/2022 11:30	0	0	0	0
145	3/2/2022 11:31	0	0	0	0
146	3/2/2022 11:32	0	0	0	0
147	3/2/2022 11:33	0	0	0	0
148	3/2/2022 11:34	0	0	0	0
149	3/2/2022 11:35	0	0	0	0
150	3/2/2022 11:36	0	0	0	0
151	3/2/2022 11:37	0	0	0	0
152	3/2/2022 11:38	0	0	0	0
153	3/2/2022 11:39	0	0	0	0
154	3/2/2022 11:40	0	0	0	0
155	3/2/2022 11:41	0	0	0	0
156	3/2/2022 11:42	0	0	0	0
157	3/2/2022 11:43	0	0	0	0
158	3/2/2022 11:44	0	0	0	0
159	3/2/2022 11:45	0	0	0	0
160	3/2/2022 11:46	0	0	0	0
161	3/2/2022 11:47	0	0	0	0
162	3/2/2022 11:48	0	0	0	0
163	3/2/2022 11:49	0	0	0	0
164	3/2/2022 11:50	0	0	0	0
165	3/2/2022 11:51	0	0	0	0
166	3/2/2022 11:52	0	0	0	0
167	3/2/2022 11:53	0	0	0	0
168	3/2/2022 11:54	0	0	0	0
169	3/2/2022 11:55	0	0	0	0
170	3/2/2022 11:56	0	0	0	0
171	3/2/2022 11:57	0	0	0	0
172	3/2/2022 11:58	0	0	0	0
173	3/2/2022 11:59	0	0	0	0
174	3/2/2022 12:00	0	0	0	0
175	3/2/2022 12:01	0	0	0	0
176	3/2/2022 12:02	0	0	0	0
177	3/2/2022 12:03	0	0	0	0
178	3/2/2022 12:04	0	0	0	0
179	3/2/2022 12:05	0	0	0	0
180	3/2/2022 12:06	0	0	0	0
181	3/2/2022 12:07	0	0	0	0
182	3/2/2022 12:08	0	0	0	0
183	3/2/2022 12:09	0	0	0	0
184	3/2/2022 12:10	0	0	0	0
185	3/2/2022 12:11	0	0	0	0

186	3/2/2022 12:12	0	0	0	0
187	3/2/2022 12:13	0	0	0	0
188	3/2/2022 12:14	0	0	0	0
189	3/2/2022 12:15	0	0	0	0
190	3/2/2022 12:16	0	0	0	0
191	3/2/2022 12:17	0	0	0	0
192	3/2/2022 12:18	0	0	0	0
193	3/2/2022 12:19	0	0	0	0
194	3/2/2022 12:20	0	0	0	0
195	3/2/2022 12:21	0	0	0	0
196	3/2/2022 12:22	0	0	0	0
197	3/2/2022 12:23	0	0	0	0
198	3/2/2022 12:24	0	0	0	0
199	3/2/2022 12:25	0	0	0	0
200	3/2/2022 12:26	0	0	0	0
201	3/2/2022 12:27	0	0	0	0
202	3/2/2022 12:28	0	0	0	0
203	3/2/2022 12:29	0	0	0	0
204	3/2/2022 12:30	0	0	0	0
205	3/2/2022 12:31	0	0	0	0
206	3/2/2022 12:32	0	0	0	0
207	3/2/2022 12:33	0	0	0	0
208	3/2/2022 12:34	0	0	0	0
209	3/2/2022 12:35	0	0	0	0
210	3/2/2022 12:36	0	0	0	0
211	3/2/2022 12:37	0	0	0	0
212	3/2/2022 12:38	0	0	0	0
213	3/2/2022 12:39	0	0	0	0
214	3/2/2022 12:40	0	0	0	0
215	3/2/2022 12:41	0	0	0	0
216	3/2/2022 12:42	0	0	0	0
217	3/2/2022 12:43	0	0	0	0
218	3/2/2022 12:44	0	0	0	0
219	3/2/2022 12:45	0	0	0	0
220	3/2/2022 12:46	0	0	0	0
221	3/2/2022 12:47	0	0	0	0
222	3/2/2022 12:48	0	0	0	0
223	3/2/2022 12:49	0	0	0	0
224	3/2/2022 12:50	0	0	0	0
225	3/2/2022 12:51	0	0	0	0
226	3/2/2022 12:52	0	0	0	0
227	3/2/2022 12:53	0	0	0	0
228	3/2/2022 12:54	0	0	0	0
229	3/2/2022 12:55	0	0	0	0
230	3/2/2022 12:56	0	0	0	0
231	3/2/2022 12:57	0	0	0	0
232	3/2/2022 12:58	0	0	0	0

233	3/2/2022 12:59	0	0	0	0
234	3/2/2022 13:00	0	0	0	0
235	3/2/2022 13:01	0	0	0	0
236	3/2/2022 13:02	0	0	0	0
237	3/2/2022 13:03	0	0	0	0
238	3/2/2022 13:04	0	0	0	0
239	3/2/2022 13:05	0	0	0	0
240	3/2/2022 13:06	0	0	0	0
241	3/2/2022 13:07	0	0	0	0
242	3/2/2022 13:08	0	0	0	0
243	3/2/2022 13:09	0	0	0	0
244	3/2/2022 13:10	0	0	0	0
245	3/2/2022 13:11	0	0	0	0
246	3/2/2022 13:12	0	0	0	0
247	3/2/2022 13:13	0	0	0	0
248	3/2/2022 13:14	0	0	0	0
249	3/2/2022 13:15	0	0	0	0
250	3/2/2022 13:16	0	0	0	0
251	3/2/2022 13:17	0	0	0	0
252	3/2/2022 13:18	0	0	0	0
253	3/2/2022 13:19	0	0	0	0
254	3/2/2022 13:20	0	0	0	0
255	3/2/2022 13:21	0	0	0	0
256	3/2/2022 13:22	0	0	0	0
257	3/2/2022 13:23	0	0	0	0
258	3/2/2022 13:24	0	0	0	0
259	3/2/2022 13:25	0	0	0	0
260	3/2/2022 13:26	0	0	0	0
261	3/2/2022 13:27	0	0	0	0
262	3/2/2022 13:28	0	0	0	0
263	3/2/2022 13:29	0	0	0	0
264	3/2/2022 13:30	0	0	0	0
265	3/2/2022 13:31	0	0	0	0
266	3/2/2022 13:32	0	0	0	0
267	3/2/2022 13:33	0	0	0	0
268	3/2/2022 13:34	0	0	0	0
269	3/2/2022 13:35	0	0	0	0
270	3/2/2022 13:36	0	0	0	0
271	3/2/2022 13:37	0	0	0	0
272	3/2/2022 13:38	0	0	0	0
273	3/2/2022 13:39	0	0	0	0
274	3/2/2022 13:40	0	0	0	0
275	3/2/2022 13:41	0	0	0	0
276	3/2/2022 13:42	0	0	0	0
277	3/2/2022 13:43	0	0	0	0
278	3/2/2022 13:44	0	0	0	0
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281	3/2/2022 13:47	0	0	0	0
282	3/2/2022 13:48	0	0	0	0
283	3/2/2022 13:49	0	0	0	0
284	3/2/2022 13:50	0	0	0	0
285	3/2/2022 13:51	0	0	0	0
286	3/2/2022 13:52	0	0	0	0
287	3/2/2022 13:53	0	0	0	0
288	3/2/2022 13:54	0	0	0	0
289	3/2/2022 13:55	0	0	0	0
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292	3/2/2022 13:58	0	0	0	0
293	3/2/2022 13:59	0	0	0	0
294	3/2/2022 14:00	0	0	0	0
295	3/2/2022 14:01	0	0	0	0
296	3/2/2022 14:02	0	0	0	0
297	3/2/2022 14:03	0	0	0	0
298	3/2/2022 14:04	0	0	0	0
299	3/2/2022 14:05	0	0	0	0
300	3/2/2022 14:06	0	0	0	0
301	3/2/2022 14:07	0	0	0	0
302	3/2/2022 14:08	0	0	0	0
303	3/2/2022 14:09	0	0	0	0
304	3/2/2022 14:10	0	0	0	0
305	3/2/2022 14:11	0	0	0	0
306	3/2/2022 14:12	0	0	0	0
307	3/2/2022 14:13	0	0	0	0
308	3/2/2022 14:14	0	0	0	0
309	3/2/2022 14:15	0	0	0	0
310	3/2/2022 14:16	0	0	0	0
311	3/2/2022 14:17	0	0	0	0
312	3/2/2022 14:18	0	0	0	0
313	3/2/2022 14:19	0	0	0	0
314	3/2/2022 14:20	0	0	0	0
315	3/2/2022 14:21	0	0	0	0
316	3/2/2022 14:22	0	0	0	0
317	3/2/2022 14:23	0	0	0	0
318	3/2/2022 14:24	0	0	0	0
319	3/2/2022 14:25	0	0	0	0
320	3/2/2022 14:26	0	0	0	0
321	3/2/2022 14:27	0	0	0	0
322	3/2/2022 14:28	0	0	0	0
323	3/2/2022 14:29	0	0	0	0
324	3/2/2022 14:30	0	0	0	0
325	3/2/2022 14:31	0	0	0	0
326	3/2/2022 14:32	0	0	0	0

327	3/2/2022 14:33	0	0	0	0
328	3/2/2022 14:34	0	0	0	0
329	3/2/2022 14:35	0	0	0	0
330	3/2/2022 14:36	0	0	0	0
331	3/2/2022 14:37	0	0	0	0
332	3/2/2022 14:38	0	0	0	0
333	3/2/2022 14:39	0	0	0	0
334	3/2/2022 14:40	0	0	0	0
335	3/2/2022 14:41	0	0	0	0
336	3/2/2022 14:42	0	0	0	0
337	3/2/2022 14:43	0	0	0	0
338	3/2/2022 14:44	0	0	0	0
339	3/2/2022 14:45	0	0	0	0
340	3/2/2022 14:46	0	0	0	0
341	3/2/2022 14:47	0	0	0	0
342	3/2/2022 14:48	0	0	0	0
343	3/2/2022 14:49	0	0	0	0
344	3/2/2022 14:50	0	0	0	0
345	3/2/2022 14:51	0	0	0	0
346	3/2/2022 14:52	0	0	0	0
347	3/2/2022 14:53	0	0	0	0
348	3/2/2022 14:54	0	0	0	0
349	3/2/2022 14:55	0	0	0	0
350	3/2/2022 14:56	0	0	0	0
351	3/2/2022 14:57	0	0	0	0
352	3/2/2022 14:58	0	0	0	0
353	3/2/2022 14:59	0	0	0	0
354	3/2/2022 15:00	0	0	0	0
355	3/2/2022 15:01	0	0	0	0
356	3/2/2022 15:02	0	0	0	0
357	3/2/2022 15:03	0	0	0	0
358	3/2/2022 15:04	0	0	0	0
359	3/2/2022 15:05	0	0	0	0
360	3/2/2022 15:06	0	0	0	0
361	3/2/2022 15:07	0	0	0	0
362	3/2/2022 15:08	0	0	0	0
363	3/2/2022 15:09	0	0	0	0
364	3/2/2022 15:10	0	0	0	0
365	3/2/2022 15:11	0	0	0	0
366	3/2/2022 15:12	0	0	0	0
367	3/2/2022 15:13	0	0	0	0
368	3/2/2022 15:14	0	0	0	0
369	3/2/2022 15:15	0	0	0	0
370	3/2/2022 15:16	0	0	0	0
371	3/2/2022 15:17	0	0	0	0
372	3/2/2022 15:18	0	0	0	0
373	3/2/2022 15:19	0	0	0	0

374	3/2/2022 15:20	0	0	0	0
375	3/2/2022 15:21	0	0	0	0
376	3/2/2022 15:22	0	0	0	0
377	3/2/2022 15:23	0	0	0	0
378	3/2/2022 15:24	0	0	0	0
379	3/2/2022 15:25	0	0	0	0
380	3/2/2022 15:26	0	0	0	0
381	3/2/2022 15:27	0	0	0	0
382	3/2/2022 15:28	0	0	0	0
383	3/2/2022 15:29	0	0	0	0
384	3/2/2022 15:30	0	0	0	0
385	3/2/2022 15:31	0	0	0	0
386	3/2/2022 15:32	0	0	0	0
387	3/2/2022 15:33	0	0	0	0
388	3/2/2022 15:34	0	0	0	0
389	3/2/2022 15:35	0	0	0	0
390	3/2/2022 15:36	0	0	0	0
Peak		0	0	0	0
Min		0	0	0	0
Average		0	0	0	0
**********					
TWA/STEL					
		PID(ppm)	PID(ppm)		
Index	Date/Time	(TWA)	(STEL)		
1	3/2/2022 9:07	0	---		
2	3/2/2022 9:08	0	---		
3	3/2/2022 9:09	0	---		
4	3/2/2022 9:10	0	---		
5	3/2/2022 9:11	0	---		
6	3/2/2022 9:12	0	---		
7	3/2/2022 9:13	0	---		
8	3/2/2022 9:14	0	---		
9	3/2/2022 9:15	0	---		
10	3/2/2022 9:16	0	---		
11	3/2/2022 9:17	0	---		
12	3/2/2022 9:18	0	---		
13	3/2/2022 9:19	0	---		
14	3/2/2022 9:20	0	---		
15	3/2/2022 9:21	0	0		
16	3/2/2022 9:22	0	0		
17	3/2/2022 9:23	0	0		
18	3/2/2022 9:24	0	0		
19	3/2/2022 9:25	0	0		
20	3/2/2022 9:26	0	0		
21	3/2/2022 9:27	0	0		
22	3/2/2022 9:28	0	0		

23	3/2/2022 9:29	0	0		
24	3/2/2022 9:30	0	0		
25	3/2/2022 9:31	0	0		
26	3/2/2022 9:32	0	0		
27	3/2/2022 9:33	0	0		
28	3/2/2022 9:34	0	0		
29	3/2/2022 9:35	0	0		
30	3/2/2022 9:36	0	0		
31	3/2/2022 9:37	0	0		
32	3/2/2022 9:38	0	0		
33	3/2/2022 9:39	0	0		
34	3/2/2022 9:40	0	0		
35	3/2/2022 9:41	0	0		
36	3/2/2022 9:42	0	0		
37	3/2/2022 9:43	0	0		
38	3/2/2022 9:44	0	0		
39	3/2/2022 9:45	0	0		
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42	3/2/2022 9:48	0	0		
43	3/2/2022 9:49	0	0		
44	3/2/2022 9:50	0	0		
45	3/2/2022 9:51	0	0		
46	3/2/2022 9:52	0	0		
47	3/2/2022 9:53	0	0		
48	3/2/2022 9:54	0	0		
49	3/2/2022 9:55	0	0		
50	3/2/2022 9:56	0	0		
51	3/2/2022 9:57	0	0		
52	3/2/2022 9:58	0	0		
53	3/2/2022 9:59	0	0		
54	3/2/2022 10:00	0	0		
55	3/2/2022 10:01	0	0		
56	3/2/2022 10:02	0	0		
57	3/2/2022 10:03	0	0		
58	3/2/2022 10:04	0	0		
59	3/2/2022 10:05	0	0		
60	3/2/2022 10:06	0	0		
61	3/2/2022 10:07	0	0		
62	3/2/2022 10:08	0	0		
63	3/2/2022 10:09	0	0		
64	3/2/2022 10:10	0	0		
65	3/2/2022 10:11	0	0		
66	3/2/2022 10:12	0	0		
67	3/2/2022 10:13	0	0		
68	3/2/2022 10:14	0	0		
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72	3/2/2022 10:18	0	0		
73	3/2/2022 10:19	0	0		
74	3/2/2022 10:20	0	0		
75	3/2/2022 10:21	0	0		
76	3/2/2022 10:22	0	0		
77	3/2/2022 10:23	0	0		
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79	3/2/2022 10:25	0	0		
80	3/2/2022 10:26	0	0		
81	3/2/2022 10:27	0	0		
82	3/2/2022 10:28	0	0		
83	3/2/2022 10:29	0	0		
84	3/2/2022 10:30	0	0		
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86	3/2/2022 10:32	0	0		
87	3/2/2022 10:33	0	0		
88	3/2/2022 10:34	0	0		
89	3/2/2022 10:35	0	0		
90	3/2/2022 10:36	0	0		
91	3/2/2022 10:37	0	0		
92	3/2/2022 10:38	0	0		
93	3/2/2022 10:39	0	0		
94	3/2/2022 10:40	0	0		
95	3/2/2022 10:41	0	0		
96	3/2/2022 10:42	0	0		
97	3/2/2022 10:43	0	0		
98	3/2/2022 10:44	0	0		
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103	3/2/2022 10:49	0	0		
104	3/2/2022 10:50	0	0		
105	3/2/2022 10:51	0	0		
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110	3/2/2022 10:56	0	0		
111	3/2/2022 10:57	0	0		
112	3/2/2022 10:58	0	0		
113	3/2/2022 10:59	0	0		
114	3/2/2022 11:00	0	0		
115	3/2/2022 11:01	0	0		
116	3/2/2022 11:02	0	0		

117	3/2/2022 11:03	0	0		
118	3/2/2022 11:04	0	0		
119	3/2/2022 11:05	0	0		
120	3/2/2022 11:06	0	0		
121	3/2/2022 11:07	0	0		
122	3/2/2022 11:08	0	0		
123	3/2/2022 11:09	0	0		
124	3/2/2022 11:10	0	0		
125	3/2/2022 11:11	0	0		
126	3/2/2022 11:12	0	0		
127	3/2/2022 11:13	0	0		
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130	3/2/2022 11:16	0	0		
131	3/2/2022 11:17	0	0		
132	3/2/2022 11:18	0	0		
133	3/2/2022 11:19	0	0		
134	3/2/2022 11:20	0	0		
135	3/2/2022 11:21	0	0		
136	3/2/2022 11:22	0	0		
137	3/2/2022 11:23	0	0		
138	3/2/2022 11:24	0	0		
139	3/2/2022 11:25	0	0		
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146	3/2/2022 11:32	0	0		
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172	3/2/2022 11:58	0	0		
173	3/2/2022 11:59	0	0		
174	3/2/2022 12:00	0	0		
175	3/2/2022 12:01	0	0		
176	3/2/2022 12:02	0	0		
177	3/2/2022 12:03	0	0		
178	3/2/2022 12:04	0	0		
179	3/2/2022 12:05	0	0		
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196	3/2/2022 12:22	0	0		
197	3/2/2022 12:23	0	0		
198	3/2/2022 12:24	0	0		
199	3/2/2022 12:25	0	0		
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232	3/2/2022 12:58	0	0		
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234	3/2/2022 13:00	0	0		
235	3/2/2022 13:01	0	0		
236	3/2/2022 13:02	0	0		
237	3/2/2022 13:03	0	0		
238	3/2/2022 13:04	0	0		
239	3/2/2022 13:05	0	0		
240	3/2/2022 13:06	0	0		
241	3/2/2022 13:07	0	0		
242	3/2/2022 13:08	0	0		
243	3/2/2022 13:09	0	0		
244	3/2/2022 13:10	0	0		
245	3/2/2022 13:11	0	0		
246	3/2/2022 13:12	0	0		
247	3/2/2022 13:13	0	0		
248	3/2/2022 13:14	0	0		
249	3/2/2022 13:15	0	0		
250	3/2/2022 13:16	0	0		
251	3/2/2022 13:17	0	0		
252	3/2/2022 13:18	0	0		
253	3/2/2022 13:19	0	0		
254	3/2/2022 13:20	0	0		
255	3/2/2022 13:21	0	0		
256	3/2/2022 13:22	0	0		
257	3/2/2022 13:23	0	0		

258	3/2/2022 13:24	0	0		
259	3/2/2022 13:25	0	0		
260	3/2/2022 13:26	0	0		
261	3/2/2022 13:27	0	0		
262	3/2/2022 13:28	0	0		
263	3/2/2022 13:29	0	0		
264	3/2/2022 13:30	0	0		
265	3/2/2022 13:31	0	0		
266	3/2/2022 13:32	0	0		
267	3/2/2022 13:33	0	0		
268	3/2/2022 13:34	0	0		
269	3/2/2022 13:35	0	0		
270	3/2/2022 13:36	0	0		
271	3/2/2022 13:37	0	0		
272	3/2/2022 13:38	0	0		
273	3/2/2022 13:39	0	0		
274	3/2/2022 13:40	0	0		
275	3/2/2022 13:41	0	0		
276	3/2/2022 13:42	0	0		
277	3/2/2022 13:43	0	0		
278	3/2/2022 13:44	0	0		
279	3/2/2022 13:45	0	0		
280	3/2/2022 13:46	0	0		
281	3/2/2022 13:47	0	0		
282	3/2/2022 13:48	0	0		
283	3/2/2022 13:49	0	0		
284	3/2/2022 13:50	0	0		
285	3/2/2022 13:51	0	0		
286	3/2/2022 13:52	0	0		
287	3/2/2022 13:53	0	0		
288	3/2/2022 13:54	0	0		
289	3/2/2022 13:55	0	0		
290	3/2/2022 13:56	0	0		
291	3/2/2022 13:57	0	0		
292	3/2/2022 13:58	0	0		
293	3/2/2022 13:59	0	0		
294	3/2/2022 14:00	0	0		
295	3/2/2022 14:01	0	0		
296	3/2/2022 14:02	0	0		
297	3/2/2022 14:03	0	0		
298	3/2/2022 14:04	0	0		
299	3/2/2022 14:05	0	0		
300	3/2/2022 14:06	0	0		
301	3/2/2022 14:07	0	0		
302	3/2/2022 14:08	0	0		
303	3/2/2022 14:09	0	0		
304	3/2/2022 14:10	0	0		

305	3/2/2022 14:11	0	0		
306	3/2/2022 14:12	0	0		
307	3/2/2022 14:13	0	0		
308	3/2/2022 14:14	0	0		
309	3/2/2022 14:15	0	0		
310	3/2/2022 14:16	0	0		
311	3/2/2022 14:17	0	0		
312	3/2/2022 14:18	0	0		
313	3/2/2022 14:19	0	0		
314	3/2/2022 14:20	0	0		
315	3/2/2022 14:21	0	0		
316	3/2/2022 14:22	0	0		
317	3/2/2022 14:23	0	0		
318	3/2/2022 14:24	0	0		
319	3/2/2022 14:25	0	0		
320	3/2/2022 14:26	0	0		
321	3/2/2022 14:27	0	0		
322	3/2/2022 14:28	0	0		
323	3/2/2022 14:29	0	0		
324	3/2/2022 14:30	0	0		
325	3/2/2022 14:31	0	0		
326	3/2/2022 14:32	0	0		
327	3/2/2022 14:33	0	0		
328	3/2/2022 14:34	0	0		
329	3/2/2022 14:35	0	0		
330	3/2/2022 14:36	0	0		
331	3/2/2022 14:37	0	0		
332	3/2/2022 14:38	0	0		
333	3/2/2022 14:39	0	0		
334	3/2/2022 14:40	0	0		
335	3/2/2022 14:41	0	0		
336	3/2/2022 14:42	0	0		
337	3/2/2022 14:43	0	0		
338	3/2/2022 14:44	0	0		
339	3/2/2022 14:45	0	0		
340	3/2/2022 14:46	0	0		
341	3/2/2022 14:47	0	0		
342	3/2/2022 14:48	0	0		
343	3/2/2022 14:49	0	0		
344	3/2/2022 14:50	0	0		
345	3/2/2022 14:51	0	0		
346	3/2/2022 14:52	0	0		
347	3/2/2022 14:53	0	0		
348	3/2/2022 14:54	0	0		
349	3/2/2022 14:55	0	0		
350	3/2/2022 14:56	0	0		
351	3/2/2022 14:57	0	0		

352	3/2/2022 14:58	0	0		
353	3/2/2022 14:59	0	0		
354	3/2/2022 15:00	0	0		
355	3/2/2022 15:01	0	0		
356	3/2/2022 15:02	0	0		
357	3/2/2022 15:03	0	0		
358	3/2/2022 15:04	0	0		
359	3/2/2022 15:05	0	0		
360	3/2/2022 15:06	0	0		
361	3/2/2022 15:07	0	0		
362	3/2/2022 15:08	0	0		
363	3/2/2022 15:09	0	0		
364	3/2/2022 15:10	0	0		
365	3/2/2022 15:11	0	0		
366	3/2/2022 15:12	0	0		
367	3/2/2022 15:13	0	0		
368	3/2/2022 15:14	0	0		
369	3/2/2022 15:15	0	0		
370	3/2/2022 15:16	0	0		
371	3/2/2022 15:17	0	0		
372	3/2/2022 15:18	0	0		
373	3/2/2022 15:19	0	0		
374	3/2/2022 15:20	0	0		
375	3/2/2022 15:21	0	0		
376	3/2/2022 15:22	0	0		
377	3/2/2022 15:23	0	0		
378	3/2/2022 15:24	0	0		
379	3/2/2022 15:25	0	0		
380	3/2/2022 15:26	0	0		
381	3/2/2022 15:27	0	0		
382	3/2/2022 15:28	0	0		
383	3/2/2022 15:29	0	0		
384	3/2/2022 15:30	0	0		
385	3/2/2022 15:31	0	0		
386	3/2/2022 15:32	0	0		
387	3/2/2022 15:33	0	0		
388	3/2/2022 15:34	0	0		
389	3/2/2022 15:35	0	0		
390	3/2/2022 15:36	0	0		

WORK AREA SAMPLING LOCATION

Test 033

Instrument		Data Properties	
Model	DustTrak II	Start Date	03/02/2022
Instrument S/N	8530133103	Start Time	07:54:15
		Stop Date	03/02/2022
		Stop Time	14:24:15
		Total Time	0:06:30:00
		Logging Interval	900 seconds

Test Data			
Data Point	**Date**	**Time**	**AEROSOL mg/m^3**
1	03/02/2022	08:09:15	0.016
2	03/02/2022	08:24:15	0.003
3	03/02/2022	08:39:15	0.003
4	03/02/2022	08:54:15	0.002
5	03/02/2022	09:09:15	0.003
6	03/02/2022	09:24:15	0.003
7	03/02/2022	09:39:15	0.005
8	03/02/2022	09:54:15	0.005
9	03/02/2022	10:09:15	0.004
10	03/02/2022	10:24:15	0.004
11	03/02/2022	10:39:15	0.003
12	03/02/2022	10:54:15	0.006
13	03/02/2022	11:09:15	0.005
14	03/02/2022	11:24:15	0.003
15	03/02/2022	11:39:15	0.003
16	03/02/2022	11:54:15	0.004
17	03/02/2022	12:09:15	0.004
18	03/02/2022	12:24:15	0.001
19	03/02/2022	12:39:15	0.001
20	03/02/2022	12:54:15	0.001
21	03/02/2022	13:09:15	0.006
22	03/02/2022	13:24:15	0.004
23	03/02/2022	13:39:15	0.005
24	03/02/2022	13:54:15	0.006
25	03/02/2022	14:09:15	0.007
26	03/02/2022	14:24:15	0.010

UPWIND SAMPLING LOCATION

Test 007

Instrument		Data Properties	
Model	DustTrak II	Start Date	03/02/2022
Instrument S/N	8530131604	Start Time	08:59:52
		Stop Date	03/02/2022
		Stop Time	15:14:52
		Total Time	0:06:15:00
		Logging Interval	900 seconds

Test Data			
Data Point	**Date**	**Time**	**AEROSOL mg/m^3**
1	03/02/2022	09:14:52	0.006
2	03/02/2022	09:29:52	0.000
3	03/02/2022	09:44:52	0.000
4	03/02/2022	09:59:52	0.000
5	03/02/2022	10:14:52	0.001
6	03/02/2022	10:29:52	0.000
7	03/02/2022	10:44:52	0.000
8	03/02/2022	10:59:52	0.000
9	03/02/2022	11:14:52	0.002
10	03/02/2022	11:29:52	0.000
11	03/02/2022	11:44:52	0.000
12	03/02/2022	11:59:52	0.000
13	03/02/2022	12:14:52	0.000
14	03/02/2022	12:29:52	0.000
15	03/02/2022	12:44:52	0.000
16	03/02/2022	12:59:52	0.000
17	03/02/2022	13:14:52	0.000
18	03/02/2022	13:29:52	0.001
19	03/02/2022	13:44:52	0.000
20	03/02/2022	13:59:52	0.000
21	03/02/2022	14:14:52	0.000
22	03/02/2022	14:29:52	0.000
23	03/02/2022	14:44:52	0.000
24	03/02/2022	14:59:52	0.001
25	03/02/2022	15:14:52	0.006

Device Serial No	Log Time	Sensor 1 Type	Sensor 1 Serial Number	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading
592-922263	6/20/2022 4:19:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:18:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:17:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:16:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:15:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:14:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:13:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:12:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:11:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:10:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:09:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:08:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:07:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:06:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:05:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:04:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:03:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:02:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:01:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 4:00:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:59:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:58:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:57:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:56:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:55:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:54:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:53:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:52:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:51:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:50:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:49:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:48:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:47:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:46:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:45:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:44:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:43:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:42:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:41:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:40:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:39:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:38:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:37:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:36:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:35:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:34:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:33:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:32:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:31:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:30:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:29:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:28:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:27:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:26:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:25:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:24:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:23:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:22:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:21:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:20:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:19:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:18:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:17:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:16:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:15:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:14:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:13:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:12:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:11:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:10:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:09:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:08:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:07:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:06:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:05:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:04:09 PM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 3:03:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:02:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:01:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 3:00:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:59:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:58:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:57:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:56:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:55:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:54:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:53:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:52:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:51:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:50:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:49:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:48:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:47:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:46:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:45:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:44:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:43:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:42:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:41:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:40:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:39:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:38:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:37:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:36:09 PM	PID	SC23030305U9	0.0	0.0	0.2	0.0	0.0	0.0
592-922263	6/20/2022 2:35:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:34:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0

592-922263	6/20/2022 2:33:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:32:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:31:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:30:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:29:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:28:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:27:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:26:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:25:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:24:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:23:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:22:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:21:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:20:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:19:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:18:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:17:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:16:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:15:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:14:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:13:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:12:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:11:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:10:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:09:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:08:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:07:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:06:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:05:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:04:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:03:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:02:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:01:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 2:00:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:59:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:58:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:57:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:56:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:55:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:54:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:53:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:52:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:51:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:50:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:49:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:48:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:47:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:46:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:45:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:44:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:43:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:42:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:41:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:40:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:39:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:38:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:37:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:36:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:35:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:34:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:33:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:32:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:31:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:30:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:29:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:28:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:27:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:26:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:25:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:24:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:23:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:22:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:21:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:20:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:19:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:18:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:17:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:16:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:15:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:14:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:13:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:12:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:11:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:10:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:09:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:08:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:07:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:06:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:05:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:04:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:03:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:02:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:01:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 1:00:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:59:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:58:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:57:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:56:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:55:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:54:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:53:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:52:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:51:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:50:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:49:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:48:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:47:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:46:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:45:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0

592-922263	6/20/2022 12:44:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:43:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:42:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:41:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:40:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:39:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:38:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:37:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:36:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:35:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:34:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:33:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:32:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:31:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:30:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:29:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:28:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:27:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:26:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:25:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:24:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:23:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:22:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:21:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:20:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:19:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:18:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:17:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:16:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:15:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:14:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:13:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:12:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:11:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:10:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:09:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:08:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:07:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:06:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:05:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:04:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:03:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:02:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:01:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 12:00:09 PM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:59:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:58:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:57:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:56:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:55:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:54:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:53:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:52:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:51:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:50:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:49:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:48:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:47:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:46:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:45:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:44:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:43:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:42:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:41:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:40:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:39:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 11:38:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:37:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:36:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:35:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:34:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:33:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:32:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:31:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:30:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:29:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:28:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:27:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:26:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:25:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:24:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:23:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:22:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:21:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:20:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:19:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:18:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:17:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:16:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:15:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:14:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:13:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:12:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:11:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:10:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:09:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:08:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:07:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:06:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:05:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:04:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:03:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:02:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:01:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 11:00:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:59:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:58:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:57:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:56:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0

592-922263	6/20/2022 10:55:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:54:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:53:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:52:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:51:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:50:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:49:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:48:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:47:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:46:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:45:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:44:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:43:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:42:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:41:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:40:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:39:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:38:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:37:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:36:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:35:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:34:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:33:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:32:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:31:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:30:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:29:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:28:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:27:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:26:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:25:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:24:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:23:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:22:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:21:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:20:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:19:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:18:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:17:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:16:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:15:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 10:14:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 10:13:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.1	0.0
592-922263	6/20/2022 10:12:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.1	0.0
592-922263	6/20/2022 10:11:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.1	0.0
592-922263	6/20/2022 10:10:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:09:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.1	0.0
592-922263	6/20/2022 10:08:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:07:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:06:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:05:09 AM	PID	SC23030305U9	0.0	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:04:09 AM	PID	SC23030305U9	0.0	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:03:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 10:02:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 10:01:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 10:00:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:59:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:58:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:57:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:56:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:55:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:54:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:53:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:52:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 9:51:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 9:50:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:49:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 9:48:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 9:47:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:46:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:45:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:44:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:43:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:42:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:41:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:40:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:39:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:38:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:37:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:36:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:35:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:34:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:33:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:32:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:31:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:30:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:29:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:28:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:27:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:26:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:25:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:24:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:23:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:22:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:21:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:20:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:19:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:18:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:17:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:16:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 9:15:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:14:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:13:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:12:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:11:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:10:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:09:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:08:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:07:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0

592-922263	6/20/2022 9:06:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:05:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:04:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:03:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:02:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:01:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 9:00:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 8:59:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:58:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:57:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:56:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:55:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:54:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:53:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:52:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:51:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:50:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:49:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:48:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:47:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:46:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:45:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:44:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:43:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:42:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:41:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 8:40:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:39:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:38:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:37:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:36:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:35:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:34:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:33:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:32:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:31:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:30:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:29:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:28:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:27:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:26:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:25:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:24:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:23:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:22:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:21:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:20:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:19:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:18:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:17:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:16:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:15:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:14:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:13:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:12:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:11:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:10:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:09:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:08:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:07:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:06:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:05:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:04:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:03:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:02:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 8:01:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 8:00:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:59:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:58:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:57:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:56:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:55:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:54:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:53:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 7:52:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:51:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:50:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:49:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:48:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:47:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:46:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:45:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.1	0.1	0.0
592-922263	6/20/2022 7:44:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 7:43:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 7:42:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.1	0.0
592-922263	6/20/2022 7:41:09 AM	PID	SC23030305U9	0.0	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:40:09 AM	PID	SC23030305U9	0.0	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:39:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:38:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:37:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:36:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:35:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:34:09 AM	PID	SC23030305U9	0.1	0.1	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:33:09 AM	PID	SC23030305U9	0.1	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:32:09 AM	PID	SC23030305U9	0.0	0.0	0.1	0.0	0.0	0.0
592-922263	6/20/2022 7:31:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:30:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:29:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:28:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:27:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:26:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:25:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:24:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:23:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:22:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:21:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:20:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0	0.0	0.0
592-922263	6/20/2022 7:19:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:18:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0

592-922263	6/20/2022 7:17:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:16:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:15:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:14:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:13:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:12:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:11:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:10:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:09:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:08:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:07:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:06:09 AM	PID	SC23030305U9	0.0	0.0	0.0	0.0		0.0
592-922263	6/20/2022 7:05:09 AM	PID	SC23030305U9						

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530102709
Firmware Version	3.1
Calibration Date	5/14/2022
Test Name	MANUAL_001
Test Start Time	8:42:27 AM
Test Start Date	6/20/2022
Test Length [D:H:M]	0:08:00
Test Interval [M:S]	10:00
Mass Average [mg/m3]	0.008
Mass Minimum [mg/m3]	0.004
Mass Maximum [mg/m3]	0.013
Mass TWA [mg/m3]	0.008
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	48

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
600	0.013		
1200	0.013		
1800	0.013		
2400	0.013		
3000	0.012		
3600	0.012		
4200	0.011		
4800	0.009		
5400	0.009		
6000	0.009		
6600	0.007		
7200	0.008		
7800	0.008		
8400	0.007		
9000	0.007		
9600	0.007		
10200	0.006		
10800	0.006		
11400	0.005		
12000	0.005		
12600	0.005		
13200	0.004		
13800	0.004		
14400	0.004		
15000	0.005		
15600	0.005		
16200	0.005		

16800	0.004		
17400	0.004		
18000	0.004		
18600	0.005		
19200	0.005		
19800	0.006		
20400	0.007		
21000	0.007		
21600	0.008		
22200	0.008		
22800	0.008		
23400	0.008		
24000	0.009		
24600	0.009		
25200	0.01		
25800	0.013		
26400	0.013		
27000	0.013		
27600	0.013		
28200	0.013		
28800	0.012		

Device Serial No	Log Time	Sensor 1 Ty	Sensor 1 Se	Sensor 1 St	Sensor 1 G	Sensor 1 A	Sensor 1 M	Sensor 1 M	Sensor 1 S	Sensor 1 TV
592-925077	6/20/2022 16:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:57	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:56	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:55	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:54	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:53	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:52	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:51	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:50	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:41	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:40	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:39	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:38	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:36	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:35	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:32	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:31	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:30	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:29	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:28	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:27	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:26	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:25	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:17	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:16	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:15	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:14	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:13	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:12	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:10	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:09	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:08	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 16:00	PID	SC2303027	Normal	0	0	0	0	0	0

592-925077	6/20/2022 15:59	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:57	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:56	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:55	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:54	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:53	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:52	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:51	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:50	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:41	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:40	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:39	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:38	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:36	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:35	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:32	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:31	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:30	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:29	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:28	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:27	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:26	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:25	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:17	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:16	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:15	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:14	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:13	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:12	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:10	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:09	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:08	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 15:00	PID	SC2303027	Normal	0	0	0	0	0	0

592-925077	6/20/2022 14:59	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:57	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:56	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:55	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:54	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:53	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:52	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:51	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:50	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:41	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:40	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:39	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:38	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:36	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:35	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:32	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:31	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:30	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:29	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:28	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:27	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:26	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:25	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:17	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:16	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:15	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:14	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:13	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:12	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:10	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:09	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:08	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 14:00	PID	SC2303027	Normal	0	0	0	0	0	0

592-925077	6/20/2022 13:59	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:57	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:56	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:55	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:54	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:53	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:52	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:51	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:50	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:41	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 13:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:36	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 13:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:32	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 13:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:17	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 13:09	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 13:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 13:00	PID	SC2303027	Normal	0	0	0	0	0	0

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592-925077	6/20/2022 12:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:57	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 12:22	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 12:19	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 12:14	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 12:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:10	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:09	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 12:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 12:00	PID	SC2303027	Normal	0	0	0	0	0	0

592-925077	6/20/2022 11:59	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 11:57	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 11:51	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 11:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:41	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 11:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 11:01	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 10:57	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 10:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:46	PID	SC2303027	Normal	0	0	0	0	0	0
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592-925077	6/20/2022 10:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:41	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:40	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:39	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:38	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:36	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:35	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:32	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:31	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:30	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:29	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:28	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:27	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:26	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:25	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:17	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:16	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:15	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:14	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:13	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:12	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:10	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:09	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:08	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:07	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:06	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:05	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:04	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:03	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:02	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:01	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 10:00	PID	SC2303027	Normal	0	0	0	0	0	0

592-925077	6/20/2022 9:59	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:58	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:57	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:56	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:55	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:54	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:53	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:52	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:51	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:50	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:49	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:48	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:47	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:46	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:45	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:44	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:43	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:42	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:41	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:40	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:39	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:38	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:37	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:36	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:35	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:34	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:33	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:32	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:31	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:30	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:29	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:28	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:27	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:26	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:25	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:24	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:23	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:22	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:21	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:20	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:19	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:18	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:17	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:16	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:15	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:14	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:13	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:12	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:11	PID	SC2303027	Normal	0	0	0	0	0	0
592-925077	6/20/2022 9:10	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:09	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:08	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:07	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:06	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:05	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:04	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:03	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:02	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:01	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 9:00	PID	SC2303027	Normal	0	0	0	0		0

592-925077	6/20/2022 8:59	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 8:58	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 8:57	PID	SC2303027	Normal	0	0	0	0		0
592-925077	6/20/2022 8:56	PID	SC23030276V3							

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530142402
Firmware Version	3.1
Calibration Date	7/29/2021
Test Name	MANUAL_001
Test Start Time	8:36:29 AM
Test Start Date	6/20/2022
Test Length [D:H:M]	0:09:10
Test Interval [M:S]	10:00
Mass Average [mg/m3]	0.015
Mass Minimum [mg/m3]	0.009
Mass Maximum [mg/m3]	0.036
Mass TWA [mg/m3]	0.014
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	55

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
600	0.036		
1200	0.014		
1800	0.015		
2400	0.015		
3000	0.015		
3600	0.015		
4200	0.015		
4800	0.016		
5400	0.016		
6000	0.017		
6600	0.015		
7200	0.016		
7800	0.015		
8400	0.014		
9000	0.013		
9600	0.013		
10200	0.012		
10800	0.012		
11400	0.012		
12000	0.011		
12600	0.012		
13200	0.012		
13800	0.012		
14400	0.01		
15000	0.01		
15600	0.01		
16200	0.01		

16800	0.009
17400	0.009
18000	0.01
18600	0.01
19200	0.01
19800	0.011
20400	0.01
21000	0.01
21600	0.011
22200	0.012
22800	0.013
23400	0.014
24000	0.014
24600	0.015
25200	0.016
25800	0.017
26400	0.019
27000	0.024
27600	0.023
28200	0.019
28800	0.021
29400	0.023
30000	0.025
30600	0.024
31200	0.025
31800	0.024
32400	0.024
33000	0.024

DOWNWIND LOCATION - DUST MONITORING

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530164102
Firmware Version	3.1
Calibration Date	6/19/2023
Test Name	MANUAL_002
Test Start Time	8:01:04 AM
Test Start Date	6/28/2023
Test Length [D:H:M]	0:03:15
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.204
Mass Minimum [mg/m3]	0.15
Mass Maximum [mg/m3]	0.285
Mass TWA [mg/m3]	0.083
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
0	0.3		
900	0.285		
1800	0.262		
2700	0.249		
3600	0.236		
4500	0.23		
5400	0.213		
6300	0.194		
7200	0.181		
8100	0.177		
9000	0.16		
9900	0.15		
10800	0.155		
11700	0.154		

NEAREST INTAKE LOCATION - DUST MONITORING

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.1
Calibration Date	6/16/2023
Test Name	MANUAL_003
Test Start Time	7:52:31 AM
Test Start Date	6/28/2023
Test Length [D:H:M]	0:03:15
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.197
Mass Minimum [mg/m3]	0.141
Mass Maximum [mg/m3]	0.292
Mass TWA [mg/m3]	0.08
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	13

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
0	0.3		
900	0.292		
1800	0.253		
2700	0.241		
3600	0.231		
4500	0.221		
5400	0.209		
6300	0.189		
7200	0.175		
8100	0.166		
9000	0.157		
9900	0.141		
10800	0.141		
11700	0.141		

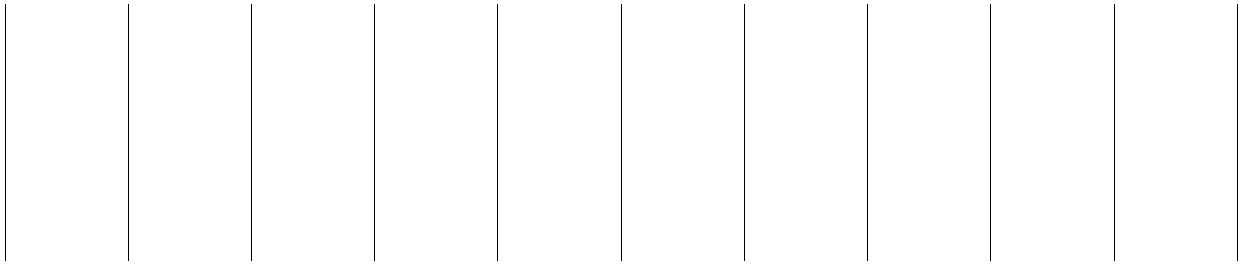
D LOCATION - DUST MONITORING

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530152808
Firmware Version	3.1
Calibration Date	6/16/2023
Test Name	MANUAL_022
Test Start Time	7:48:44
Test Start Date	6/28/2023
Test Length [D:H:M]	0:03:00
Test Interval [M:S]	15:00
Mass Average [mg/m3]	0.191
Mass Minimum [mg/m3]	0.14
Mass Maximum [mg/m3]	0.273
Mass TWA [mg/m3]	0.071
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	12

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
0	0.3		
900	0.273		
1800	0.236		
2700	0.222		
3600	0.211		
4500	0.202		
5400	0.193		
6300	0.177		
7200	0.165		
8100	0.16		
9000	0.163		
9900	0.145		
10800	0.14		

DOWNWIND LOCATION - PID MONITORING

Device Serial No	Log Time	Sensor 1 Type	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading
					ERROR - DID NOT RECORD					



NEAREST INTAKE LOCATION - PID MONITORING

Device Serial No	Log Time	Sensor 1 Type	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading
592-927806	6/28/2023 12:22:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:21:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:20:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:19:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:18:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:17:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:16:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:15:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.2	0.3	0.0
592-927806	6/28/2023 12:14:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:13:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.2	0.3	0.0
592-927806	6/28/2023 12:12:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:11:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:10:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.3	0.0
592-927806	6/28/2023 12:09:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-927806	6/28/2023 12:08:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-927806	6/28/2023 12:07:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-927806	6/28/2023 12:06:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.3	0.2	0.0
592-927806	6/28/2023 12:05:30 PM	PID	SC23030308W3	Normal	0.3	0.3	0.3	0.2	0.2	0.0
592-927806	6/28/2023 12:04:30 PM	PID	SC23030308W3	Normal	0.2	0.2	0.3	0.2	0.2	0.0
592-927806	6/28/2023 12:03:30 PM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 12:02:30 PM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 12:01:30 PM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 12:00:30 PM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:59:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:58:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:57:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:56:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:55:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:54:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:53:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:52:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:51:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:50:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:49:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:48:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:47:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:46:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:45:30 AM	PID	SC23030308W3	Normal	0.2	0.1	0.2	0.1	0.2	0.0
592-927806	6/28/2023 11:44:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.2	0.0
592-927806	6/28/2023 11:43:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.1	0.0
592-927806	6/28/2023 11:42:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.2	0.1	0.0
592-927806	6/28/2023 11:41:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.1	0.1	0.0
592-927806	6/28/2023 11:40:30 AM	PID	SC23030308W3	Normal	0.2	0.1	0.2	0.1	0.1	0.0
592-927806	6/28/2023 11:39:30 AM	PID	SC23030308W3	Normal	0.2	0.2	0.2	0.1	0.1	0.0
592-927806	6/28/2023 11:38:30 AM	PID	SC23030308W3	Normal	0.2	0.1	0.2	0.1	0.1	0.0
592-927806	6/28/2023 11:37:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:36:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.2	0.1	0.1	0.0
592-927806	6/28/2023 11:35:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:34:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:33:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:32:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:31:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:30:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:29:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:28:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:27:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:26:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:25:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:24:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:23:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:22:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:21:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:20:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:19:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:18:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:17:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:16:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:15:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:14:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:13:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:12:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:11:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:10:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:09:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:08:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:07:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:06:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:05:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:04:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:03:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:02:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:01:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 11:00:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:59:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:58:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:57:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:56:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:55:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.0	0.1	0.0
592-927806	6/28/2023 10:54:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:53:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:52:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:51:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:50:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:49:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:48:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:47:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:46:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:45:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:44:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:43:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:42:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.0	0.1	0.0
592-927806	6/28/2023 10:41:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.1	0.0
592-927806	6/28/2023 10:40:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.0	0.0
592-927806	6/28/2023 10:39:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.0	0.0
592-927806	6/28/2023 10:38:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:37:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:36:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.1	0.0	0.0
592-927806	6/28/2023 10:35:30 AM	PID	SC23030308W3	Normal	0.1	0.1	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:34:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:33:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.1	0.0	0.0	0.0

592-927806	6/28/2023 10:32:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:31:30 AM	PID	SC23030308W3	Normal	0.1	0.0	0.1	0.0	0.0	0.0
592-927806	6/28/2023 10:30:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:29:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:28:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:27:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:26:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:25:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:24:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:23:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:22:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:21:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:20:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:19:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:18:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:17:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:16:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:15:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:14:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:13:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:12:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:11:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:10:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:09:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:08:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:07:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:06:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:05:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:04:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:03:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:02:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:01:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 10:00:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:59:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:58:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:57:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:56:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:55:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:54:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:53:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:52:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:51:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:50:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:49:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:48:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:47:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:46:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:45:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:44:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:43:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:42:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:41:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:40:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:39:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:38:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:37:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:36:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:35:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:34:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:33:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:32:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:31:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:30:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:29:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:28:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:27:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:26:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:25:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:24:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:23:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:22:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:21:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:20:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:19:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:18:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:17:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:16:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:15:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:14:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:13:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:12:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:11:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:10:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:09:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-927806	6/28/2023 9:08:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:07:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:06:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:05:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:04:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:03:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:02:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:01:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 9:00:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:59:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:58:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:57:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:56:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:55:30 AM	PID	SC23030308W3	Normal	0.0	0.0	0.0	0.0		0.0
592-927806	6/28/2023 8:54:30 AM	PID	SC23030308W3							

UPWIND LOCATION - PID MONITORING

Device Serial No	Log Time	Log Type	Sensor 1 Type	Sensor 1 Serial Number	Sensor 1 Status	Sensor 1 Gas Reading	Sensor 1 Average Reading	Sensor 1 Maximum Reading	Sensor 1 Minimum Reading	Sensor 1 STEL Reading	Sensor 1 TWA Reading
592-920496	6/28/2023 11:00:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:59:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:58:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:57:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:56:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:55:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:54:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:53:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:52:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:51:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:50:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:49:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:48:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:47:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:46:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:45:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:44:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:43:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:42:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:41:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:40:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:39:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:38:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:37:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:36:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:35:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:34:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:33:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:32:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:31:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:30:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:29:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:28:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:27:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:26:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:25:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:24:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:23:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:22:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:21:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:20:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:19:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:18:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:17:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:16:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:15:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:14:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:13:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:12:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:11:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:10:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:09:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:08:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:07:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:06:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:05:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:04:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:03:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:02:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:01:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 10:00:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:59:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:58:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:57:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:56:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:55:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:54:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:53:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:52:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:51:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:50:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:49:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:48:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:47:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:46:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:45:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:44:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:43:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:42:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:41:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:40:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:39:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:38:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:37:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:36:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:35:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:34:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:33:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:32:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:31:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:30:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:29:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:28:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:27:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:26:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:25:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:24:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:23:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:22:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:21:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:20:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:19:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:18:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:17:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:16:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:15:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:14:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:13:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:12:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:11:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:10:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:09:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:08:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:07:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:06:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:05:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:04:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:03:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:02:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:01:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 9:00:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:59:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:58:33 AM	Readings	PID	SC23030142B8	Normal	0.0	0.0	0.0	0.0	0.0	0.0

592-920496	6/28/2023 8:57:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:56:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:55:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:54:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:53:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:52:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:51:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:50:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:49:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:48:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:47:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:46:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:45:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:44:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:43:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:42:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:41:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:40:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:39:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:38:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:37:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:36:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:35:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:34:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:33:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:32:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:31:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:30:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:29:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:28:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:27:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:26:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:25:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:24:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:23:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:22:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:21:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:20:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:19:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:18:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:17:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:16:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:15:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:14:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:13:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:12:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:11:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:10:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:09:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:08:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:07:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:06:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:05:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:04:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0	0.0	0.0
592-920496	6/28/2023 8:03:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 8:02:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 8:01:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 8:00:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:59:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:58:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:57:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:56:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:55:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:54:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:53:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:52:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:51:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:50:33 AM	Readings	PID	SC2303014288	Normal	0.0	0.0	0.0	0.0		0.0
592-920496	6/28/2023 7:49:33 AM	CONFIG	PID	SC2303014288							

APPENDIX B

Soil Boring Logs

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB201**
START DATE: 3/2/2022 COMPLETION DATE: 3/2/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: approx. 8' GROUNDWATER DEPTH AFTER DRILLING COMPLETION: not measured
WEATHER: Sunny 32° CONTRACTOR/DRILLERS: Matrix Environmental Technologies / P. Bliek
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		51	OL/OH	3" Black, Sandy Organic Soil, wet, loose, Quaternary Fill.
1			0.2		SP	Black, POORLY GRADED SAND WITH GRAVEL (cf, a), trace Silt, wet, loose, pieces of brick and ash, Quaternary Fill.
2			0.1		OL/SP	3" Brown Organic Soil, moist, over 3" brown POOLY GRADED SAND W/GRAVEL (f,r), moist, med den
3					CL	Brown CLAY, moist, very stiff, Lacustrine.
4			0.1			
5	**2**	**5.0-10.0**		60	ML, CL	5" resample over Gray and Tan SILTY CLAY, moist, very stiff, Lacustrine.
6			0.0			
7			0.0			
8					ML, CL	Gray and Tan CLAYEY SILT WITH SAND, moist to wet, stiff, Lacustrine.
9			0.0		CL	Brown and Gray CLAY, laminated, moist, Lacustrine.
10	**3**	**10.0-15.0**		60	CL	Brown SANDY CLAY, wet, stiff, Lacustine.
11			0.0		ML	Gray SANDY SILT, saturated, soft, Alluvium.
12			0.0		CL	Brown CLAY, moist, very stiff, laminated in last 4", Alluvium.
13					SP-SM	Grayish brown POORLY GRADED SAND (f) WITH SILT AND GRAVEL (cf, sr), wet, dense, Alluvium.
14			0.0			
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
Notes						

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**

CLIENT: **Aquino** WELL/BORING ID: **SB202**

START DATE: 3/2/2022 COMPLETION DATE: 3/2/2022 RECORDED BY: C. Zink

GROUNDWATER DEPTH WHILE DRILLING: approx. 7.5' GROUNDWATER DEPTH AFTER COMPLETION: not measured

WEATHER: Sunny 32° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / P. Bliek

Sampler Type: macrocore (L=48", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0.4	31	GP	Asphalt over POORLY GRADED GRAVEL WITH SAND, dry, loose to medium dense, Quaternary Fill.
1					SW-SM	Grayish Brown WELL GRADED SAND WITH SILT AND GRAVEL (sr to sa), bricks, concrete in last 3", dry, medium dense, Quaternary Fill.
2			0.4			
3						
4						
5	**2**	**5.0-10.0**		60	CL	2" Fill (as above) over brown CLAY, moist to dry, dense, Lacustrine.
6			0.2		ML, CL	Gray SANDY SILT bedded with CLAY, moist, dense, Lacustrine.
7						
8			0.0		CL	Gray CLAY laminated with brown CLAY, wet,very stiff, occasional sand stringers (1/32" or less in width), Lacustrine.
9			0.0			
10	**3**	**10.0-15.0**		60		
11			0.2		ML, CL	4" resample over Gray and brown SILTY CLAY, wet, very stiff, Lacustrine.
12						
13			0.4			
14			0.0		SP	Gray POORLY GRADED SAND WITH GRAVEL (cf, sr to sa), saturated, loose, Alluvium.
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
Notes						

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**

CLIENT: **Aquino** WELL/BORING ID: **SB203**

START DATE: 3/2/2022 COMPLETION DATE: 3/2/2022 RECORDED BY: C. Zink

GROUNDWATER DEPTH WHILE DRILLING: approx. 9' GROUNDWATER DEPTH AFTER COMPLETION: not measured

WEATHER: Sunny 34° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / P. Bliek

Sampler Type: macrocore (L=48", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		43	GP	Asphalt over POORLY GRADED GRAVEL WITH SAND, dry, loose, Quaternary Fill.
1			0.3		SW	Brown and orangish brown WELL GRADED SAND, few Gravel (mf), dry to moist, loose to medium dense, 3" brown clay lenses at 1'2" and 2', Quaternary Fill.
2			0.9			
3					SW	Brown WELL GRADED SAND WITH GRAVEL (mf, sr), trace SILT, moist, medium dense, Quaternary Fill.
4						
5	**2**	**5.0-10.0**	0.0	26	CL	Brown CLAY, dry to moist, very stiff, Quaternary Fill.
					SW	Brown WELL GRADED SAND, trace Gravel (mf, sa to sr), trace Silt, dry to moist, Fill.
6			0.5		SW-SM	Brown WELL GRADED SAND WITH SILT AND GRAVEL (mf, sa to sr), most to wet, Quaternary Fill or Alluvium.
7						
8						
9						
10	**3**	**10.0-15.0**	0.2	19	CL	Brown CLAY, moist, stiff, Lacustrine.
					ML, CL	Gray CLAYEY SILT, wet, dense, Lacustrine.
11			0.3		ML	Gray SILT, trace Gravel (f, sr to a), loose, saturated, occasional 1" lense of Clay, Alluvium.
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
Notes						

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB204**
START DATE: 3/2/2022 COMPLETION DATE: 3/2/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: approx. 10' GROUNDWATER DEPTH AFTER DRILLING COMPLETION: not measured
WEATHER: Sunny 34° CONTRACTOR/DRILLERS: Matrix Environmental Technologies / P. Bliek
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		37	OL/OH	Brown ORGANIC SOIL WITH SAND, moist, medium dense, Quaternary Fill.
1			0.0		CL	Brown CLAY, dry, very sitff, Quaternary Fill.
2			0.1		SW-SM	Orange brick over Brown POORLY GRADED SAND WITH SILT AND GRAVEL (f), wet, medium dense, Quaternary Fill.
3						
4						
5	**2**	**5.0-10.0**		54	SW-SM	Brown POORLY GRADED SAND WITH SILT AND GRAVEL (f), moist, medium dense, Fill.
6			0.4			
7			0.3		CL	Gray and brown CLAY, laminated, moist in top 1', dry to moist in remaining, stiff, Lacustine.
8						
9			0.0			
10	**3**	**10.0-15.0**		60		
11			0.1		CL, ML	Grayish brown CLAYEY SILT, trace Sand (f), wet, medium stiff, Lacustine.
12						
13			0.0		SM	Gray SILTY SAND WITH GRAVEL (cf, sa to sr), saturated, loose, Alluvium.
14			0.0			
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
Notes						

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB205**
START DATE: 6/20/2022 COMPLETION DATE: 6/20/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: Approx. 8' GROUNDWATER DEPTH AFTER COMPLETION: not measured
WEATHER: Partly sunny 60 - 70° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / R. Reagan
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		38	SM	8 inches of asphalt and gravel subbase overlying dark brown SILTY SAND, dry, dense, Quaternary Fill.
1			0		SP-SM	Brown POORLY GRADED SAND WITH SILT, moist then wet last 9 inches, medium dense, Quaternary Fill.
2			0			
3						
4						
5	**2**	**5.0-10.0**		60	SP-SM	Brown POORLY GRADED SAND WITH GRAVEL AND SILT, moist, medium dense, Quaternary Fill.
6			0			
7					CL	Brown CLAY, gray SAND (f) laminations (1/4-inch thickness) every 1 to 2 inches, dry to moist, stiff, Lacustrine
8			0			
9			0		CL	Brown CLAY, trace f Sand, dry to moist, very stiff, Lacustrine
10	**3**	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes

Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 1.5' and 7' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB206**
START DATE: 6/20/2022 COMPLETION DATE: 6/20/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: approx. 8' GROUNDWATER DEPTH AFTER COMPLETION: not measured
WEATHER: Partly sunny 60 - 70° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / R. Reagan
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0	30	GW	Asphalt over sand and gravel fill overlying dark brown WELL GRADED GRAVEL WITH SAND, dry, loose to medium dense, Quaternary Fill.
1			0		SP	Brown POORLY GRADED SAND, trace silt, trace Gravel, dry, medium dense.
2					SW	Brown WELL GRADED SAND (cf) WITH GRAVEL, trace Silt, wet, loose, Quaternary Fill.
3						
4						
5	**2**	**5.0-10.0**		60		
6			0			
7					CL	Brown and reddish brown CLAY, laminated, occasional brown f SAND lenses (<1/8 inches), dry to moist, stiff to very stiff.
8			0			
9			0			
10	**3**	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes: Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 2' and 6' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB207**
START DATE: 6/20/2022 COMPLETION DATE: 6/20/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: approx. 8' GROUNDWATER DEPTH AFTER COMPLETION: not measured
WEATHER: Partly sunny 60 - 70° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / R. Reagan
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0	39	ML	Asphalt over sand and gravel fill overlying dark brown SANDY SILT, dry, loose to medium dense, Quaternary Fill.
1						
			0		SP	Brown POORLY GRADED SAND WITH GRAVEL (sa to sr), dry, medium dense.
2						
3						
4						
5	**2**	**5.0-10.0**		52		
6			0		CL	Gray CLAY, dry to moist, stiff to very stiff.
7						
8			0		CL	Brown CLAY, dry to moist, stiff to very stiff.
9						
10	**3**	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes: Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 1' - 3' and 6' - 8' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION:	**65-67 Lake Ave., Lancaster, NY**	PROJECT No.	**18-046**
CLIENT:	**Aquino**	WELL/BORING ID:	**SB113**
START DATE:	6/20/2022	COMPLETION DATE: 6/20/2022	RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING:	Approx. 7' DRILLING	GROUNDWATER DEPTH AFTER COMPLETION:	NA
WEATHER:	Partly sunny 60 - 70°	CONTRACTOR/DRILLERS:	Matrix Environmental Technologies / R. Reagan
DRILL RIG:	Geoprobe 6620 DT	DRILL SIZE & TYPE: Direct Push 2 1/2" NPT	HAMMER Type: Hydraulic
		Sampler Type:	macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0.0	39	GP	Asphalt overlying gray, POORLY GRADED GRAVEL (cf) WITH SAND (cf), loose, dry, Quaternary Fill
1					SM	Brown SILTY SAND (mf) WITH GRAVEL (cf), medium dense, moist, Quaternary Fill
2			0.0			
3						
4						
5	**2**	**5.0-10.0**	0	60	SP-SM	Brown POORLY GRADED SAND WITH SILT AND GRAVEL (cf), moist, medium dense, Quaterny Fill or Colluvium
6			0		CL,ML	Brown CLAY and gray SILT, laminated, wet, dense, Lacustrine
7						
8			0			
9						
10	**3**	**10.0-15.0**	0.0	60	CL, ML	As above
11						
12			0.0			
13						
14			0.0		ML	Gray SANDY SILT WITH GRAVEL (cf, sa to a), saturated, soft, Lacustine or possibly Alluvium
					ML	Gray SILTY SAND, trace f Gravel, dry, medium dense, Lacustrine or possibly Alluvium
15	**4**	**15.0-20.0**		60	ML, CL	Tan CLAYEY SILT, dry to moist, medium dense, Lacustrine or possibly Alluvium
			0		ML, CL	Dark Gray SILT AND CLAY, trace Gravel (f, a), wet, medium dense, Lacustrine or Alluvium
16					ML	Dark gray SILT WITH SAND, trace Gravel (f, a), wet, very dense, Alluvium.
17			0			
18						
19			0			
20	**5**	**20.0-25.0**				
21						
22						

Notes

Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 1' - 5' and 15' - 18' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION:	**65-67 Lake Ave., Lancaster, NY**	PROJECT No.	**18-046**
CLIENT:	**Aquino**	WELL/BORING ID:	**SB114**
START DATE:	6/20/2022	COMPLETION DATE: 6/20/2022	RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING:	5.5'	GROUNDWATER DEPTH AFTER COMPLETION:	not measured
WEATHER:	Partly sunny 60 - 70°	DRILLING CONTRACTOR/DRILLERS:	Matrix Environmental Technologies / R. Reagan
DRILL RIG:	Geoprobe 6620 DT	DRILL SIZE & TYPE: Direct Push 2 1/2" NPT	HAMMER Type: Hydraulic
		Sampler Type:	macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0	30	SP	Grayish brown POORLY GRADED SAND WITH GRAVEL, dry, loose, Quaternary Fill.
1			0		SP	Brown POORLY GRADED SAND, trace Silt, trace Gravel (mf, sf), moist, medium dense, Quaternary Fill.
2			0		CL, ML	Brown, reddish brown and gray CLAY, very thin laminations (1/16 to 1/32"), occasional yellowish brown Silt laminations (1/32"), moist, dense, Lacustrine.
3						
4						
5	**2**	**5.0-10.0**		40		
6			0		SP, CL, ML	Olive POORLY GRADED SAND (f), thinnly bedded with reddish brown CLAY, grades to olive brown CLAYEY SILT thinnly bedded with reddish brown CLAY, moist, medium dense, Lacustrine
7					CL, ML	Gray SILTY CLAY laminated with reddish brown CLAY (1/4 to 1/2" laminations), moist, very stiff, Lacustine.
8			0			
9			0			
10	**3**	**10.0-15.0**		35	CL, ML	Gray SILTY CLAY laminated with reddish brown CLAY (1/4 to 1/2" laminations), moist, very stiff, Lacustine.
11			0		ML	Gray SANDY SILT WITH GRAVEL (mf, sa to a), wet, stiff, Alluvium.
12						
13						
14						
15	**4**	**15.0-20.0**	0	32	ML	3" resample over Gray SILT WITH SAND (mf), trace f Gravel (a), wet, stiff, Alluvium.
16					ML	Light gray SANDY SILT WITH GRAVEL, dry, stiff, Alluvium.
17			0		SW	Gray WELL GRADED SAND WITH GRAVEL (mf, sa to a), trace silt, wet, med. dense, Alluvium.
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes: Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 0.5' - 2', 6' - 10' and 12' - 16' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION:	**65-67 Lake Ave., Lancaster, NY**	PROJECT No.	**18-046**
CLIENT:	**Aquino**	WELL/BORING ID:	**SB115**
START DATE:	6/20/2022	COMPLETION DATE: 6/20/2022	RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING:	Approx. 9.5'	GROUNDWATER DEPTH AFTER COMPLETION:	not measured
WEATHER:	Partly sunny 60 - 70°	DRILLING CONTRACTOR/DRILLERS:	Matrix Environmental Technologies / R. Reagan
DRILL RIG:	Geoprobe 6620 DT	DRILL SIZE & TYPE: Direct Push 2 1/2" NPT	HAMMER Type: Hydraulic
		Sampler Type:	macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		50		
1			0		OL, SM	8" Brown Organic Soil overlying Brown SILTY SAND (cf) WITH GRAVEL (f), dry to moist, medium dense, Quaternary Fill.
2						
3			0			
					ML, CL	Reddish brown CLAY (varved) bedded with gray SILT, dry to moist, Lacustrine.
4						
			0			
5	**2**	**5.0-10.0**		60		Resample
6						
			0		ML, CL	Brown, reddish brown and grayish brown CLAY and SILT (laminated) with very thin (1/32") sand lenses, moist, very dense, Lacustrine
7						
8			0			
9						
	3	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes

Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 0' - 3' and 6' - 8' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION:	**65-67 Lake Ave., Lancaster, NY**	PROJECT No.	**18-046**
CLIENT:	**Aquino**	WELL/BORING ID:	**SB116**
START DATE:	6/20/2022	COMPLETION DATE: 6/20/2022	RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING:	Approx. 9.5'	GROUNDWATER DEPTH AFTER COMPLETION:	not measured
WEATHER:	Partly sunny 60 - 70°	DRILLING CONTRACTOR/DRILLERS:	Matrix Environmental Technologies / R. Reagan
DRILL RIG:	Geoprobe 6620 DT	DRILL SIZE & TYPE: Direct Push 2 1/2" NPT	HAMMER Type: Hydraulic
		Sampler Type:	macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**		52	OL	ORGANIC SOIL WITH SAND, moist, medium dense, roots
			0			
1					SP-SM	Brown POORLY GRADED SAND WITH SILT, trace Gravel (f), moist, medium dense, Quaternary Fill
2			0			
3					SM	Dark Brown SILTY SAND, trace Gravel, moist, medium dense, Quaternary Fill
4						
5	**2**	**5.0-10.0**		60	SP-SM	Brown POORLY GRADED SAND WITH SILT, trace Gravel (f), wet, medium dense, Quaternary Fill or Colluvium
			0.0			
6					ML, CL	Reddish brown SILTY CLAY laminated with gray SILT, moist, dense, Lacustrine
7					ML	Brown SANDY SILT WITH GRAVEL (mf, sa), moist, Lacustrine
			0.0			
8					ML, CL	Reddish brown SILTY CLAY, trace Gravel (f), trace Sand (f), dry to moist, dense, Lacustrine
9			0.0			
10	**3**	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes

Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. Samples from 0.5' - 2.5' and 6' - 7.5' below grade submitted for laboratory analysis.

Matrix Environmental Technologies Inc. — SUBSURFACE LOG

PROJECT & LOCATION: **65-67 Lake Ave., Lancaster, NY** PROJECT No. **18-046**
CLIENT: **Aquino** WELL/BORING ID: **SB117**
START DATE: 6/20/2022 COMPLETION DATE: 6/20/2022 RECORDED BY: C. Zink
GROUNDWATER DEPTH WHILE DRILLING: approx. 7.5' GROUNDWATER DEPTH AFTER COMPLETION: not measured
WEATHER: Partly sunny 60 - 70° DRILLING CONTRACTOR/DRILLERS: Matrix Environmental Technologies / R. Reagan
DRILL RIG: Geoprobe 6620 DT DRILL SIZE & TYPE: Direct Push 2 1/2" NPT HAMMER Type: Hydraulic
Sampler Type: macrocore (L=60", OD=2.125")

Sample Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	Recovery (inches)	USCS Group Symbol	SOIL DESCRIPTION AND DRILLING COMMENTS Unified Soil Classification System f-fine m-medium c-coarse sr - subrounded, r - rounded, sa - subangular, a - angular
	1	**0.0-5.0**	0	36	OL, SM	Topsoil over 9 inches Brown SILTY SAND (cf), with roots, loose, dry.
1			0		SP-SM	Brownish gray POORLY GRADED SAND (mf) with SILT and GRAVEL (mf, a), loose, dry Quaternary Fill.
2						
3						
4						
5	**2**	**5.0-10.0**	0.0	54	SM	6" resample over Brown SILTY SAND (f), medium dense, moist, Quaternary Fill
6			0		SM, CL	Brown SILTY SAND (mf) WITH GRAVEL, medium dense, moist, occasional 2" lenses of reddish brown CLAY, Lacustine
7						
8			0		CL, ML	Brown CLAY, varved, stiff, wet, lense of brown SANDY SILT at 9.7-9.9', Lacustrine
9						
10	**3**	**10.0-15.0**				
11						
12						
13						
14						
15	**4**	**15.0-20.0**				
16						
17						
18						
19						
20	**5**	**20.0-25.0**				
21						
22						

Notes: Soil samples screened with Mini Rae 3000 PID with 11.7 eV lamp. SampleS from 0.5' - 3.0' and 8' - 10' below grade submitted for laboratory analysis.

APPENDIX C

Laboratory Analytical Reports

Carus Remediation Technologies
Remediation Report

March 9, 2022

Customer: Matrix Environmental Technologies
3730 California Road
Orchard Park, NY 14127

Attention: Christine Curtis

From: T. Colgan

TECH # 22-038

Subject: RemOx® S ISCO Reagent Permanganate Natural Oxidant Demand

Summary
The overall average RemOx® S ISCO reagent permanganate natural oxidant demand (PNOD) at 48 hours for the soil samples was determined to be 8.5 g/kg. The average demands ranged from 4.2 g/kg to 13.2 g/kg. These values are calculated on a weight as potassium permanganate ($KMnO_4$) per dry weight of soil.

Background
Two soil samples were received from Matrix Environmental Technologies from the Lakeside Village Apartments project located in Lancaster, NY. The soil samples designations were LF1 (8'-9') and LF1 (10'-11'). The samples were analyzed for permanganate natural oxidant demand. The measurement of the permanganate natural oxidant demand is used to estimate the concentration of permanganate that will be consumed by the natural reducing agents during a given time period of 48 hours.

Experimental
The samples were analyzed for permanganate natural oxidant demand following ASTM D7262-10 Test Method A. A brief summary is as follows:

To determine the PNOD, the soil was baked at 105°C for 24 hours then allowed to cool to room temperature. The soil was then blended and passed through a U.S. 10 sieve (2 mm). Reactors were loaded with 50 grams of soil and 100 mL of 20 g/L $KMnO_4$ for an initial dose of 40 g/kg $KMnO_4$ on a dry soil weight basis at a 1:2 soil to aqueous reagent ratio. Each soil dose was performed in triplicate. The reaction vessels were inverted once to mix the reagents. Residual permanganate (MnO_4^-) was determined at 48 hours. The demands were calculated on a dry weight basis.

Results

The permanganate demand is the amount of permanganate consumed in a given amount of time. It should be noted that in a soil or groundwater sample, the oxidation of any compound by permanganate is dependent on the initial dose of permanganate and the reaction time available. As the permanganate dose is increased, the reaction rate and oxidant consumption may also increase. Some compounds that are not typically oxidized by permanganate under low doses can become reactive with permanganate at higher concentrations. The 48-hour PNOD results can be seen in Table 1 (on a dry soil basis).

Table 1: 48-Hour PNOD *

Soil Sample Identification	Average and Standard Deviation (g/kg)	Replicate 1 (g/kg)	Replicate 2 (g/kg)	Replicate 3 (g/kg)
LF1 (8'-9')	12.3 ± 0.95	13.2	12.4	11.3
LF1 (10'-11')	4.6 ± 0.57	5.3	4.5	4.2
Overall Average	8.5			

*Demands were calculated on a weight $NaMnO_4$/dry soil weight basis from an initial dose of 40.0 g/kg $NaMnO_4$ initial dose at a 1:2 soil to aqueous solution ratio.

Conclusions

For this application the amount of permanganate needed will be dependent on the reaction time allowed. On average, the soil samples had a 48-hour permanganate demand value of 8.5 g/kg. The average demands ranged from 4.2 g/kg to 13.2 g/kg. Generally, remediation sites with a soil demand of less than 20.0 g/kg at the time of interest are favorable for *in situ* chemical oxidation with permanganate (see Table 2 for additional information).

Table 2: Correlation of Permanganate Natural Oxidant Demand Results*

PNOD (g/kg)	Rank	Comment
<10	Low	ISCO with MnO_4^- is recommended. Soil contribution to MnO_4^- demand is low.
10-20	Moderate	ISCO with MnO_4^- is recommended. Soil contribution to MnO_4^- demand is moderate. Economics should be considered.
>20	High	ISCO with MnO_4^- is technically feasible. Other technologies may provide lower cost alternatives.

*Dry Weight Basis

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-195466-1
Client Project/Site: Project # 18-046 - Lakeside Village Apts

For:
Matrix Environmental Technologies Inc
3730 California Road
PO BOX 427
Orchard Park, New York 14127

Attn: Ms. Christine Curtis

Authorized for release by:
3/16/2022 11:59:11 AM
Wyatt Watson, Project Management Assistant I
Wyatt.Watson@Eurofinset.com

Designee for

Steve Hartmann, Project Manager
(413)572-4000
Steve.Hartmann@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Qualifiers

GC/MS 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.

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.

GC 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
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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-195466-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-195466-1

Comments
No additional comments.

Receipt
The samples were received on 3/3/2022 1:35 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 was 8.8º C.

Receipt Exceptions
The following samples were preserved via freezing on 3/3/22 at 1500: SB201 (1.8-2.3) (480-195466-1), SB201 (6-6.5) (480-195466-2), SB202 (2-2.5) (480-195466-3), SB202 (6-6.5) (480-195466-4), SB203 (2-2.5) (480-195466-5), SB203 (5-5.5) (480-195466-6), SB204 (2.75-3.2) (480-195466-7), SB204 (5.5-6.0) (480-195466-8), LF1 (480-195466-9), LF2 (480-195466-10) and LF1 (480-195466-11) .

The following samples were received at the laboratory outside the required temperature criteria: SB201 (1.8-2.3) (480-195466-1), SB201 (6-6.5) (480-195466-2), SB202 (2-2.5) (480-195466-3), SB202 (6-6.5) (480-195466-4), SB203 (2-2.5) (480-195466-5), SB203 (5-5.5) (480-195466-6), SB204 (2.75-3.2) (480-195466-7), SB204 (5.5-6.0) (480-195466-8), LF1 (480-195466-9), LF2 (480-195466-10) and LF1 (480-195466-11).

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-616884 recovered above the upper control limit for trans-1,3-Dichloropropene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB201 (1.8-2.3) (480-195466-1), SB201 (6-6.5) (480-195466-2), SB202 (2-2.5) (480-195466-3), SB202 (6-6.5) (480-195466-4), SB203 (2-2.5) (480-195466-5), SB203 (5-5.5) (480-195466-6), SB204 (2.75-3.2) (480-195466-7), SB204 (5.5-6.0) (480-195466-8) and LF1 (480-195466-11).

Method 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB202 (2-2.5) (480-195466-3) and SB204 (2.75-3.2) (480-195466-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: SB201 (1.8-2.3) (480-195466-1), SB201 (6-6.5) (480-195466-2), SB202 (6-6.5) (480-195466-4), SB203 (2-2.5) (480-195466-5), SB203 (5-5.5) (480-195466-6), SB204 (5.5-6.0) (480-195466-8) and LF1 (480-195466-11). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted due to the nature of the TCLP matrix: LF1 (480-195466-9), LF2 (480-195466-10) and (LB 480-616936/1-A). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-617050 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: LF1 (480-195466-9) and LF2 (480-195466-10).

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
Method 8015D: Reported analyte concentrations in the following samples are below 200 ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: LF1 (480-195466-9) and LF2 (480-195466-10).

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

GC Semi VOA

Job ID: 480-195466-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

Method 8151A: The continuing calibration verification (CCV) associated with batch 480-617225 recovered above the upper control limit for 2,4-D. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: LF1 (480-195466-9) and LF2 (480-195466-10).

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

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

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: LF1 (480-195466-9) and LF2 (480-195466-10).

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

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-616935 and 480-617096.

Method 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-616935 and 480-617097.

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

Detection Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: SB201 (1.8-2.3) — Lab Sample ID: 480-195466-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	370	J	450	370	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	95		89	20	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	300		89	42	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1800		89	12	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB201 (6-6.5) — Lab Sample ID: 480-195466-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	84		54	7.3	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB202 (2-2.5) — Lab Sample ID: 480-195466-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	8800		200	27	ug/Kg	4	☼	8260C	Total/NA
Trichloroethene	180	J	200	56	ug/Kg	4	☼	8260C	Total/NA

Client Sample ID: SB202 (6-6.5) — Lab Sample ID: 480-195466-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	210		56	16	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2900		56	7.6	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	13	J	56	13	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	710		56	16	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB203 (2-2.5) — Lab Sample ID: 480-195466-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1600		50	6.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB203 (5-5.5) — Lab Sample ID: 480-195466-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	160		51	14	ug/Kg	1	☼	8260C	Total/NA
Methyl acetate	46	J	250	24	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	230		51	6.8	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	13	J	51	12	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	37	J	51	14	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB204 (2.75-3.2) — Lab Sample ID: 480-195466-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3000		240	65	ug/Kg	4	☼	8260C	Total/NA
Tetrachloroethene	19000		240	32	ug/Kg	4	☼	8260C	Total/NA
trans-1,2-Dichloroethene	1300		240	56	ug/Kg	4	☼	8260C	Total/NA
Trichloroethene	7000		240	66	ug/Kg	4	☼	8260C	Total/NA

Client Sample ID: SB204 (5.5-6.0) — Lab Sample ID: 480-195466-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	990		60	17	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	26	J	60	8.1	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	28	J	60	14	ug/Kg	1	☼	8260C	Total/NA
Vinyl chloride	33	J	60	20	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: LF1 — Lab Sample ID: 480-195466-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.011		0.010	0.0036	mg/L	10		8260C	TCLP
Trichloroethene	0.011		0.010	0.0046	mg/L	10		8260C	TCLP
GRO (C6-C10)	1.8		1.4	0.38	mg/Kg	1	☼	8015D	Total/NA
Diesel Range Organics [C10-C28]	9.6	J	19	5.8	mg/Kg	1	☼	8015D	Total/NA
Barium	0.75	J	1.0	0.10	mg/L	1		6010C	TCLP
Cadmium	0.0018	J	0.0020	0.00050	mg/L	1		6010C	TCLP
Lead	0.0075	J	0.020	0.0030	mg/L	1		6010C	TCLP
Flashpoint	>175		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	8.8	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	19.8	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: LF2 — Lab Sample ID: 480-195466-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.014		0.010	0.0036	mg/L	10		8260C	TCLP
GRO (C6-C10)	1.8		1.5	0.40	mg/Kg	1	☼	8015D	Total/NA
Diesel Range Organics [C10-C28]	28		21	6.3	mg/Kg	1	☼	8015D	Total/NA
Barium	0.63	J	1.0	0.10	mg/L	1		6010C	TCLP
Cadmium	0.00086	J	0.0020	0.00050	mg/L	1		6010C	TCLP
Lead	0.011	J	0.020	0.0030	mg/L	1		6010C	TCLP
Flashpoint	>175		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	9.2	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	19.9	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: LF1 — Lab Sample ID: 480-195466-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	370		59	16	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2500		59	8.0	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	140		59	14	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	1200		59	16	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB201 (1.8-2.3)
Lab Sample ID: 480-195466-1
Date Collected: 03/02/22 09:55
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 76.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		89	25	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,1,2,2-Tetrachloroethane	ND		89	15	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,1,2-Trichloroethane	ND		89	19	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		89	45	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,1-Dichloroethane	ND		89	28	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,1-Dichloroethene	ND		89	31	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2,4-Trichlorobenzene	ND		89	34	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2-Dibromo-3-Chloropropane	ND		89	45	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2-Dichlorobenzene	ND		89	23	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2-Dichloroethane	ND		89	37	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2-Dichloropropane	ND		89	14	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,3-Dichlorobenzene	ND		89	24	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,4-Dichlorobenzene	ND		89	13	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
2-Butanone (MEK)	ND		450	270	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
2-Hexanone	ND		450	180	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
4-Methyl-2-pentanone (MIBK)	ND		450	29	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Acetone	**370**	**J**	450	370	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Benzene	ND		89	17	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Bromodichloromethane	ND		89	18	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Bromoform	ND		89	45	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Bromomethane	ND		89	20	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Carbon disulfide	ND		89	41	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Carbon tetrachloride	ND		89	23	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Chlorobenzene	ND		89	12	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Dibromochloromethane	ND		89	43	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Chloroethane	ND		89	19	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Chloroform	ND		89	61	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Chloromethane	ND		89	21	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
cis-1,2-Dichloroethene	ND		89	25	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
cis-1,3-Dichloropropene	ND		89	21	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Cyclohexane	**95**		89	20	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Dichlorodifluoromethane	ND		89	39	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Ethylbenzene	ND		89	26	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
1,2-Dibromoethane	ND		89	16	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Isopropylbenzene	ND		89	13	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Methyl acetate	ND		450	43	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Methyl tert-butyl ether	ND		89	34	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Methylcyclohexane	**300**		89	42	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Methylene Chloride	ND		89	18	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Styrene	ND		89	22	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Tetrachloroethene	**1800**		89	12	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Toluene	ND		89	24	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
trans-1,2-Dichloroethene	ND		89	21	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
trans-1,3-Dichloropropene	ND		89	8.8	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Trichloroethene	ND		89	25	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Trichlorofluoromethane	ND		89	42	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Vinyl chloride	ND		89	30	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1
Xylenes, Total	ND		180	50	ug/Kg	☼	03/03/22 17:00	03/06/22 00:50	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB201 (1.8-2.3)
Lab Sample ID: 480-195466-1

Date Collected: 03/02/22 09:55
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 76.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		50 - 149	03/03/22 17:00	03/06/22 00:50	1
1,2-Dichloroethane-d4 (Surr)	98		53 - 146	03/03/22 17:00	03/06/22 00:50	1
4-Bromofluorobenzene (Surr)	96		49 - 148	03/03/22 17:00	03/06/22 00:50	1
Dibromofluoromethane (Surr)	92		60 - 140	03/03/22 17:00	03/06/22 00:50	1

Client Sample ID: SB201 (6-6.5)
Lab Sample ID: 480-195466-2

Date Collected: 03/02/22 10:03
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		54	15	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,1,2,2-Tetrachloroethane	ND		54	8.8	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,1,2-Trichloroethane	ND		54	11	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		54	27	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,1-Dichloroethane	ND		54	17	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,1-Dichloroethene	ND		54	19	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2,4-Trichlorobenzene	ND		54	20	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2-Dibromo-3-Chloropropane	ND		54	27	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2-Dichlorobenzene	ND		54	14	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2-Dichloroethane	ND		54	22	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2-Dichloropropane	ND		54	8.7	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,3-Dichlorobenzene	ND		54	14	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,4-Dichlorobenzene	ND		54	7.6	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
2-Butanone (MEK)	ND		270	160	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
2-Hexanone	ND		270	110	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
4-Methyl-2-pentanone (MIBK)	ND		270	17	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Acetone	ND		270	220	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Benzene	ND		54	10	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Bromodichloromethane	ND		54	11	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Bromoform	ND		54	27	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Bromomethane	ND		54	12	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Carbon disulfide	ND		54	25	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Carbon tetrachloride	ND		54	14	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Chlorobenzene	ND		54	7.1	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Dibromochloromethane	ND		54	26	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Chloroethane	ND		54	11	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Chloroform	ND		54	37	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Chloromethane	ND		54	13	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
cis-1,2-Dichloroethene	ND		54	15	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
cis-1,3-Dichloropropene	ND		54	13	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Cyclohexane	ND		54	12	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Dichlorodifluoromethane	ND		54	24	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Ethylbenzene	ND		54	16	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
1,2-Dibromoethane	ND		54	9.4	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Isopropylbenzene	ND		54	8.1	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Methyl acetate	ND		270	26	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Methyl tert-butyl ether	ND		54	20	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Methylcyclohexane	ND		54	25	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Methylene Chloride	ND		54	11	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1

Client Sample ID: SB201 (6-6.5)

Lab Sample ID: 480-195466-2
Date Collected: 03/02/22 10:03
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		54	13	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Tetrachloroethene	**84**		54	7.3	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Toluene	ND		54	14	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
trans-1,2-Dichloroethene	ND		54	13	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
trans-1,3-Dichloropropene	ND		54	5.3	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Trichloroethene	ND		54	15	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Trichlorofluoromethane	ND		54	25	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Vinyl chloride	ND		54	18	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1
Xylenes, Total	ND		110	30	ug/Kg	☼	03/03/22 17:00	03/06/22 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*50 - 149*	*03/03/22 17:00*	*03/06/22 01:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*53 - 146*	*03/03/22 17:00*	*03/06/22 01:12*	*1*
4-Bromofluorobenzene (Surr)	*94*		*49 - 148*	*03/03/22 17:00*	*03/06/22 01:12*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*	*03/03/22 17:00*	*03/06/22 01:12*	*1*

Client Sample ID: SB202 (2-2.5)

Lab Sample ID: 480-195466-3
Date Collected: 03/02/22 10:45
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	55	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,1,2,2-Tetrachloroethane	ND		200	32	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,1,2-Trichloroethane	ND		200	42	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	100	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,1-Dichloroethane	ND		200	62	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,1-Dichloroethene	ND		200	69	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2,4-Trichlorobenzene	ND		200	76	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2-Dibromo-3-Chloropropane	ND		200	100	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2-Dichlorobenzene	ND		200	51	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2-Dichloroethane	ND		200	82	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2-Dichloropropane	ND		200	32	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,3-Dichlorobenzene	ND		200	53	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,4-Dichlorobenzene	ND		200	28	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
2-Butanone (MEK)	ND		1000	590	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
2-Hexanone	ND		1000	410	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
4-Methyl-2-pentanone (MIBK)	ND		1000	64	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Acetone	ND		1000	820	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Benzene	ND		200	38	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Bromodichloromethane	ND		200	40	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Bromoform	ND		200	100	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Bromomethane	ND		200	44	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Carbon disulfide	ND		200	91	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Carbon tetrachloride	ND		200	51	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Chlorobenzene	ND		200	26	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Dibromochloromethane	ND		200	97	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Chloroethane	ND		200	42	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Chloroform	ND		200	140	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Chloromethane	ND		200	48	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4

Client Sample ID: SB202 (2-2.5)
Lab Sample ID: 480-195466-3

Date Collected: 03/02/22 10:45
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		200	55	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
cis-1,3-Dichloropropene	ND		200	48	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Cyclohexane	ND		200	44	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Dichlorodifluoromethane	ND		200	87	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Ethylbenzene	ND		200	58	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
1,2-Dibromoethane	ND		200	35	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Isopropylbenzene	ND		200	30	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Methyl acetate	ND		1000	95	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Methyl tert-butyl ether	ND		200	76	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Methylcyclohexane	ND		200	94	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Methylene Chloride	ND		200	40	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Styrene	ND		200	48	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Tetrachloroethene	**8800**		200	27	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Toluene	ND		200	54	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
trans-1,2-Dichloroethene	ND		200	47	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
trans-1,3-Dichloropropene	ND		200	20	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Trichloroethene	**180**	**J**	200	56	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Trichlorofluoromethane	ND		200	94	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Vinyl chloride	ND		200	67	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4
Xylenes, Total	ND		400	110	ug/Kg	☼	03/03/22 17:00	03/06/22 01:36	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*50 - 149*	*03/03/22 17:00*	*03/06/22 01:36*	*4*
1,2-Dichloroethane-d4 (Surr)	*95*		*53 - 146*	*03/03/22 17:00*	*03/06/22 01:36*	*4*
4-Bromofluorobenzene (Surr)	*92*		*49 - 148*	*03/03/22 17:00*	*03/06/22 01:36*	*4*
Dibromofluoromethane (Surr)	*89*		*60 - 140*	*03/03/22 17:00*	*03/06/22 01:36*	*4*

Client Sample ID: SB202 (6-6.5)
Lab Sample ID: 480-195466-4

Date Collected: 03/02/22 11:10
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		56	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,1,2,2-Tetrachloroethane	ND		56	9.1	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,1,2-Trichloroethane	ND		56	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		56	28	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,1-Dichloroethane	ND		56	17	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,1-Dichloroethene	ND		56	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2,4-Trichlorobenzene	ND		56	21	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2-Dibromo-3-Chloropropane	ND		56	28	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2-Dichlorobenzene	ND		56	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2-Dichloroethane	ND		56	23	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2-Dichloropropane	ND		56	9.1	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,3-Dichlorobenzene	ND		56	15	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,4-Dichlorobenzene	ND		56	7.9	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
2-Butanone (MEK)	ND		280	170	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
2-Hexanone	ND		280	120	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
4-Methyl-2-pentanone (MIBK)	ND		280	18	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Acetone	ND		280	230	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB202 (6-6.5)
Lab Sample ID: 480-195466-4
Date Collected: 03/02/22 11:10
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		56	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Bromodichloromethane	ND		56	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Bromoform	ND		56	28	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Bromomethane	ND		56	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Carbon disulfide	ND		56	26	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Carbon tetrachloride	ND		56	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Chlorobenzene	ND		56	7.4	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Dibromochloromethane	ND		56	27	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Chloroethane	ND		56	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Chloroform	ND		56	39	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Chloromethane	ND		56	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
cis-1,2-Dichloroethene	**210**		56	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
cis-1,3-Dichloropropene	ND		56	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Cyclohexane	ND		56	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Dichlorodifluoromethane	ND		56	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Ethylbenzene	ND		56	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
1,2-Dibromoethane	ND		56	9.9	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Isopropylbenzene	ND		56	8.4	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Methyl acetate	ND		280	27	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Methyl tert-butyl ether	ND		56	21	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Methylcyclohexane	ND		56	26	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Methylene Chloride	ND		56	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Styrene	ND		56	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Tetrachloroethene	**2900**		56	7.6	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Toluene	ND		56	15	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
trans-1,2-Dichloroethene	**13**	**J**	56	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
trans-1,3-Dichloropropene	ND		56	5.5	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Trichloroethene	**710**		56	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Trichlorofluoromethane	ND		56	26	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Vinyl chloride	ND		56	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1
Xylenes, Total	ND		110	31	ug/Kg	☼	03/03/22 17:00	03/06/22 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*50 - 149*	*03/03/22 17:00*	*03/06/22 02:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*	*03/03/22 17:00*	*03/06/22 02:00*	*1*
4-Bromofluorobenzene (Surr)	*92*		*49 - 148*	*03/03/22 17:00*	*03/06/22 02:00*	*1*
Dibromofluoromethane (Surr)	*91*		*60 - 140*	*03/03/22 17:00*	*03/06/22 02:00*	*1*

Client Sample ID: SB203 (2-2.5)
Lab Sample ID: 480-195466-5
Date Collected: 03/02/22 11:53
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 89.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,1,2,2-Tetrachloroethane	ND		50	8.1	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,1,2-Trichloroethane	ND		50	10	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,1-Dichloroethane	ND		50	15	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,1-Dichloroethene	ND		50	17	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB203 (2-2.5)
Lab Sample ID: 480-195466-5
Date Collected: 03/02/22 11:53
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 89.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		50	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,2-Dibromo-3-Chloropropane	ND		50	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,2-Dichlorobenzene	ND		50	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,2-Dichloroethane	ND		50	20	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,2-Dichloropropane	ND		50	8.1	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,3-Dichlorobenzene	ND		50	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,4-Dichlorobenzene	ND		50	7.0	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
2-Butanone (MEK)	ND		250	150	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
2-Hexanone	ND		250	100	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
4-Methyl-2-pentanone (MIBK)	ND		250	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Acetone	ND		250	210	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Benzene	ND		50	9.5	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Bromodichloromethane	ND		50	10	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Bromoform	ND		50	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Bromomethane	ND		50	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Carbon disulfide	ND		50	23	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Carbon tetrachloride	ND		50	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Chlorobenzene	ND		50	6.6	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Dibromochloromethane	ND		50	24	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Chloroethane	ND		50	10	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Chloroform	ND		50	34	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Chloromethane	ND		50	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
cis-1,2-Dichloroethene	ND		50	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
cis-1,3-Dichloropropene	ND		50	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Cyclohexane	ND		50	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Dichlorodifluoromethane	ND		50	22	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Ethylbenzene	ND		50	15	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
1,2-Dibromoethane	ND		50	8.7	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Isopropylbenzene	ND		50	7.5	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Methyl acetate	ND		250	24	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Methyl tert-butyl ether	ND		50	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Methylcyclohexane	ND		50	23	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Methylene Chloride	ND		50	9.9	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Styrene	ND		50	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Tetrachloroethene	**1600**		50	6.7	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Toluene	ND		50	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
trans-1,2-Dichloroethene	ND		50	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
trans-1,3-Dichloropropene	ND		50	4.9	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Trichloroethene	ND		50	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Trichlorofluoromethane	ND		50	23	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Vinyl chloride	ND		50	17	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1
Xylenes, Total	ND		100	28	ug/Kg	☼	03/03/22 17:00	03/06/22 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*50 - 149*	*03/03/22 17:00*	*03/06/22 02:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*	*03/03/22 17:00*	*03/06/22 02:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*03/03/22 17:00*	*03/06/22 02:23*	*1*
Dibromofluoromethane (Surr)	*87*		*60 - 140*	*03/03/22 17:00*	*03/06/22 02:23*	*1*

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: SB203 (5-5.5)
Date Collected: 03/02/22 12:09
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-6
Matrix: Solid
Percent Solids: 85.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		51	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,1,2,2-Tetrachloroethane	ND		51	8.3	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,1,2-Trichloroethane	ND		51	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,1-Dichloroethane	ND		51	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,1-Dichloroethene	ND		51	18	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2,4-Trichlorobenzene	ND		51	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2-Dibromo-3-Chloropropane	ND		51	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2-Dichlorobenzene	ND		51	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2-Dichloroethane	ND		51	21	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2-Dichloropropane	ND		51	8.2	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,3-Dichlorobenzene	ND		51	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,4-Dichlorobenzene	ND		51	7.1	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
2-Butanone (MEK)	ND		250	150	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
2-Hexanone	ND		250	100	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
4-Methyl-2-pentanone (MIBK)	ND		250	16	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Acetone	ND		250	210	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Benzene	ND		51	9.7	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Bromodichloromethane	ND		51	10	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Bromoform	ND		51	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Bromomethane	ND		51	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Carbon disulfide	ND		51	23	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Carbon tetrachloride	ND		51	13	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Chlorobenzene	ND		51	6.7	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Dibromochloromethane	ND		51	25	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Chloroethane	ND		51	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Chloroform	ND		51	35	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Chloromethane	ND		51	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
cis-1,2-Dichloroethene	**160**		51	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
cis-1,3-Dichloropropene	ND		51	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Cyclohexane	ND		51	11	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Dichlorodifluoromethane	ND		51	22	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Ethylbenzene	ND		51	15	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
1,2-Dibromoethane	ND		51	8.9	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Isopropylbenzene	ND		51	7.6	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Methyl acetate	**46**	**J**	250	24	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Methyl tert-butyl ether	ND		51	19	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Methylcyclohexane	ND		51	24	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Methylene Chloride	ND		51	10	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Styrene	ND		51	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Tetrachloroethene	**230**		51	6.8	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Toluene	ND		51	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
trans-1,2-Dichloroethene	**13**	**J**	51	12	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
trans-1,3-Dichloropropene	ND		51	5.0	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Trichloroethene	**37**	**J**	51	14	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Trichlorofluoromethane	ND		51	24	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Vinyl chloride	ND		51	17	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1
Xylenes, Total	ND		100	28	ug/Kg	☼	03/03/22 17:00	03/06/22 02:46	1

Client Sample ID: SB203 (5-5.5)

Lab Sample ID: 480-195466-6
Date Collected: 03/02/22 12:09
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 85.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*50 - 149*	*03/03/22 17:00*	*03/06/22 02:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*53 - 146*	*03/03/22 17:00*	*03/06/22 02:46*	*1*
4-Bromofluorobenzene (Surr)	*98*		*49 - 148*	*03/03/22 17:00*	*03/06/22 02:46*	*1*
Dibromofluoromethane (Surr)	*83*		*60 - 140*	*03/03/22 17:00*	*03/06/22 02:46*	*1*

Client Sample ID: SB204 (2.75-3.2)

Lab Sample ID: 480-195466-7
Date Collected: 03/02/22 12:55
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		240	65	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,1,2,2-Tetrachloroethane	ND		240	38	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,1,2-Trichloroethane	ND		240	50	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		240	120	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,1-Dichloroethane	ND		240	73	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,1-Dichloroethene	ND		240	82	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2,4-Trichlorobenzene	ND		240	89	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2-Dibromo-3-Chloropropane	ND		240	120	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2-Dichlorobenzene	ND		240	60	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2-Dichloroethane	ND		240	97	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2-Dichloropropane	ND		240	38	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,3-Dichlorobenzene	ND		240	63	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,4-Dichlorobenzene	ND		240	33	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
2-Butanone (MEK)	ND		1200	700	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
2-Hexanone	ND		1200	480	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
4-Methyl-2-pentanone (MIBK)	ND		1200	76	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Acetone	ND		1200	970	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Benzene	ND		240	45	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Bromodichloromethane	ND		240	47	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Bromoform	ND		240	120	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Bromomethane	ND		240	52	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Carbon disulfide	ND		240	110	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Carbon tetrachloride	ND		240	60	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Chlorobenzene	ND		240	31	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Dibromochloromethane	ND		240	110	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Chloroethane	ND		240	49	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Chloroform	ND		240	160	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Chloromethane	ND		240	56	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
cis-1,2-Dichloroethene	**3000**		240	65	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
cis-1,3-Dichloropropene	ND		240	56	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Cyclohexane	ND		240	52	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Dichlorodifluoromethane	ND		240	100	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Ethylbenzene	ND		240	69	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
1,2-Dibromoethane	ND		240	41	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Isopropylbenzene	ND		240	35	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Methyl acetate	ND		1200	110	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Methyl tert-butyl ether	ND		240	89	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Methylcyclohexane	ND		240	110	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Methylene Chloride	ND		240	47	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4

Client Sample ID: SB204 (2.75-3.2)

Lab Sample ID: 480-195466-7
Date Collected: 03/02/22 12:55
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		240	57	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Tetrachloroethene	**19000**		240	32	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Toluene	ND		240	63	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
trans-1,2-Dichloroethene	**1300**		240	56	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
trans-1,3-Dichloropropene	ND		240	23	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Trichloroethene	**7000**		240	66	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Trichlorofluoromethane	ND		240	110	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Vinyl chloride	ND		240	79	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4
Xylenes, Total	ND		470	130	ug/Kg	☼	03/03/22 17:00	03/06/22 03:10	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*50 - 149*	*03/03/22 17:00*	*03/06/22 03:10*	*4*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*03/03/22 17:00*	*03/06/22 03:10*	*4*
4-Bromofluorobenzene (Surr)	*96*		*49 - 148*	*03/03/22 17:00*	*03/06/22 03:10*	*4*
Dibromofluoromethane (Surr)	*89*		*60 - 140*	*03/03/22 17:00*	*03/06/22 03:10*	*4*

Client Sample ID: SB204 (5.5-6.0)

Lab Sample ID: 480-195466-8
Date Collected: 03/02/22 13:23
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 79.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		60	17	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,1,2,2-Tetrachloroethane	ND		60	9.8	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,1,2-Trichloroethane	ND		60	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		60	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,1-Dichloroethane	ND		60	19	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,1-Dichloroethene	ND		60	21	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2,4-Trichlorobenzene	ND		60	23	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2-Dibromo-3-Chloropropane	ND		60	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2-Dichlorobenzene	ND		60	15	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2-Dichloroethane	ND		60	25	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2-Dichloropropane	ND		60	9.8	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,3-Dichlorobenzene	ND		60	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,4-Dichlorobenzene	ND		60	8.5	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
2-Butanone (MEK)	ND		300	180	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
2-Hexanone	ND		300	120	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
4-Methyl-2-pentanone (MIBK)	ND		300	19	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Acetone	ND		300	250	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Benzene	ND		60	11	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Bromodichloromethane	ND		60	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Bromoform	ND		60	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Bromomethane	ND		60	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Carbon disulfide	ND		60	27	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Carbon tetrachloride	ND		60	15	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Chlorobenzene	ND		60	8.0	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Dibromochloromethane	ND		60	29	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Chloroethane	ND		60	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Chloroform	ND		60	41	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Chloromethane	ND		60	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1

Client Sample ID: SB204 (5.5-6.0)
Lab Sample ID: 480-195466-8

Date Collected: 03/02/22 13:23
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 79.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**990**		60	17	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
cis-1,3-Dichloropropene	ND		60	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Cyclohexane	ND		60	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Dichlorodifluoromethane	ND		60	26	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Ethylbenzene	ND		60	18	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
1,2-Dibromoethane	ND		60	11	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Isopropylbenzene	ND		60	9.1	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Methyl acetate	ND		300	29	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Methyl tert-butyl ether	ND		60	23	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Methylcyclohexane	ND		60	28	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Methylene Chloride	ND		60	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Styrene	ND		60	15	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Tetrachloroethene	**26**	**J**	60	8.1	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Toluene	ND		60	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
trans-1,2-Dichloroethene	**28**	**J**	60	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
trans-1,3-Dichloropropene	ND		60	5.9	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Trichloroethene	ND		60	17	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Trichlorofluoromethane	ND		60	28	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Vinyl chloride	**33**	**J**	60	20	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1
Xylenes, Total	ND		120	33	ug/Kg	☼	03/03/22 17:00	03/06/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*50 - 149*	*03/03/22 17:00*	*03/06/22 03:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*53 - 146*	*03/03/22 17:00*	*03/06/22 03:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*03/03/22 17:00*	*03/06/22 03:34*	*1*
Dibromofluoromethane (Surr)	*89*		*60 - 140*	*03/03/22 17:00*	*03/06/22 03:34*	*1*

Client Sample ID: LF1
Lab Sample ID: 480-195466-9

Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			03/08/22 18:19	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			03/08/22 18:19	10
Chlorobenzene	ND		0.010	0.0075	mg/L			03/08/22 18:19	10
Chloroform	ND		0.010	0.0034	mg/L			03/08/22 18:19	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			03/08/22 18:19	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			03/08/22 18:19	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			03/08/22 18:19	10
Tetrachloroethene	**0.011**		0.010	0.0036	mg/L			03/08/22 18:19	10
Trichloroethene	**0.011**		0.010	0.0046	mg/L			03/08/22 18:19	10
Vinyl chloride	ND		0.010	0.0090	mg/L			03/08/22 18:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*03/08/22 18:19*	*10*
Toluene-d8 (Surr)	*91*		*80 - 120*		*03/08/22 18:19*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/08/22 18:19*	*10*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*03/08/22 18:19*	*10*

Client Sample ID: LF1
Date Collected: 03/02/22 14:15
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-9
Matrix: Solid

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		03/08/22 15:04	03/09/22 13:52	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		03/08/22 15:04	03/09/22 13:52	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		03/08/22 15:04	03/09/22 13:52	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		03/08/22 15:04	03/09/22 13:52	1
Hexachloroethane	ND		0.020	0.0023	mg/L		03/08/22 15:04	03/09/22 13:52	1
3-Methylphenol	ND		0.040	0.0016	mg/L		03/08/22 15:04	03/09/22 13:52	1
2-Methylphenol	ND		0.020	0.0016	mg/L		03/08/22 15:04	03/09/22 13:52	1
4-Methylphenol	ND		0.040	0.0014	mg/L		03/08/22 15:04	03/09/22 13:52	1
Nitrobenzene	ND		0.020	0.0011	mg/L		03/08/22 15:04	03/09/22 13:52	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		03/08/22 15:04	03/09/22 13:52	1
Pyridine	ND		0.10	0.0016	mg/L		03/08/22 15:04	03/09/22 13:52	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		03/08/22 15:04	03/09/22 13:52	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		03/08/22 15:04	03/09/22 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*41 - 120*	*03/08/22 15:04*	*03/09/22 13:52*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*03/08/22 15:04*	*03/09/22 13:52*	*1*
2-Fluorophenol	*46*		*35 - 120*	*03/08/22 15:04*	*03/09/22 13:52*	*1*
Nitrobenzene-d5	*88*		*46 - 120*	*03/08/22 15:04*	*03/09/22 13:52*	*1*
p-Terphenyl-d14	*102*		*60 - 148*	*03/08/22 15:04*	*03/09/22 13:52*	*1*
Phenol-d5	*31*		*22 - 120*	*03/08/22 15:04*	*03/09/22 13:52*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		03/08/22 09:48	03/09/22 11:58	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		03/08/22 09:48	03/09/22 11:58	1
Endrin	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 11:58	1
Heptachlor	ND		0.00020	0.0000085	mg/L		03/08/22 09:48	03/09/22 11:58	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		03/08/22 09:48	03/09/22 11:58	1
Methoxychlor	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 11:58	1
Toxaphene	ND		0.0020	0.00012	mg/L		03/08/22 09:48	03/09/22 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*20 - 120*	*03/08/22 09:48*	*03/09/22 11:58*	*1*
DCB Decachlorobiphenyl	*74*		*20 - 120*	*03/08/22 09:48*	*03/09/22 11:58*	*1*
Tetrachloro-m-xylene	*95*		*44 - 120*	*03/08/22 09:48*	*03/09/22 11:58*	*1*
Tetrachloro-m-xylene	*73*		*44 - 120*	*03/08/22 09:48*	*03/09/22 11:58*	*1*

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		03/08/22 09:52	03/09/22 17:59	1
2,4-D	ND		0.0020	0.00040	mg/L		03/08/22 09:52	03/09/22 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*51*		*48 - 132*	*03/08/22 09:52*	*03/09/22 17:59*	*1*
2,4-Dichlorophenylacetic acid	*60*		*48 - 132*	*03/08/22 09:52*	*03/09/22 17:59*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/08/22 11:10	03/09/22 02:13	1
Barium	**0.75**	**J**	1.0	0.10	mg/L		03/08/22 11:10	03/09/22 02:13	1

Client Sample ID: LF1
Lab Sample ID: 480-195466-9
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35

Method: 6010C - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0018**	**J**	0.0020	0.00050	mg/L		03/08/22 11:10	03/09/22 02:13	1
Chromium	ND		0.020	0.010	mg/L		03/08/22 11:10	03/09/22 02:13	1
Lead	**0.0075**	**J**	0.020	0.0030	mg/L		03/08/22 11:10	03/09/22 02:13	1
Selenium	ND		0.025	0.0087	mg/L		03/08/22 11:10	03/09/22 02:13	1
Silver	ND		0.0060	0.0017	mg/L		03/08/22 11:10	03/09/22 02:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/08/22 11:29	03/08/22 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10	10	mg/Kg		03/04/22 13:25	03/04/22 15:26	1
Sulfide, Reactive	ND		10	10	mg/Kg		03/04/22 13:25	03/04/22 14:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>175**		50.0	50.0	Degrees F			03/08/22 18:32	1
pH	**8.8**	**HF**	0.1	0.1	SU			03/05/22 17:40	1
Temperature	**19.8**	**HF**	0.001	0.001	Degrees C			03/05/22 17:40	1

Client Sample ID: LF1
Lab Sample ID: 480-195466-9
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 84.6

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	**1.8**		1.4	0.38	mg/Kg	☼	03/08/22 08:05	03/08/22 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*46 - 156*	*03/08/22 08:05*	*03/08/22 10:38*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**9.6**	**J**	19	5.8	mg/Kg	☼	03/07/22 09:00	03/07/22 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*48 - 125*	*03/07/22 09:00*	*03/07/22 12:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.042	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1221	ND		0.21	0.042	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1232	ND		0.21	0.042	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1242	ND		0.21	0.042	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1248	ND		0.21	0.042	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1254	ND		0.21	0.10	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1260	ND		0.21	0.10	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1262	ND		0.21	0.10	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1
PCB-1268	ND		0.21	0.10	mg/Kg	☼	03/07/22 07:42	03/07/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*122*		*60 - 154*	*03/07/22 07:42*	*03/07/22 18:03*	*1*

Client Sample ID: LF1
Lab Sample ID: 480-195466-9

Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 84.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*120*		*60 - 154*	*03/07/22 07:42*	*03/07/22 18:03*	*1*
DCB Decachlorobiphenyl	*101*		*65 - 174*	*03/07/22 07:42*	*03/07/22 18:03*	*1*
DCB Decachlorobiphenyl	*101*		*65 - 174*	*03/07/22 07:42*	*03/07/22 18:03*	*1*

Client Sample ID: LF2
Lab Sample ID: 480-195466-10

Date Collected: 03/02/22 14:25
Matrix: Solid
Date Received: 03/03/22 13:35

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			03/08/22 18:42	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			03/08/22 18:42	10
Chlorobenzene	ND		0.010	0.0075	mg/L			03/08/22 18:42	10
Chloroform	ND		0.010	0.0034	mg/L			03/08/22 18:42	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			03/08/22 18:42	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			03/08/22 18:42	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			03/08/22 18:42	10
Tetrachloroethene	**0.014**		0.010	0.0036	mg/L			03/08/22 18:42	10
Trichloroethene	ND		0.010	0.0046	mg/L			03/08/22 18:42	10
Vinyl chloride	ND		0.010	0.0090	mg/L			03/08/22 18:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*03/08/22 18:42*	*10*
Toluene-d8 (Surr)	*91*		*80 - 120*		*03/08/22 18:42*	*10*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*03/08/22 18:42*	*10*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*03/08/22 18:42*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		03/08/22 15:04	03/09/22 14:16	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		03/08/22 15:04	03/09/22 14:16	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		03/08/22 15:04	03/09/22 14:16	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		03/08/22 15:04	03/09/22 14:16	1
Hexachloroethane	ND		0.020	0.0023	mg/L		03/08/22 15:04	03/09/22 14:16	1
3-Methylphenol	ND		0.040	0.0016	mg/L		03/08/22 15:04	03/09/22 14:16	1
2-Methylphenol	ND		0.020	0.0016	mg/L		03/08/22 15:04	03/09/22 14:16	1
4-Methylphenol	ND		0.040	0.0014	mg/L		03/08/22 15:04	03/09/22 14:16	1
Nitrobenzene	ND		0.020	0.0011	mg/L		03/08/22 15:04	03/09/22 14:16	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		03/08/22 15:04	03/09/22 14:16	1
Pyridine	ND		0.10	0.0016	mg/L		03/08/22 15:04	03/09/22 14:16	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		03/08/22 15:04	03/09/22 14:16	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		03/08/22 15:04	03/09/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*41 - 120*	*03/08/22 15:04*	*03/09/22 14:16*	*1*
2-Fluorobiphenyl	*88*		*48 - 120*	*03/08/22 15:04*	*03/09/22 14:16*	*1*
2-Fluorophenol	*46*		*35 - 120*	*03/08/22 15:04*	*03/09/22 14:16*	*1*
Nitrobenzene-d5	*83*		*46 - 120*	*03/08/22 15:04*	*03/09/22 14:16*	*1*
p-Terphenyl-d14	*97*		*60 - 148*	*03/08/22 15:04*	*03/09/22 14:16*	*1*
Phenol-d5	*31*		*22 - 120*	*03/08/22 15:04*	*03/09/22 14:16*	*1*

Client Sample ID: LF2
Date Collected: 03/02/22 14:25
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-10
Matrix: Solid

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		03/08/22 09:48	03/09/22 12:18	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		03/08/22 09:48	03/09/22 12:18	1
Endrin	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 12:18	1
Heptachlor	ND		0.00020	0.0000085	mg/L		03/08/22 09:48	03/09/22 12:18	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		03/08/22 09:48	03/09/22 12:18	1
Methoxychlor	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 12:18	1
Toxaphene	ND		0.0020	0.00012	mg/L		03/08/22 09:48	03/09/22 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*20 - 120*	*03/08/22 09:48*	*03/09/22 12:18*	*1*
DCB Decachlorobiphenyl	*72*		*20 - 120*	*03/08/22 09:48*	*03/09/22 12:18*	*1*
Tetrachloro-m-xylene	*97*		*44 - 120*	*03/08/22 09:48*	*03/09/22 12:18*	*1*
Tetrachloro-m-xylene	*75*		*44 - 120*	*03/08/22 09:48*	*03/09/22 12:18*	*1*

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		03/08/22 09:52	03/09/22 18:28	1
2,4-D	ND		0.0020	0.00040	mg/L		03/08/22 09:52	03/09/22 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*65*		*48 - 132*	*03/08/22 09:52*	*03/09/22 18:28*	*1*
2,4-Dichlorophenylacetic acid	*85*		*48 - 132*	*03/08/22 09:52*	*03/09/22 18:28*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/08/22 11:10	03/09/22 02:17	1
Barium	**0.63**	**J**	1.0	0.10	mg/L		03/08/22 11:10	03/09/22 02:17	1
Cadmium	**0.00086**	**J**	0.0020	0.00050	mg/L		03/08/22 11:10	03/09/22 02:17	1
Chromium	ND		0.020	0.010	mg/L		03/08/22 11:10	03/09/22 02:17	1
Lead	**0.011**	**J**	0.020	0.0030	mg/L		03/08/22 11:10	03/09/22 02:17	1
Selenium	ND		0.025	0.0087	mg/L		03/08/22 11:10	03/09/22 02:17	1
Silver	ND		0.0060	0.0017	mg/L		03/08/22 11:10	03/09/22 02:17	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/08/22 11:29	03/08/22 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10	10	mg/Kg		03/04/22 13:25	03/04/22 15:27	1
Sulfide, Reactive	ND		10	10	mg/Kg		03/04/22 13:25	03/04/22 14:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>175**		50.0	50.0	Degrees F			03/09/22 16:08	1
pH	**9.2**	**HF**	0.1	0.1	SU			03/05/22 17:40	1
Temperature	**19.9**	**HF**	0.001	0.001	Degrees C			03/05/22 17:40	1

Client Sample ID: LF2

Lab Sample ID: 480-195466-10
Date Collected: 03/02/22 14:25
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 78.6

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	1.8		1.5	0.40	mg/Kg	☼	03/08/22 08:05	03/08/22 11:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*46 - 156*	*03/08/22 08:05*	*03/08/22 11:15*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	28		21	6.3	mg/Kg	☼	03/07/22 09:00	03/07/22 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*48 - 125*	*03/07/22 09:00*	*03/07/22 13:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.056	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1221	ND		0.28	0.056	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1232	ND		0.28	0.056	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1242	ND		0.28	0.056	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1248	ND		0.28	0.056	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1262	ND		0.28	0.13	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1
PCB-1268	ND		0.28	0.13	mg/Kg	☼	03/07/22 07:42	03/07/22 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*130*		*60 - 154*	*03/07/22 07:42*	*03/07/22 17:37*	*1*
Tetrachloro-m-xylene	*134*		*60 - 154*	*03/07/22 07:42*	*03/07/22 17:37*	*1*
DCB Decachlorobiphenyl	*115*		*65 - 174*	*03/07/22 07:42*	*03/07/22 17:37*	*1*
DCB Decachlorobiphenyl	*112*		*65 - 174*	*03/07/22 07:42*	*03/07/22 17:37*	*1*

Client Sample ID: LF1

Lab Sample ID: 480-195466-11
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 83.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		59	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,1,2,2-Tetrachloroethane	ND		59	9.6	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,1,2-Trichloroethane	ND		59	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		59	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,1-Dichloroethane	ND		59	18	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,1-Dichloroethene	ND		59	21	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2,4-Trichlorobenzene	ND		59	22	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2-Dibromo-3-Chloropropane	ND		59	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2-Dichlorobenzene	ND		59	15	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2-Dichloroethane	ND		59	24	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2-Dichloropropane	ND		59	9.6	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,3-Dichlorobenzene	ND		59	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,4-Dichlorobenzene	ND		59	8.3	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
2-Butanone (MEK)	ND		300	180	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
2-Hexanone	ND		300	120	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: LF1
Lab Sample ID: 480-195466-11
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 83.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		300	19	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Acetone	ND		300	240	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Benzene	ND		59	11	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Bromodichloromethane	ND		59	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Bromoform	ND		59	30	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Bromomethane	ND		59	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Carbon disulfide	ND		59	27	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Carbon tetrachloride	ND		59	15	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Chlorobenzene	ND		59	7.8	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Dibromochloromethane	ND		59	29	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Chloroethane	ND		59	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Chloroform	ND		59	41	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Chloromethane	ND		59	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
cis-1,2-Dichloroethene	**370**		59	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
cis-1,3-Dichloropropene	ND		59	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Cyclohexane	ND		59	13	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Dichlorodifluoromethane	ND		59	26	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Ethylbenzene	ND		59	17	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
1,2-Dibromoethane	ND		59	10	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Isopropylbenzene	ND		59	8.9	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Methyl acetate	ND		300	28	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Methyl tert-butyl ether	ND		59	22	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Methylcyclohexane	ND		59	28	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Methylene Chloride	ND		59	12	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Styrene	ND		59	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Tetrachloroethene	**2500**		59	8.0	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Toluene	ND		59	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
trans-1,2-Dichloroethene	**140**		59	14	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
trans-1,3-Dichloropropene	ND		59	5.8	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Trichloroethene	**1200**		59	16	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Trichlorofluoromethane	ND		59	28	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Vinyl chloride	ND		59	20	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1
Xylenes, Total	ND		120	33	ug/Kg	☼	03/03/22 17:00	03/06/22 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*50 - 149*	*03/03/22 17:00*	*03/06/22 03:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*53 - 146*	*03/03/22 17:00*	*03/06/22 03:58*	*1*
4-Bromofluorobenzene (Surr)	*93*		*49 - 148*	*03/03/22 17:00*	*03/06/22 03:58*	*1*
Dibromofluoromethane (Surr)	*84*		*60 - 140*	*03/03/22 17:00*	*03/06/22 03:58*	*1*

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Method: 8260C - TCLP Volatiles

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-617050/5	Lab Control Sample	89	97	99	102
MB 480-617050/7	Method Blank	86	93	96	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - TCLP Volatiles

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)	(75-123)
480-195466-9	LF1	102	91	97	109
480-195466-10	LF2	102	91	100	103
LB 480-616936/1-A	Method Blank	104	88	99	110

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(50-149)	(53-146)	(49-148)	(60-140)
480-195466-1	SB201 (1.8-2.3)	95	98	96	92
480-195466-2	SB201 (6-6.5)	98	100	94	92
480-195466-3	SB202 (2-2.5)	91	95	92	89
480-195466-4	SB202 (6-6.5)	94	97	92	91
480-195466-5	SB203 (2-2.5)	96	97	95	87
480-195466-6	SB203 (5-5.5)	98	95	98	83
480-195466-7	SB204 (2.75-3.2)	96	99	96	89
480-195466-8	SB204 (5.5-6.0)	97	100	95	89
480-195466-11	LF1	97	95	93	84
LCS 480-616692/1-A	Lab Control Sample	97	96	100	96
MB 480-616692/2-A	Method Blank	95	98	95	91

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(60-148)	(22-120)
LCS 480-617177/2-A	Lab Control Sample	100	81	44	80	93	29
LCSD 480-617177/3-A	Lab Control Sample Dup	114	95	50	92	103	34
MB 480-617177/1-A	Method Blank	86	97	51	92	107	35

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(60-148)	(22-120)
480-195466-9	LF1	93	90	46	88	102	31
480-195466-10	LF2	91	88	46	83	97	31
LB 480-616935/1-F	Method Blank	100	94	52	94	103	33

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(46-156)
480-195466-9	LF1	87
480-195466-9 MS	LF1	60
480-195466-9 MSD	LF1	67
480-195466-10	LF2	85
LCS 480-617051/2-A	Lab Control Sample	90
MB 480-617051/1-A	Method Blank	96

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH
Lab Sample ID	Client Sample ID	(48-125)
480-195466-9	LF1	80

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH (48-125)								
480-195466-10	LF2	81								
LCS 480-616939/2-A	Lab Control Sample	99								
LCSD 480-616939/3-A	Lab Control Sample Dup	100								
MB 480-616939/1-A	Method Blank	71								

Surrogate Legend

OTPH = o-Terphenyl

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP1 (20-120)	DCBP2 (20-120)	TCX1 (44-120)	TCX2 (44-120)					
LCS 480-617096/2-A	Lab Control Sample	49	51	55	79					
LCSD 480-617096/3-A	Lab Control Sample Dup	39	45	83	76					
MB 480-617096/1-A	Method Blank	43	46	85	68					

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid
Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP1 (20-120)	DCBP2 (20-120)	TCX1 (44-120)	TCX2 (44-120)					
480-195466-9	LF1	75	74	95	73					
480-195466-10	LF2	68	72	97	75					
LB 480-616935/1-B	Method Blank	60	63	96	68					

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)					
480-195466-9	LF1	120	122	101	101					
480-195466-10	LF2	134	130	112	115					
480-195466-10 MS	LF2	135	129	116	114					
480-195466-10 MSD	LF2	150	140	125	126					
LCS 480-616931/2-A	Lab Control Sample	146	149	127	127					
MB 480-616931/1-A	Method Blank	129	120	113	108					

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 8151 - TCLP Herbicides

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (48-132)	DCPAA2 (48-132)
LCS 480-617097/2-A	Lab Control Sample	52	56
LCSD 480-617097/3-A	Lab Control Sample Dup	86	83
MB 480-617097/1-A	Method Blank	83	69

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 8151 - TCLP Herbicides

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (48-132)	DCPAA2 (48-132)
480-195466-9	LF1	51	60
480-195466-10	LF2	65	85
LB 480-616935/1-C	Method Blank	57	66

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 8260C - TCLP Volatiles

Lab Sample ID: MB 480-617050/7
Matrix: Solid
Analysis Batch: 617050

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			03/08/22 10:47	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			03/08/22 10:47	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			03/08/22 10:47	1
Benzene	ND		0.0010	0.00041	mg/L			03/08/22 10:47	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			03/08/22 10:47	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			03/08/22 10:47	1
Chloroform	ND		0.0010	0.00034	mg/L			03/08/22 10:47	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			03/08/22 10:47	1
Trichloroethene	ND		0.0010	0.00046	mg/L			03/08/22 10:47	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			03/08/22 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*03/08/22 10:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*03/08/22 10:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*03/08/22 10:47*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*03/08/22 10:47*	*1*

Lab Sample ID: LCS 480-617050/5
Matrix: Solid
Analysis Batch: 617050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0217		mg/L		87	66 - 127
1,2-Dichloroethane	0.0250	0.0252		mg/L		101	75 - 120
2-Butanone (MEK)	0.125	0.169		mg/L		135	57 - 140
Benzene	0.0250	0.0236		mg/L		94	71 - 124
Carbon tetrachloride	0.0250	0.0231		mg/L		92	72 - 134
Chlorobenzene	0.0250	0.0236		mg/L		94	80 - 120
Chloroform	0.0250	0.0234		mg/L		94	73 - 127
Tetrachloroethene	0.0250	0.0229		mg/L		92	74 - 122
Trichloroethene	0.0250	0.0238		mg/L		95	74 - 123
Vinyl chloride	0.0250	0.0266		mg/L		107	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*89*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*

Lab Sample ID: LB 480-616936/1-A
Matrix: Solid
Analysis Batch: 617050

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			03/08/22 17:32	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			03/08/22 17:32	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			03/08/22 17:32	10
Benzene	ND		0.010	0.0041	mg/L			03/08/22 17:32	10

Method: 8260C - TCLP Volatiles (Continued)

Lab Sample ID: LB 480-616936/1-A
Matrix: Solid
Analysis Batch: 617050

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		0.010	0.0027	mg/L			03/08/22 17:32	10
Chlorobenzene	ND		0.010	0.0075	mg/L			03/08/22 17:32	10
Chloroform	ND		0.010	0.0034	mg/L			03/08/22 17:32	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			03/08/22 17:32	10
Trichloroethene	ND		0.010	0.0046	mg/L			03/08/22 17:32	10
Vinyl chloride	ND		0.010	0.0090	mg/L			03/08/22 17:32	10

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*03/08/22 17:32*	*10*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*03/08/22 17:32*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/08/22 17:32*	*10*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*03/08/22 17:32*	*10*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-616692/2-A
Matrix: Solid
Analysis Batch: 616658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,1-Dichloroethane	ND		100	31	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,1-Dichloroethene	ND		100	35	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2-Dichloroethane	ND		100	41	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2-Dichloropropane	ND		100	16	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
2-Butanone (MEK)	ND		500	300	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
2-Hexanone	ND		500	210	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Acetone	ND		500	410	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Benzene	ND		100	19	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Bromodichloromethane	ND		100	20	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Bromoform	ND		100	50	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Bromomethane	ND		100	22	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Carbon disulfide	ND		100	46	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Carbon tetrachloride	ND		100	26	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Chlorobenzene	ND		100	13	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Dibromochloromethane	ND		100	48	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Chloroethane	ND		100	21	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Chloroform	ND		100	69	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Chloromethane	ND		100	24	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		03/03/22 13:14	03/03/22 14:13	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-616692/2-A
Matrix: Solid
Analysis Batch: 616658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Cyclohexane	ND		100	22	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Ethylbenzene	ND		100	29	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
1,2-Dibromoethane	ND		100	18	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Isopropylbenzene	ND		100	15	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Methyl acetate	ND		500	48	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Methylcyclohexane	ND		100	47	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Methylene Chloride	ND		100	20	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Styrene	ND		100	24	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Tetrachloroethene	ND		100	13	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Toluene	ND		100	27	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Trichloroethene	ND		100	28	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Trichlorofluoromethane	ND		100	47	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Vinyl chloride	ND		100	34	ug/Kg		03/03/22 13:14	03/03/22 14:13	1
Xylenes, Total	ND		200	55	ug/Kg		03/03/22 13:14	03/03/22 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*50 - 149*	*03/03/22 13:14*	*03/03/22 14:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*03/03/22 13:14*	*03/03/22 14:13*	*1*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*03/03/22 13:14*	*03/03/22 14:13*	*1*
Dibromofluoromethane (Surr)	*91*		*60 - 140*	*03/03/22 13:14*	*03/03/22 14:13*	*1*

Lab Sample ID: LCS 480-616692/1-A
Matrix: Solid
Analysis Batch: 616658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2560		ug/Kg		102	68 - 130
1,1,2,2-Tetrachloroethane	2500	2260		ug/Kg		90	73 - 120
1,1,2-Trichloroethane	2500	2320		ug/Kg		93	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2560		ug/Kg		102	10 - 179
1,1-Dichloroethane	2500	2300		ug/Kg		92	78 - 121
1,1-Dichloroethene	2500	2390		ug/Kg		96	48 - 133
1,2,4-Trichlorobenzene	2500	2340		ug/Kg		94	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2160		ug/Kg		86	56 - 122
1,2-Dichlorobenzene	2500	2370		ug/Kg		95	78 - 125
1,2-Dichloroethane	2500	2280		ug/Kg		91	74 - 127
1,2-Dichloropropane	2500	2430		ug/Kg		97	80 - 120
1,3-Dichlorobenzene	2500	2380		ug/Kg		95	80 - 120
1,4-Dichlorobenzene	2500	2340		ug/Kg		94	80 - 120
2-Butanone (MEK)	12500	11100		ug/Kg		88	54 - 149
2-Hexanone	12500	12400		ug/Kg		99	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	11400		ug/Kg		91	74 - 120
Acetone	12500	10100		ug/Kg		81	47 - 141

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-616692/1-A
Matrix: Solid
Analysis Batch: 616658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2500	2510		ug/Kg		100	77 - 125
Bromodichloromethane	2500	2440		ug/Kg		98	71 - 121
Bromoform	2500	2360		ug/Kg		95	48 - 125
Bromomethane	2500	1860		ug/Kg		74	39 - 149
Carbon disulfide	2500	2390		ug/Kg		96	40 - 136
Carbon tetrachloride	2500	2490		ug/Kg		99	54 - 135
Chlorobenzene	2500	2380		ug/Kg		95	76 - 126
Dibromochloromethane	2500	2440		ug/Kg		98	64 - 120
Chloroethane	2500	2300		ug/Kg		92	23 - 150
Chloroform	2500	2280		ug/Kg		91	78 - 120
Chloromethane	2500	2130		ug/Kg		85	61 - 124
cis-1,2-Dichloroethene	2500	2420		ug/Kg		97	79 - 124
cis-1,3-Dichloropropene	2500	2790		ug/Kg		111	75 - 121
Cyclohexane	2500	2640		ug/Kg		105	49 - 129
Dichlorodifluoromethane	2500	2180		ug/Kg		87	10 - 150
Ethylbenzene	2500	2480		ug/Kg		99	78 - 124
1,2-Dibromoethane	2500	2610		ug/Kg		104	80 - 120
Isopropylbenzene	2500	2490		ug/Kg		100	76 - 120
Methyl acetate	5000	4560		ug/Kg		91	71 - 123
Methyl tert-butyl ether	2500	2430		ug/Kg		97	67 - 137
Methylcyclohexane	2500	2800		ug/Kg		112	50 - 130
Methylene Chloride	2500	2350		ug/Kg		94	75 - 118
Styrene	2500	2600		ug/Kg		104	80 - 120
Tetrachloroethene	2500	2490		ug/Kg		100	73 - 133
Toluene	2500	2370		ug/Kg		95	75 - 124
trans-1,2-Dichloroethene	2500	2410		ug/Kg		97	74 - 129
trans-1,3-Dichloropropene	2500	2980		ug/Kg		119	73 - 120
Trichloroethene	2500	2480		ug/Kg		99	75 - 131
Trichlorofluoromethane	2500	2450		ug/Kg		98	29 - 158
Vinyl chloride	2500	2200		ug/Kg		88	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*50 - 149*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*
Dibromofluoromethane (Surr)	*96*		*60 - 140*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-617177/1-A
Matrix: Solid
Analysis Batch: 617260

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00045	mg/L		03/08/22 15:04	03/09/22 11:50	1
2,4-Dinitrotoluene	ND		0.0050	0.00043	mg/L		03/08/22 15:04	03/09/22 11:50	1
Hexachlorobenzene	ND		0.0050	0.00050	mg/L		03/08/22 15:04	03/09/22 11:50	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		03/08/22 15:04	03/09/22 11:50	1
Hexachloroethane	ND		0.0050	0.00058	mg/L		03/08/22 15:04	03/09/22 11:50	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-617177/1-A
Matrix: Solid
Analysis Batch: 617260

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Methylphenol	ND		0.010	0.00040	mg/L		03/08/22 15:04	03/09/22 11:50	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		03/08/22 15:04	03/09/22 11:50	1
4-Methylphenol	ND		0.010	0.00035	mg/L		03/08/22 15:04	03/09/22 11:50	1
Nitrobenzene	ND		0.0050	0.00028	mg/L		03/08/22 15:04	03/09/22 11:50	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		03/08/22 15:04	03/09/22 11:50	1
Pyridine	ND		0.025	0.00040	mg/L		03/08/22 15:04	03/09/22 11:50	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		03/08/22 15:04	03/09/22 11:50	1
2,4,6-Trichlorophenol	ND		0.0050	0.00060	mg/L		03/08/22 15:04	03/09/22 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*41 - 120*	*03/08/22 15:04*	*03/09/22 11:50*	*1*
2-Fluorobiphenyl	*97*		*48 - 120*	*03/08/22 15:04*	*03/09/22 11:50*	*1*
2-Fluorophenol	*51*		*35 - 120*	*03/08/22 15:04*	*03/09/22 11:50*	*1*
Nitrobenzene-d5	*92*		*46 - 120*	*03/08/22 15:04*	*03/09/22 11:50*	*1*
p-Terphenyl-d14	*107*		*60 - 148*	*03/08/22 15:04*	*03/09/22 11:50*	*1*
Phenol-d5	*35*		*22 - 120*	*03/08/22 15:04*	*03/09/22 11:50*	*1*

Lab Sample ID: LCS 480-617177/2-A
Matrix: Solid
Analysis Batch: 617260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0500	0.0313		mg/L		63	51 - 120
2,4-Dinitrotoluene	0.0500	0.0462		mg/L		92	69 - 120
Hexachlorobenzene	0.0500	0.0455		mg/L		91	61 - 120
Hexachlorobutadiene	0.0500	0.0323		mg/L		65	35 - 120
Hexachloroethane	0.0500	0.0289		mg/L		58	43 - 120
3-Methylphenol	0.0500	0.0303		mg/L		61	39 - 120
2-Methylphenol	0.0500	0.0328		mg/L		66	39 - 120
4-Methylphenol	0.0500	0.0303		mg/L		61	29 - 131
Nitrobenzene	0.0500	0.0404		mg/L		81	53 - 123
Pentachlorophenol	0.100	0.106		mg/L		106	29 - 136
Pyridine	0.100	0.0195	J	mg/L		20	10 - 120
2,4,5-Trichlorophenol	0.0500	0.0441		mg/L		88	65 - 126
2,4,6-Trichlorophenol	0.0500	0.0427		mg/L		85	64 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*100*		*41 - 120*
2-Fluorobiphenyl	*81*		*48 - 120*
2-Fluorophenol	*44*		*35 - 120*
Nitrobenzene-d5	*80*		*46 - 120*
p-Terphenyl-d14	*93*		*60 - 148*
Phenol-d5	*29*		*22 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-617177/3-A
Matrix: Solid
Analysis Batch: 617260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 617177

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			0.0500	0.0374		mg/L		75	51 - 120	18	36
2,4-Dinitrotoluene			0.0500	0.0542		mg/L		108	69 - 120	16	20
Hexachlorobenzene			0.0500	0.0517		mg/L		103	61 - 120	13	15
Hexachlorobutadiene			0.0500	0.0394		mg/L		79	35 - 120	20	44
Hexachloroethane			0.0500	0.0363		mg/L		73	43 - 120	23	46
3-Methylphenol			0.0500	0.0358		mg/L		72	39 - 120	17	30
2-Methylphenol			0.0500	0.0379		mg/L		76	39 - 120	14	27
4-Methylphenol			0.0500	0.0358		mg/L		72	29 - 131	17	24
Nitrobenzene			0.0500	0.0462		mg/L		92	53 - 123	13	24
Pentachlorophenol			0.100	0.124		mg/L		124	29 - 136	15	37
Pyridine			0.100	0.0268		mg/L		27	10 - 120	31	49
2,4,5-Trichlorophenol			0.0500	0.0519		mg/L		104	65 - 126	16	18
2,4,6-Trichlorophenol			0.0500	0.0497		mg/L		99	64 - 120	15	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*114*		*41 - 120*
2-Fluorobiphenyl	*95*		*48 - 120*
2-Fluorophenol	*50*		*35 - 120*
Nitrobenzene-d5	*92*		*46 - 120*
p-Terphenyl-d14	*103*		*60 - 148*
Phenol-d5	*34*		*22 - 120*

Lab Sample ID: LB 480-616935/1-F
Matrix: Solid
Analysis Batch: 617260

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 617177

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.040	0.0018	mg/L		03/08/22 15:04	03/09/22 13:03	1
2,4-Dinitrotoluene	ND		0.020	0.0017	mg/L		03/08/22 15:04	03/09/22 13:03	1
Hexachlorobenzene	ND		0.020	0.0020	mg/L		03/08/22 15:04	03/09/22 13:03	1
Hexachlorobutadiene	ND		0.020	0.0027	mg/L		03/08/22 15:04	03/09/22 13:03	1
Hexachloroethane	ND		0.020	0.0023	mg/L		03/08/22 15:04	03/09/22 13:03	1
3-Methylphenol	ND		0.040	0.0016	mg/L		03/08/22 15:04	03/09/22 13:03	1
2-Methylphenol	ND		0.020	0.0016	mg/L		03/08/22 15:04	03/09/22 13:03	1
4-Methylphenol	ND		0.040	0.0014	mg/L		03/08/22 15:04	03/09/22 13:03	1
Nitrobenzene	ND		0.020	0.0011	mg/L		03/08/22 15:04	03/09/22 13:03	1
Pentachlorophenol	ND		0.040	0.0088	mg/L		03/08/22 15:04	03/09/22 13:03	1
Pyridine	ND		0.10	0.0016	mg/L		03/08/22 15:04	03/09/22 13:03	1
2,4,5-Trichlorophenol	ND		0.020	0.0019	mg/L		03/08/22 15:04	03/09/22 13:03	1
2,4,6-Trichlorophenol	ND		0.020	0.0024	mg/L		03/08/22 15:04	03/09/22 13:03	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*100*		*41 - 120*	*03/08/22 15:04*	*03/09/22 13:03*	*1*
2-Fluorobiphenyl	*94*		*48 - 120*	*03/08/22 15:04*	*03/09/22 13:03*	*1*
2-Fluorophenol	*52*		*35 - 120*	*03/08/22 15:04*	*03/09/22 13:03*	*1*
Nitrobenzene-d5	*94*		*46 - 120*	*03/08/22 15:04*	*03/09/22 13:03*	*1*
p-Terphenyl-d14	*103*		*60 - 148*	*03/08/22 15:04*	*03/09/22 13:03*	*1*
Phenol-d5	*33*		*22 - 120*	*03/08/22 15:04*	*03/09/22 13:03*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 480-617051/1-A
Matrix: Solid
Analysis Batch: 617059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	ND		1.2	0.33	mg/Kg		03/08/22 08:05	03/08/22 09:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*46 - 156*	*03/08/22 08:05*	*03/08/22 09:12*	*1*

Lab Sample ID: LCS 480-617051/2-A
Matrix: Solid
Analysis Batch: 617059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	9.56	8.58		mg/Kg		90	64 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*90*		*46 - 156*

Lab Sample ID: 480-195466-9 MS
Matrix: Solid
Analysis Batch: 617059

Client Sample ID: LF1
Prep Type: Total/NA
Prep Batch: 617051

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	1.8		10.9	9.12		mg/Kg	☼	67	41 - 142

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*60*		*46 - 156*

Lab Sample ID: 480-195466-9 MSD
Matrix: Solid
Analysis Batch: 617059

Client Sample ID: LF1
Prep Type: Total/NA
Prep Batch: 617051

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C6-C10)	1.8		11.1	9.85		mg/Kg	☼	73	41 - 142	8	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*67*		*46 - 156*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 480-616939/1-A
Matrix: Solid
Analysis Batch: 616986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		16	4.9	mg/Kg		03/07/22 09:00	03/07/22 13:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*71*		*48 - 125*	*03/07/22 09:00*	*03/07/22 13:51*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 480-616939/2-A
Matrix: Solid
Analysis Batch: 616986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			49.6	45.1		mg/Kg		91	63 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*99*		*48 - 125*

Lab Sample ID: LCSD 480-616939/3-A
Matrix: Solid
Analysis Batch: 616986

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 616939

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			49.1	45.2		mg/Kg		92	63 - 127	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*100*		*48 - 125*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-617096/1-A
Matrix: Solid
Analysis Batch: 617227

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.000050	0.0000015	mg/L		03/08/22 09:48	03/09/22 09:41	1
Chlordane (technical)	ND		0.00050	0.0000073	mg/L		03/08/22 09:48	03/09/22 09:41	1
Endrin	ND		0.000050	0.0000035	mg/L		03/08/22 09:48	03/09/22 09:41	1
Heptachlor	ND		0.000050	0.0000021	mg/L		03/08/22 09:48	03/09/22 09:41	1
Heptachlor epoxide	ND		0.000050	0.0000013	mg/L		03/08/22 09:48	03/09/22 09:41	1
Methoxychlor	ND		0.000050	0.0000035	mg/L		03/08/22 09:48	03/09/22 09:41	1
Toxaphene	ND		0.00050	0.000030	mg/L		03/08/22 09:48	03/09/22 09:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*		*20 - 120*	*03/08/22 09:48*	*03/09/22 09:41*	*1*
DCB Decachlorobiphenyl	*46*		*20 - 120*	*03/08/22 09:48*	*03/09/22 09:41*	*1*
Tetrachloro-m-xylene	*85*		*44 - 120*	*03/08/22 09:48*	*03/09/22 09:41*	*1*
Tetrachloro-m-xylene	*68*		*44 - 120*	*03/08/22 09:48*	*03/09/22 09:41*	*1*

Lab Sample ID: LCS 480-617096/2-A
Matrix: Solid
Analysis Batch: 617227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617096

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
gamma-BHC (Lindane)			0.000500	0.000459		mg/L		92	56 - 120		
Endrin			0.000500	0.000534		mg/L		107	65 - 135		
Heptachlor			0.000500	0.000479		mg/L		96	58 - 120		
Heptachlor epoxide			0.000500	0.000554		mg/L		111	65 - 125		
Methoxychlor			0.000500	0.000534		mg/L		107	50 - 150		

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-617096/2-A
Matrix: Solid
Analysis Batch: 617227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617096

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	49		20 - 120
DCB Decachlorobiphenyl	51		20 - 120
Tetrachloro-m-xylene	55		44 - 120
Tetrachloro-m-xylene	79		44 - 120

Lab Sample ID: LCSD 480-617096/3-A
Matrix: Solid
Analysis Batch: 617227

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 617096

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
gamma-BHC (Lindane)			0.000500	0.000456		mg/L		91	56 - 120	1	24
Endrin			0.000500	0.000515		mg/L		103	65 - 135	4	24
Heptachlor			0.000500	0.000499		mg/L		100	58 - 120	4	25
Heptachlor epoxide			0.000500	0.000537		mg/L		107	65 - 125	3	23
Methoxychlor			0.000500	0.000532		mg/L		106	50 - 150	0	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	39		20 - 120
DCB Decachlorobiphenyl	45		20 - 120
Tetrachloro-m-xylene	83		44 - 120
Tetrachloro-m-xylene	76		44 - 120

Lab Sample ID: LB 480-616935/1-B
Matrix: Solid
Analysis Batch: 617227

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 617096

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		03/08/22 09:48	03/09/22 11:19	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		03/08/22 09:48	03/09/22 11:19	1
Endrin	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 11:19	1
Heptachlor	ND		0.00020	0.0000085	mg/L		03/08/22 09:48	03/09/22 11:19	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		03/08/22 09:48	03/09/22 11:19	1
Methoxychlor	ND		0.00020	0.000014	mg/L		03/08/22 09:48	03/09/22 11:19	1
Toxaphene	ND		0.0020	0.00012	mg/L		03/08/22 09:48	03/09/22 11:19	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	60		20 - 120	03/08/22 09:48	03/09/22 11:19	1
DCB Decachlorobiphenyl	63		20 - 120	03/08/22 09:48	03/09/22 11:19	1
Tetrachloro-m-xylene	96		44 - 120	03/08/22 09:48	03/09/22 11:19	1
Tetrachloro-m-xylene	68		44 - 120	03/08/22 09:48	03/09/22 11:19	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-616931/1-A
Matrix: Solid
Analysis Batch: 617012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1221	ND		0.24	0.047	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1232	ND		0.24	0.047	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1242	ND		0.24	0.047	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1248	ND		0.24	0.047	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1254	ND		0.24	0.11	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1260	ND		0.24	0.11	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1262	ND		0.24	0.11	mg/Kg		03/07/22 07:42	03/07/22 16:43	1
PCB-1268	ND		0.24	0.11	mg/Kg		03/07/22 07:42	03/07/22 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*120*		*60 - 154*	*03/07/22 07:42*	*03/07/22 16:43*	*1*
Tetrachloro-m-xylene	*129*		*60 - 154*	*03/07/22 07:42*	*03/07/22 16:43*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*03/07/22 07:42*	*03/07/22 16:43*	*1*
DCB Decachlorobiphenyl	*113*		*65 - 174*	*03/07/22 07:42*	*03/07/22 16:43*	*1*

Lab Sample ID: LCS 480-616931/2-A
Matrix: Solid
Analysis Batch: 617012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616931

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.05	2.79		mg/Kg		136	51 - 185		
PCB-1260			2.05	2.77		mg/Kg		135	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*149*		*60 - 154*
Tetrachloro-m-xylene	*146*		*60 - 154*
DCB Decachlorobiphenyl	*127*		*65 - 174*
DCB Decachlorobiphenyl	*127*		*65 - 174*

Lab Sample ID: 480-195466-10 MS
Matrix: Solid
Analysis Batch: 617012

Client Sample ID: LF2
Prep Type: Total/NA
Prep Batch: 616931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		2.92	3.38		mg/Kg	☼	116	50 - 177		
PCB-1260	ND		2.92	3.38		mg/Kg	☼	116	33 - 200		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*129*		*60 - 154*
Tetrachloro-m-xylene	*135*		*60 - 154*
DCB Decachlorobiphenyl	*114*		*65 - 174*
DCB Decachlorobiphenyl	*116*		*65 - 174*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-195466-10 MSD
Matrix: Solid
Analysis Batch: 617012

Client Sample ID: LF2
Prep Type: Total/NA
Prep Batch: 616931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2.74	3.72		mg/Kg	☼	136	50 - 177	10	50
PCB-1260	ND		2.74	3.70		mg/Kg	☼	135	33 - 200	9	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*140*		*60 - 154*
Tetrachloro-m-xylene	*150*		*60 - 154*
DCB Decachlorobiphenyl	*126*		*65 - 174*
DCB Decachlorobiphenyl	*125*		*65 - 174*

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 480-617097/1-A
Matrix: Solid
Analysis Batch: 617225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.00050	0.000090	mg/L		03/08/22 09:52	03/09/22 15:31	1
2,4-D	ND		0.00050	0.00010	mg/L		03/08/22 09:52	03/09/22 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*83*		*48 - 132*	*03/08/22 09:52*	*03/09/22 15:31*	*1*
2,4-Dichlorophenylacetic acid	*69*		*48 - 132*	*03/08/22 09:52*	*03/09/22 15:31*	*1*

Lab Sample ID: LCS 480-617097/2-A
Matrix: Solid
Analysis Batch: 617225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617097

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)			0.00200	0.00115		mg/L		57	49 - 150		
2,4-D			0.00200	0.00125		mg/L		63	36 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*52*		*48 - 132*
2,4-Dichlorophenylacetic acid	*56*		*48 - 132*

Lab Sample ID: LCSD 480-617097/3-A
Matrix: Solid
Analysis Batch: 617225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 617097

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)			0.00200	0.00165		mg/L		82	49 - 150	36	50
2,4-D			0.00200	0.00159		mg/L		80	36 - 150	24	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*86*		*48 - 132*
2,4-Dichlorophenylacetic acid	*83*		*48 - 132*

Method: 8151 - TCLP Herbicides (Continued)

Lab Sample ID: LB 480-616935/1-C
Matrix: Solid
Analysis Batch: 617225

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 617097

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		03/08/22 09:52	03/09/22 17:00	1
2,4-D	ND		0.0020	0.00040	mg/L		03/08/22 09:52	03/09/22 17:00	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*57*		*48 - 132*	*03/08/22 09:52*	*03/09/22 17:00*	*1*
2,4-Dichlorophenylacetic acid	*66*		*48 - 132*	*03/08/22 09:52*	*03/09/22 17:00*	*1*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-617104/2-A
Matrix: Solid
Analysis Batch: 617286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617104

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/08/22 11:10	03/09/22 02:02	1
Barium	ND		1.0	0.10	mg/L		03/08/22 11:10	03/09/22 02:02	1
Cadmium	ND		0.0020	0.00050	mg/L		03/08/22 11:10	03/09/22 02:02	1
Chromium	ND		0.020	0.010	mg/L		03/08/22 11:10	03/09/22 02:02	1
Lead	ND		0.020	0.0030	mg/L		03/08/22 11:10	03/09/22 02:02	1
Selenium	ND		0.025	0.0087	mg/L		03/08/22 11:10	03/09/22 02:02	1
Silver	ND		0.0060	0.0017	mg/L		03/08/22 11:10	03/09/22 02:02	1

Lab Sample ID: LCS 480-617104/3-A
Matrix: Solid
Analysis Batch: 617286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.07		mg/L		107	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Cadmium	1.00	1.03		mg/L		103	80 - 120
Chromium	1.00	1.02		mg/L		102	80 - 120
Lead	1.00	0.943		mg/L		94	80 - 120
Selenium	1.00	1.08		mg/L		108	80 - 120
Silver	1.00	1.14		mg/L		114	80 - 120

Lab Sample ID: LB 480-616935/1-D
Matrix: Solid
Analysis Batch: 617286

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 617104

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/08/22 11:10	03/09/22 01:58	1
Barium	ND		1.0	0.10	mg/L		03/08/22 11:10	03/09/22 01:58	1
Cadmium	ND		0.0020	0.00050	mg/L		03/08/22 11:10	03/09/22 01:58	1
Chromium	ND		0.020	0.010	mg/L		03/08/22 11:10	03/09/22 01:58	1
Lead	ND		0.020	0.0030	mg/L		03/08/22 11:10	03/09/22 01:58	1
Selenium	ND		0.025	0.0087	mg/L		03/08/22 11:10	03/09/22 01:58	1
Silver	ND		0.0060	0.0017	mg/L		03/08/22 11:10	03/09/22 01:58	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-617106/2-A
Matrix: Solid
Analysis Batch: 617202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/08/22 11:29	03/08/22 15:09	1

Lab Sample ID: LCS 480-617106/3-A
Matrix: Solid
Analysis Batch: 617202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00668	0.00688		mg/L		103	80 - 120

Lab Sample ID: LB 480-616935/1-E
Matrix: Solid
Analysis Batch: 617202

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 617106

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/08/22 11:29	03/08/22 15:08	1

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 480-617220/1
Matrix: Solid
Analysis Batch: 617220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	79.00		Degrees F		98	97.5 - 102.5

Lab Sample ID: LCS 480-617344/1
Matrix: Solid
Analysis Batch: 617344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	82.00		Degrees F		101	97.5 - 102.5

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 480-616843/1-A
Matrix: Solid
Analysis Batch: 616868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0	10.0	mg/Kg		03/04/22 13:25	03/04/22 15:18	1

Lab Sample ID: LCS 480-616843/2-A
Matrix: Solid
Analysis Batch: 616868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	1000	271.3		mg/Kg		27	10 - 100

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 480-616847/1-A
Matrix: Solid
Analysis Batch: 616861

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		10.0	10.0	mg/Kg		03/04/22 13:25	03/04/22 14:51	1

Lab Sample ID: LCS 480-616847/2-A
Matrix: Solid
Analysis Batch: 616861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide, Reactive			1320	641.2		mg/Kg		49	10 - 100		

Method: 9045D - pH

Lab Sample ID: LCS 480-616897/1
Matrix: Solid
Analysis Batch: 616897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.0		SU		100	99 - 101		

Lab Sample ID: 480-195466-9 DU
Matrix: Solid
Analysis Batch: 616897

Client Sample ID: LF1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.8	HF		8.9		SU				0.2	5
Temperature	19.8	HF		19.8		Degrees C				0	10

GC/MS VOA

Analysis Batch: 616658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-616692/2-A	Method Blank	Total/NA	Solid	8260C	616692
LCS 480-616692/1-A	Lab Control Sample	Total/NA	Solid	8260C	616692

Prep Batch: 616692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-1	SB201 (1.8-2.3)	Total/NA	Solid	5035A_H	
480-195466-2	SB201 (6-6.5)	Total/NA	Solid	5035A_H	
480-195466-3	SB202 (2-2.5)	Total/NA	Solid	5035A_H	
480-195466-4	SB202 (6-6.5)	Total/NA	Solid	5035A_H	
480-195466-5	SB203 (2-2.5)	Total/NA	Solid	5035A_H	
480-195466-6	SB203 (5-5.5)	Total/NA	Solid	5035A_H	
480-195466-7	SB204 (2.75-3.2)	Total/NA	Solid	5035A_H	
480-195466-8	SB204 (5.5-6.0)	Total/NA	Solid	5035A_H	
480-195466-11	LF1	Total/NA	Solid	5035A_H	
MB 480-616692/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-616692/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Analysis Batch: 616884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-1	SB201 (1.8-2.3)	Total/NA	Solid	8260C	616692
480-195466-2	SB201 (6-6.5)	Total/NA	Solid	8260C	616692
480-195466-3	SB202 (2-2.5)	Total/NA	Solid	8260C	616692
480-195466-4	SB202 (6-6.5)	Total/NA	Solid	8260C	616692
480-195466-5	SB203 (2-2.5)	Total/NA	Solid	8260C	616692
480-195466-6	SB203 (5-5.5)	Total/NA	Solid	8260C	616692
480-195466-7	SB204 (2.75-3.2)	Total/NA	Solid	8260C	616692
480-195466-8	SB204 (5.5-6.0)	Total/NA	Solid	8260C	616692
480-195466-11	LF1	Total/NA	Solid	8260C	616692

Leach Batch: 616936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	1311	
480-195466-10	LF2	TCLP	Solid	1311	
LB 480-616936/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 617050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	8260C	616936
480-195466-10	LF2	TCLP	Solid	8260C	616936
LB 480-616936/1-A	Method Blank	TCLP	Solid	8260C	616936
MB 480-617050/7	Method Blank	Total/NA	Solid	8260C	
LCS 480-617050/5	Lab Control Sample	Total/NA	Solid	8260C	

GC/MS Semi VOA

Leach Batch: 616935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	1311	
480-195466-10	LF2	TCLP	Solid	1311	
LB 480-616935/1-F	Method Blank	TCLP	Solid	1311	

GC/MS Semi VOA

Prep Batch: 617177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	3510C	616935
480-195466-10	LF2	TCLP	Solid	3510C	616935
LB 480-616935/1-F	Method Blank	TCLP	Solid	3510C	616935
MB 480-617177/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 480-617177/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-617177/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 617260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	8270D	617177
480-195466-10	LF2	TCLP	Solid	8270D	617177
LB 480-616935/1-F	Method Blank	TCLP	Solid	8270D	617177
MB 480-617177/1-A	Method Blank	Total/NA	Solid	8270D	617177
LCS 480-617177/2-A	Lab Control Sample	Total/NA	Solid	8270D	617177
LCSD 480-617177/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	617177

GC VOA

Prep Batch: 617051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	5035A_H	
480-195466-10	LF2	Total/NA	Solid	5035A_H	
MB 480-617051/1-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-617051/2-A	Lab Control Sample	Total/NA	Solid	5035A_H	
480-195466-9 MS	LF1	Total/NA	Solid	5035A_H	
480-195466-9 MSD	LF1	Total/NA	Solid	5035A_H	

Analysis Batch: 617059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	8015D	617051
480-195466-10	LF2	Total/NA	Solid	8015D	617051
MB 480-617051/1-A	Method Blank	Total/NA	Solid	8015D	617051
LCS 480-617051/2-A	Lab Control Sample	Total/NA	Solid	8015D	617051
480-195466-9 MS	LF1	Total/NA	Solid	8015D	617051
480-195466-9 MSD	LF1	Total/NA	Solid	8015D	617051

GC Semi VOA

Prep Batch: 616931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	3550C	
480-195466-10	LF2	Total/NA	Solid	3550C	
MB 480-616931/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-616931/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-195466-10 MS	LF2	Total/NA	Solid	3550C	
480-195466-10 MSD	LF2	Total/NA	Solid	3550C	

Leach Batch: 616935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	1311	
480-195466-10	LF2	TCLP	Solid	1311	
LB 480-616935/1-B	Method Blank	TCLP	Solid	1311	

GC Semi VOA (Continued)

Leach Batch: 616935 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-616935/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 616939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	3550C	
480-195466-10	LF2	Total/NA	Solid	3550C	
MB 480-616939/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-616939/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 480-616939/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	

Analysis Batch: 616986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	8015D	616939
480-195466-10	LF2	Total/NA	Solid	8015D	616939
MB 480-616939/1-A	Method Blank	Total/NA	Solid	8015D	616939
LCS 480-616939/2-A	Lab Control Sample	Total/NA	Solid	8015D	616939
LCSD 480-616939/3-A	Lab Control Sample Dup	Total/NA	Solid	8015D	616939

Analysis Batch: 617012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	8082A	616931
480-195466-10	LF2	Total/NA	Solid	8082A	616931
MB 480-616931/1-A	Method Blank	Total/NA	Solid	8082A	616931
LCS 480-616931/2-A	Lab Control Sample	Total/NA	Solid	8082A	616931
480-195466-10 MS	LF2	Total/NA	Solid	8082A	616931
480-195466-10 MSD	LF2	Total/NA	Solid	8082A	616931

Prep Batch: 617096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	3510C	616935
480-195466-10	LF2	TCLP	Solid	3510C	616935
LB 480-616935/1-B	Method Blank	TCLP	Solid	3510C	616935
MB 480-617096/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 480-617096/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-617096/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Prep Batch: 617097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	8151A	616935
480-195466-10	LF2	TCLP	Solid	8151A	616935
LB 480-616935/1-C	Method Blank	TCLP	Solid	8151A	616935
MB 480-617097/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-617097/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 480-617097/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 617225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	8151	617097
480-195466-10	LF2	TCLP	Solid	8151	617097
LB 480-616935/1-C	Method Blank	TCLP	Solid	8151	617097
MB 480-617097/1-A	Method Blank	Total/NA	Solid	8151	617097

GC Semi VOA (Continued)

Analysis Batch: 617225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-617097/2-A	Lab Control Sample	Total/NA	Solid	8151	617097
LCSD 480-617097/3-A	Lab Control Sample Dup	Total/NA	Solid	8151	617097

Analysis Batch: 617227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	8081B	617096
480-195466-10	LF2	TCLP	Solid	8081B	617096
LB 480-616935/1-B	Method Blank	TCLP	Solid	8081B	617096
MB 480-617096/1-A	Method Blank	Total/NA	Solid	8081B	617096
LCS 480-617096/2-A	Lab Control Sample	Total/NA	Solid	8081B	617096
LCSD 480-617096/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	617096

Metals

Leach Batch: 616935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	1311	
480-195466-10	LF2	TCLP	Solid	1311	
LB 480-616935/1-D	Method Blank	TCLP	Solid	1311	
LB 480-616935/1-E	Method Blank	TCLP	Solid	1311	

Prep Batch: 617104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	3010A	616935
480-195466-10	LF2	TCLP	Solid	3010A	616935
LB 480-616935/1-D	Method Blank	TCLP	Solid	3010A	616935
MB 480-617104/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 480-617104/3-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 617106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	7470A	616935
480-195466-10	LF2	TCLP	Solid	7470A	616935
LB 480-616935/1-E	Method Blank	TCLP	Solid	7470A	616935
MB 480-617106/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 480-617106/3-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 617202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	7470A	617106
480-195466-10	LF2	TCLP	Solid	7470A	617106
LB 480-616935/1-E	Method Blank	TCLP	Solid	7470A	617106
MB 480-617106/2-A	Method Blank	Total/NA	Solid	7470A	617106
LCS 480-617106/3-A	Lab Control Sample	Total/NA	Solid	7470A	617106

Analysis Batch: 617286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	TCLP	Solid	6010C	617104
480-195466-10	LF2	TCLP	Solid	6010C	617104
LB 480-616935/1-D	Method Blank	TCLP	Solid	6010C	617104
MB 480-617104/2-A	Method Blank	Total/NA	Solid	6010C	617104

Metals (Continued)

Analysis Batch: 617286 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-617104/3-A	Lab Control Sample	Total/NA	Solid	6010C	617104

General Chemistry

Analysis Batch: 616748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-1	SB201 (1.8-2.3)	Total/NA	Solid	Moisture	
480-195466-2	SB201 (6-6.5)	Total/NA	Solid	Moisture	
480-195466-3	SB202 (2-2.5)	Total/NA	Solid	Moisture	
480-195466-4	SB202 (6-6.5)	Total/NA	Solid	Moisture	
480-195466-5	SB203 (2-2.5)	Total/NA	Solid	Moisture	
480-195466-6	SB203 (5-5.5)	Total/NA	Solid	Moisture	
480-195466-7	SB204 (2.75-3.2)	Total/NA	Solid	Moisture	
480-195466-8	SB204 (5.5-6.0)	Total/NA	Solid	Moisture	
480-195466-11	LF1	Total/NA	Solid	Moisture	

Prep Batch: 616843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	7.3.3	
480-195466-10	LF2	Total/NA	Solid	7.3.3	
MB 480-616843/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 480-616843/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	

Prep Batch: 616847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	7.3.4	
480-195466-10	LF2	Total/NA	Solid	7.3.4	
MB 480-616847/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 480-616847/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Analysis Batch: 616861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	9034	616847
480-195466-10	LF2	Total/NA	Solid	9034	616847
MB 480-616847/1-A	Method Blank	Total/NA	Solid	9034	616847
LCS 480-616847/2-A	Lab Control Sample	Total/NA	Solid	9034	616847

Analysis Batch: 616868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	9012	616843
480-195466-10	LF2	Total/NA	Solid	9012	616843
MB 480-616843/1-A	Method Blank	Total/NA	Solid	9012	616843
LCS 480-616843/2-A	Lab Control Sample	Total/NA	Solid	9012	616843

Analysis Batch: 616897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	9045D	
480-195466-10	LF2	Total/NA	Solid	9045D	
LCS 480-616897/1	Lab Control Sample	Total/NA	Solid	9045D	
480-195466-9 DU	LF1	Total/NA	Solid	9045D	

QC Association Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

General Chemistry

Analysis Batch: 617204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	Moisture	
480-195466-10	LF2	Total/NA	Solid	Moisture	

Analysis Batch: 617220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-9	LF1	Total/NA	Solid	1010A	
LCS 480-617220/1	Lab Control Sample	Total/NA	Solid	1010A	

Analysis Batch: 617344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195466-10	LF2	Total/NA	Solid	1010A	
LCS 480-617344/1	Lab Control Sample	Total/NA	Solid	1010A	

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: SB201 (1.8-2.3)
Date Collected: 03/02/22 09:55
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB201 (1.8-2.3)
Date Collected: 03/02/22 09:55
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-1
Matrix: Solid
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 00:50	AXK	TAL BUF

Client Sample ID: SB201 (6-6.5)
Date Collected: 03/02/22 10:03
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB201 (6-6.5)
Date Collected: 03/02/22 10:03
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-2
Matrix: Solid
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 01:12	AXK	TAL BUF

Client Sample ID: SB202 (2-2.5)
Date Collected: 03/02/22 10:45
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB202 (2-2.5)
Date Collected: 03/02/22 10:45
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-3
Matrix: Solid
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		4	616884	03/06/22 01:36	AXK	TAL BUF

Client Sample ID: SB202 (6-6.5)
Date Collected: 03/02/22 11:10
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: SB202 (6-6.5)

Lab Sample ID: 480-195466-4
Date Collected: 03/02/22 11:10
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 02:00	AXK	TAL BUF

Client Sample ID: SB203 (2-2.5)

Lab Sample ID: 480-195466-5
Date Collected: 03/02/22 11:53
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB203 (2-2.5)

Lab Sample ID: 480-195466-5
Date Collected: 03/02/22 11:53
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 02:23	AXK	TAL BUF

Client Sample ID: SB203 (5-5.5)

Lab Sample ID: 480-195466-6
Date Collected: 03/02/22 12:09
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB203 (5-5.5)

Lab Sample ID: 480-195466-6
Date Collected: 03/02/22 12:09
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 02:46	AXK	TAL BUF

Client Sample ID: SB204 (2.75-3.2)

Lab Sample ID: 480-195466-7
Date Collected: 03/02/22 12:55
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: SB204 (2.75-3.2)

Lab Sample ID: 480-195466-7
Date Collected: 03/02/22 12:55
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		4	616884	03/06/22 03:10	AXK	TAL BUF

Client Sample ID: SB204 (5.5-6.0)

Lab Sample ID: 480-195466-8
Date Collected: 03/02/22 13:23
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: SB204 (5.5-6.0)

Lab Sample ID: 480-195466-8
Date Collected: 03/02/22 13:23
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 03:34	AXK	TAL BUF

Client Sample ID: LF1

Lab Sample ID: 480-195466-9
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			616936	03/07/22 08:34	JMP	TAL BUF
TCLP	Analysis	8260C		10	617050	03/08/22 18:19	OMI	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3510C			617177	03/08/22 15:04	CMC	TAL BUF
TCLP	Analysis	8270D		1	617260	03/09/22 13:52	JMM	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3510C			617096	03/08/22 09:48	JMP	TAL BUF
TCLP	Analysis	8081B		1	617227	03/09/22 11:58	JLS	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	8151A			617097	03/08/22 09:52	JMP	TAL BUF
TCLP	Analysis	8151		1	617225	03/09/22 17:59	MAN	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3010A			617104	03/08/22 11:10	KMP	TAL BUF
TCLP	Analysis	6010C		1	617286	03/09/22 02:13	LMH	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	7470A			617106	03/08/22 11:29	BMB	TAL BUF
TCLP	Analysis	7470A		1	617202	03/08/22 15:16	BMB	TAL BUF
Total/NA	Analysis	1010A		1	617220	03/08/22 18:32	EJL	TAL BUF
Total/NA	Prep	7.3.3			616843	03/04/22 13:25	JGO	TAL BUF
Total/NA	Analysis	9012		1	616868	03/04/22 15:26	JGO	TAL BUF
Total/NA	Prep	7.3.4			616847	03/04/22 13:25	JGO	TAL BUF
Total/NA	Analysis	9034		1	616861	03/04/22 14:51	JGO	TAL BUF
Total/NA	Analysis	9045D		1	616897	03/05/22 17:40	CSS	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-195466-1

Client Sample ID: LF1

Date Collected: 03/02/22 14:15
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	617204	03/08/22 16:35	JMM	TAL BUF

Client Sample ID: LF1

Date Collected: 03/02/22 14:15
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-9
Matrix: Solid
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			617051	03/08/22 08:05	JLS	TAL BUF
Total/NA	Analysis	8015D		1	617059	03/08/22 10:38	JLS	TAL BUF
Total/NA	Prep	3550C			616939	03/07/22 09:00	VXF	TAL BUF
Total/NA	Analysis	8015D		1	616986	03/07/22 12:39	MAN	TAL BUF
Total/NA	Prep	3550C			616931	03/07/22 07:42	VXF	TAL BUF
Total/NA	Analysis	8082A		1	617012	03/07/22 18:03	NC	TAL BUF

Client Sample ID: LF2

Date Collected: 03/02/22 14:25
Date Received: 03/03/22 13:35

Lab Sample ID: 480-195466-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			616936	03/07/22 08:34	JMP	TAL BUF
TCLP	Analysis	8260C		10	617050	03/08/22 18:42	OMI	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3510C			617177	03/08/22 15:04	CMC	TAL BUF
TCLP	Analysis	8270D		1	617260	03/09/22 14:16	JMM	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3510C			617096	03/08/22 09:48	JMP	TAL BUF
TCLP	Analysis	8081B		1	617227	03/09/22 12:18	JLS	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	8151A			617097	03/08/22 09:52	JMP	TAL BUF
TCLP	Analysis	8151		1	617225	03/09/22 18:28	MAN	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	3010A			617104	03/08/22 11:10	KMP	TAL BUF
TCLP	Analysis	6010C		1	617286	03/09/22 02:17	LMH	TAL BUF
TCLP	Leach	1311			616935	03/07/22 08:29	JMP	TAL BUF
TCLP	Prep	7470A			617106	03/08/22 11:29	BMB	TAL BUF
TCLP	Analysis	7470A		1	617202	03/08/22 15:17	BMB	TAL BUF
Total/NA	Analysis	1010A		1	617344	03/09/22 16:08	EJL	TAL BUF
Total/NA	Prep	7.3.3			616843	03/04/22 13:25	JGO	TAL BUF
Total/NA	Analysis	9012		1	616868	03/04/22 15:27	JGO	TAL BUF
Total/NA	Prep	7.3.4			616847	03/04/22 13:25	JGO	TAL BUF
Total/NA	Analysis	9034		1	616861	03/04/22 14:51	JGO	TAL BUF
Total/NA	Analysis	9045D		1	616897	03/05/22 17:40	CSS	TAL BUF
Total/NA	Analysis	Moisture		1	617204	03/08/22 16:35	JMM	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: LF2
Lab Sample ID: 480-195466-10
Date Collected: 03/02/22 14:25
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			617051	03/08/22 08:05	JLS	TAL BUF
Total/NA	Analysis	8015D		1	617059	03/08/22 11:15	JLS	TAL BUF
Total/NA	Prep	3550C			616939	03/07/22 09:00	VXF	TAL BUF
Total/NA	Analysis	8015D		1	616986	03/07/22 13:15	MAN	TAL BUF
Total/NA	Prep	3550C			616931	03/07/22 07:42	VXF	TAL BUF
Total/NA	Analysis	8082A		1	617012	03/07/22 17:37	NC	TAL BUF

Client Sample ID: LF1
Lab Sample ID: 480-195466-11
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	616748	03/03/22 18:59	CDC	TAL BUF

Client Sample ID: LF1
Lab Sample ID: 480-195466-11
Date Collected: 03/02/22 14:15
Matrix: Solid
Date Received: 03/03/22 13:35
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			616692	03/03/22 17:00	LCH	TAL BUF
Total/NA	Analysis	8260C		1	616884	03/06/22 03:58	AXK	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-22

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
7470A	7470A	Solid	Mercury
9012	7.3.3	Solid	Cyanide, Reactive
9034	7.3.4	Solid	Sulfide, Reactive
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method	Method Description	Protocol	Laboratory
8260C	TCLP Volatiles	SW846	TAL BUF
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8015D	Gasoline Range Organics (GRO) (GC)	SW846	TAL BUF
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151	TCLP Herbicides	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL BUF
9012	Cyanide, Reactive	SW846	TAL BUF
9034	Sulfide, Reactive	SW846	TAL BUF
9045D	pH	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
1311	TCLP Extraction	SW846	TAL BUF
3010A	Preparation, Total Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
7.3.3	Cyanide, Reactive	SW846	TAL BUF
7.3.4	Sulfide, Reactive	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF

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:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-195466-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-195466-1	SB201 (1.8-2.3)	Solid	03/02/22 09:55	03/03/22 13:35
480-195466-2	SB201 (6-6.5)	Solid	03/02/22 10:03	03/03/22 13:35
480-195466-3	SB202 (2-2.5)	Solid	03/02/22 10:45	03/03/22 13:35
480-195466-4	SB202 (6-6.5)	Solid	03/02/22 11:10	03/03/22 13:35
480-195466-5	SB203 (2-2.5)	Solid	03/02/22 11:53	03/03/22 13:35
480-195466-6	SB203 (5-5.5)	Solid	03/02/22 12:09	03/03/22 13:35
480-195466-7	SB204 (2.75-3.2)	Solid	03/02/22 12:55	03/03/22 13:35
480-195466-8	SB204 (5.5-6.0)	Solid	03/02/22 13:23	03/03/22 13:35
480-195466-9	LF1	Solid	03/02/22 14:15	03/03/22 13:35
480-195466-10	LF2	Solid	03/02/22 14:25	03/03/22 13:35
480-195466-11	LF1	Solid	03/02/22 14:15	03/03/22 13:35

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Craig DeZinko	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-171005-37105.1
Client Contact: Ms. Christine Curtis	Phone: 908-399-3651	E-Mail: Steve.Hartmann@Eurofinset.com	State of Origin:	Page: Page 1 of 2
Company: Matrix Environmental Technologies Inc	PWSID:			Job #:
Address: 3730 California Road PO BOX 427	Due Date Requested:			
City: Orchard Park	TAT Requested (days): Standard			
State, Zip: NY, 14127	Compliance Project: Δ Yes Δ No			
Phone: 908-399-3651(Tel) 518-636-5190(Fax)	PO #: 18-046			
Email: ccurtis@matrixbiotech.com	WO #:			
Project Name: Lakeside Village Apartments	Project #: 48024071			
Site: 65-67 Lake Ave. Lancaster, N.Y.	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3

480-195466 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	8260C - TCLP Volatiles	6010C, 7470A, 8081B, 8151A, 8270D	9012_ReactiveCN, 9034_Reactive	1010A, 9045D	8082A - TCL PCBs	8015D_DRO - DRO	8015D_GRO - GRO	Total Number o	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N		
SB201 (1.8'-2.3')	3-2-22	9:55 Am	G	Solid			✓									
SB201 (6-6.5')	3-2-22	10:03 Am	G	Solid			✓									
SB202 (2'-2.5')	3-2-22	10:45 Am	G	Solid			✓									
SB202 (6'-6.5')	3-2-22	11:10 Am	G	Solid			✓									
SB203 (2'-2.5')	3-2-22	11:53 Am	G	Solid			✓									
SB203 (5'-5.5')	3-2-22	12:07 pm	G	Solid			✓									
SB204 (2.75'-3.2')	3-2-22	12:55	G	Solid			✓									
SB204 (5.5'-6.0')	3-2-22	1:23	G	Solid			✓									
LF1	3-2-22	2:15	G	Solid			✓									
LF1	3-2-22	2:15	C	Solid				✓	✓	✓	✓	✓	✓	✓		
LF2	3-2-22	2:25	C	Solid				✓	✓	✓	✓	✓	✓	✓		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Craig DeZinko	Date/Time: 3/3/22 13:35	Company	Received by: Wallace
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	Date/Time: 3/3/22 1335	Company: TAB
		B.G #1 ICE	Date/Time:	Company
			Date/Time:	Company

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-195466-1

Login Number: 195466
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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.	False	OUT OF TEMP
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	MATRIX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-199197-1
Client Project/Site: Project # 18-046 - Lakeside Village Apts
Revision: 1

For:
Matrix Environmental Technologies Inc
3730 California Road
PO BOX 427
Orchard Park, New York 14127

Attn: Ms. Christine Curtis

Authorized for release by:
7/28/2022 1:54:00 PM

Steve Hartmann, Project Manager
(413)572-4000
Steve.Hartmann@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable 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, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control 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, low biased.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control 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, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

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
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	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds 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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
H	Sample was prepped or analyzed beyond the specified holding time
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

Glossary (Continued)

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

Job ID: 480-199197-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-199197-1

Comments
This report was revised 7/28/22 to include reporting of 8260 tentatively identified compounds.

Revision
The report being provided is a revision of the original report sent on 7/11/2022. The report (revision 1) is being revised due to: Client forgot to add PCB's and TIC reporting..

Receipt
The samples were received on 6/21/2022 4:23 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 3.5º C, 3.8º C, 4.2º C, 4.6º C and 5.1º C.

GC/MS VOA
Method 8260C: The following samples were analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: SB113 (1-5) (480-199197-1), SB-114 (0.5-2.0) (480-199197-3), SB-116 (0.5-2.5) (480-199197-8), SB-117 (0.5-3.0) (480-199197-10), SB-205 (1.5) (480-199197-12) and SB-206 (2) (480-199197-14). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-205 (7) (480-199197-13) and SB-207 (1-3) (480-199197-16). Elevated reporting limits (RLs) are provided.

Method 8260C: Internal standard (ISTD) response for the following sample was outside control limits: SB-207 (6-8) (480-199197-17). The sample(s) was re-extracted and/or re-analyzed and ISTD response was outside control limits.

Method 8260C: Surrogate recovery for the following sample was outside control limits: SB-206 (6) (480-199197-15). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

Method 8260C: Internal standard and surrogate responses for the following samples were outside control limits: SB113 (15-18) (480-199197-2), SB-114 (6.0-10.0) (480-199197-4), SB-114 (12-16) (480-199197-5) and SB-115 (6-8) (480-199197-7). The sample(s) were re-extracted and/or re-analyzed and responses were outside control limits.

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

GC/MS Semi VOA
Method 8270D: The following sample was diluted due to color, appearance, and viscosity: SB113 (15-18) (480-199197-2). Elevated reporting limits (RL) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-631456 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: Equipment Blank (480-199197-19). These results have been reported and qualified.

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

GC Semi VOA
Method 8081B: The following sample was diluted due to the nature of the sample matrix : SB113 (1-5) (480-199197-1). As such, surrogate recoveries are below the calibration range, estimated, and not representative. Elevated reporting limits (RLs) are provided.

Method 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-631723 and analytical batch 480-631751 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated

Job ID: 480-199197-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals
Method 6010C: The serial dilution (480-199197-D-1-B SD ^5) associated with batch 480-631791, exhibited results outside the quality control limits for Total Barium, Chromium, Manganese, and Zinc. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The following sample was diluted due to the presence of Total Calcium which interferes with Copper: SB-114 (12-16) (480-199197-5). 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.

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

General Chemistry
Method 7196A: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: Equipment Blank (480-199197-19).

Methods 335.4, 9012B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-632260 and analytical batch 480-632311 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632392 and analytical batch 480-632449 was outside acceptance criteria. Re-extraction and/or re-analysis was performed with similar results; therefore, the data have been reported.

Methods 9012A, 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632161 and analytical batch 480-632202 was below acceptance criteria. Re-extraction and/or re-analysis was performed with similar results; therefore, the data have been reported.

Method 9012B: Reanalysis of the following samples were performed outside of the analytical holding time due to original batch failing laboratory control sample : SB113 (15-18) (480-199197-2), SB-115 (0-3) (480-199197-6), (480-199197-D-2-G DU) and (480-199197-D-6-G MS).

Methods 9012A, 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632532 and analytical batch 480-632557 was 0.1 outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported.

Method 9012B: Reanalysis of the following sample was performed outside of the analytical holding time due to the laboratory control sample failing low : SB-117 (8-10) (480-199197-11). Both sets of data has been reported.

Method 9012B: The continuing calibration verification (CCV) and the laboratory control sample (LCS) associated with batch 480-632254 recovered above the upper control limit for Cyanide, Total. The sample associated with this CCV and LCS were detects for the affected analytes; therefore, the sample was re-prepared and re-analyzed outside of analytical hold and both sets of data have been reported.

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

Organic Prep
Method 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-631266.

Job ID: 480-199197-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

Method 3550C: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SB113 (1-5) (480-199197-1) and SB-117 (0.5-3.0) (480-199197-10).

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

Detection Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB113 (1-5) — Lab Sample ID: 480-199197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	410		65	8.8	ug/Kg	1	☼	8260C	Total/NA
Arsenic	7.2		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	58.8	F1	0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.78		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.21	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Copper	28.3		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Lead	108	F1	1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Manganese	732	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	24.5		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Zinc	71.8		2.5	0.80	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.034		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	15.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB113 (15-18) — Lab Sample ID: 480-199197-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	20	3.3	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.46	J	3.9	0.19	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	1.6	J	3.9	0.55	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	0.94	J	3.9	0.60	ug/Kg	1	☼	8260C	Total/NA
Toluene	1.9	J *3	3.9	0.30	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	1.1	J	7.9	0.66	ug/Kg	1	☼	8260C	Total/NA
Arsenic	4.8		2.1	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	28.1		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.30		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.19	J	0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Copper	14.8		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Lead	6.9		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Manganese	201	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.9		5.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.53	J	4.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Zinc	39.8		2.1	0.67	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.014	J	0.022	0.0050	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.66	J *-	0.92	0.44	mg/Kg	1	☼	9012B	Total/NA
Cyanide, Total	0.57	J H *-	1.0	0.48	mg/Kg	1	☼	9012B	Total/NA
Chromium, trivalent	8.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-114 (0.5-2.0) — Lab Sample ID: 480-199197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	140		42	5.7	ug/Kg	1	☼	8260C	Total/NA
Benzo(a)anthracene	44	J	180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo(a)pyrene	66	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Benzo(b)fluoranthene	110	J	180	29	ug/Kg	1	☼	8270D	Total/NA
Benzo(g,h,i)perylene	47	J	180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo(k)fluoranthene	30	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	95	J	180	41	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	230		180	19	ug/Kg	1	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	40	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	110	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	210		180	22	ug/Kg	1	☼	8270D	Total/NA
Arsenic	4.0		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB-114 (0.5-2.0) (Continued) — Lab Sample ID: 480-199197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	42.0		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.34		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Copper	12.4		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	24.6		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Manganese	179	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	12.0		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Zinc	50.1		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.059		0.020	0.0045	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	10.6		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-114 (6.0-10.0) — Lab Sample ID: 480-199197-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.0	J	22	1.6	ug/Kg	1	☼	8260C	Total/NA
Acetone	27		22	3.8	ug/Kg	1	☼	8260C	Total/NA
Carbon disulfide	5.1		4.5	2.2	ug/Kg	1	☼	8260C	Total/NA
Arsenic	9.9		2.6	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	125		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.93		0.26	0.036	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.063	J	0.26	0.038	mg/Kg	1	☼	6010C	Total/NA
Copper	17.2		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	16.3		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Manganese	518	B	0.26	0.041	mg/Kg	1	☼	6010C	Total/NA
Nickel	30.1		6.4	0.29	mg/Kg	1	☼	6010C	Total/NA
Zinc	59.1		2.6	0.82	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.020	J	0.027	0.0061	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	27.0		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-114 (12-16) — Lab Sample ID: 480-199197-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3	J	16	2.6	ug/Kg	1	☼	8260C	Total/NA
Arsenic	2.3		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	26.7		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.20	J	0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.077	J	0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Copper	6.7		2.1	0.43	mg/Kg	2	☼	6010C	Total/NA
Lead	4.7		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Manganese	184	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	9.1		5.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Zinc	18.1		2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.010	J	0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	6.8		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-115 (0-3) — Lab Sample ID: 480-199197-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(b)fluoranthene	43	J	200	31	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	68	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Pyrene	61	J	200	23	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDE	1.2	J	1.9	0.40	ug/Kg	1	☼	8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-115 (0-3) (Continued)

Lab Sample ID: 480-199197-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	0.86	J	1.9	0.44	ug/Kg	1	☼	8081B	Total/NA
Aldrin	0.89	J	1.9	0.47	ug/Kg	1	☼	8081B	Total/NA
Perfluorooctanoic acid (PFOA)	0.12	J	0.23	0.068	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.043	J	0.23	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.21	J	0.23	0.13	ug/Kg	1	☼	537 (modified)	Total/NA
Arsenic	6.8		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	47.6		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.56		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.24		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Copper	23.6		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	22.1		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Manganese	366	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	24.7		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Zinc	70.1		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.047		0.022	0.0050	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	14.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-115 (6-8)

Lab Sample ID: 480-199197-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.8	J	23	3.9	ug/Kg	1	☼	8260C	Total/NA
Arsenic	14.0		2.6	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	92.0		0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.84		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.095	J	0.26	0.040	mg/Kg	1	☼	6010C	Total/NA
Copper	23.7		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Lead	15.6		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Manganese	462	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	34.1		6.6	0.30	mg/Kg	1	☼	6010C	Total/NA
Zinc	64.3		2.6	0.84	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.014	J	0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	24.3		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-116 (0.5-2.5)

Lab Sample ID: 480-199197-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	140	J	270	26	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	27	J	54	25	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	140		54	7.3	ug/Kg	1	☼	8260C	Total/NA
Benzo(a)anthracene	30	J	190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo(a)pyrene	31	J	190	29	ug/Kg	1	☼	8270D	Total/NA
Benzo(b)fluoranthene	44	J	190	31	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	52	J	190	21	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	29	J	190	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	49	J	190	23	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	0.63	J	1.9	0.37	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDE	1.7	J	1.9	0.40	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	1.6	J	1.9	0.45	ug/Kg	1	☼	8081B	Total/NA
Perfluoropentanoic acid (PFPeA)	0.090	J	0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.045	J	0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.17	J	0.23	0.066	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.056	J	0.23	0.038	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-116 (0.5-2.5) (Continued) — Lab Sample ID: 480-199197-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroundecanoic acid (PFUnA)	0.034	J	0.23	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.52		0.23	0.12	ug/Kg	1	☼	537 (modified)	Total/NA
Arsenic	7.5		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	446		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.58		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.3		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Copper	15.8		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	43.5		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Manganese	3440	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	24.2		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Zinc	113		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.081		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	15.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-116 (6.0-7.5) — Lab Sample ID: 480-199197-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.54	J	3.9	0.53	ug/Kg	1	☼	8260C	Total/NA
beta-BHC	0.67	J	1.9	0.34	ug/Kg	1	☼	8081B	Total/NA
Arsenic	9.5		2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	75.6		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.74		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.085	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Copper	22.4		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	14.1		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Manganese	305	B	0.23	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	27.7		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Zinc	69.0		2.3	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.022		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	20.6		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-117 (0.5-3.0) — Lab Sample ID: 480-199197-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	51	J	63	14	ug/Kg	1	☼	8260C	Total/NA
Methyl acetate	130	J	320	30	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	150		63	30	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	92		63	8.5	ug/Kg	1	☼	8260C	Total/NA
Toluene	31	J	63	17	ug/Kg	1	☼	8260C	Total/NA
Benzo(a)anthracene	150	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo(a)pyrene	180	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Benzo(b)fluoranthene	550		200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo(g,h,i)perylene	580		200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo(k)fluoranthene	140	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	190	J	200	45	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	130	J	200	36	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	120	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	500		200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	87	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	100	J	200	24	ug/Kg	1	☼	8270D	Total/NA
4,4'-DDD	0.64	J	2.0	0.39	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDE	0.74	J	2.0	0.42	ug/Kg	1	☼	8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-117 (0.5-3.0) (Continued) — Lab Sample ID: 480-199197-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	1.1	J	2.0	0.47	ug/Kg	1	☼	8081B	Total/NA
Lindane	0.55	J	2.0	0.37	ug/Kg	1	☼	8081B	Total/NA
Perfluoropentanoic acid (PFPeA)	0.068	J	0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.12	J	0.23	0.066	ug/Kg	1	☼	537 (modified)	Total/NA
Arsenic	18.2		2.5	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	168		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	1.3		0.25	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.22	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Copper	36.6		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Lead	92.4		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Manganese	209	B	0.25	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	31.6		6.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.50	J	4.9	0.49	mg/Kg	1	☼	6010C	Total/NA
Zinc	63.6		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.17		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	14.5		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-117 (8-10) — Lab Sample ID: 480-199197-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.6		2.6	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	73.2		0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.60		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.26	0.040	mg/Kg	1	☼	6010C	Total/NA
Copper	19.8		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Lead	12.7		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Manganese	484	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	26.0		6.6	0.30	mg/Kg	1	☼	6010C	Total/NA
Zinc	48.9		2.6	0.85	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.012	J	0.022	0.0052	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	1.3		1.1	0.54	mg/Kg	1	☼	9012B	Total/NA
Chromium, trivalent	16.7		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: SB-205 (1.5) — Lab Sample ID: 480-199197-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	490		78	10	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-205 (7) — Lab Sample ID: 480-199197-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	8100		110	15	ug/Kg	2	☼	8260C	Total/NA
Trichloroethene	160		110	30	ug/Kg	2	☼	8260C	Total/NA

Client Sample ID: SB-206 (2) — Lab Sample ID: 480-199197-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	670		44	6.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-206 (6) — Lab Sample ID: 480-199197-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	J	22	3.8	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-207 (1-3) — Lab Sample ID: 480-199197-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3400		92	12	ug/Kg	2	☼	8260C	Total/NA

Client Sample ID: SB-207 (6-8) — Lab Sample ID: 480-199197-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.0	J	21	1.5	ug/Kg	1	☼	8260C	Total/NA
Acetone	24		21	3.6	ug/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	6.1		4.2	0.54	ug/Kg	1	☼	8260C	Total/NA
Methyl acetate	9.0	J	21	2.6	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: Field Duplicate — Lab Sample ID: 480-199197-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.3		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	84.8		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.76		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.064	J	0.24	0.035	mg/Kg	1	☼	6010C	Total/NA
Copper	18.1		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	11.6		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Manganese	296	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	26.9		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Zinc	61.6		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.025		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA
Chromium, trivalent	23.0		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

Client Sample ID: Equipment Blank — Lab Sample ID: 480-199197-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.8	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	5.0	J	10	3.0	ug/L	1		8260C	Total/NA
4,4'-DDD	0.0096	J	0.050	0.0092	ug/L	1		8081B	Total/NA
Manganese	0.0011	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Zinc	0.030		0.010	0.0015	mg/L	1		6010C	Total/NA
Cyanide, Total	0.0070	J	0.010	0.0050	mg/L	1		9012B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2,2-Tetrachloroethane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2-Trichloroethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1-Dichloroethane	ND		65	20	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1-Dichloroethene	ND		65	23	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2,4-Trichlorobenzene	ND		65	25	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dibromo-3-Chloropropane	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichlorobenzene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichloroethane	ND		65	27	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichloropropane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,3-Dichlorobenzene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,4-Dichlorobenzene	ND		65	9.1	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
2-Butanone (MEK)	ND		330	190	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
2-Hexanone	ND		330	130	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
4-Methyl-2-pentanone (MIBK)	ND		330	21	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Acetone	ND		330	270	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Benzene	ND		65	12	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromodichloromethane	ND		65	13	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromoform	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromomethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Carbon disulfide	ND		65	30	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Carbon tetrachloride	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chlorobenzene	ND		65	8.6	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Dibromochloromethane	ND		65	32	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloroethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloroform	ND		65	45	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloromethane	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
cis-1,2-Dichloroethene	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
cis-1,3-Dichloropropene	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Cyclohexane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Dichlorodifluoromethane	ND		65	28	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Ethylbenzene	ND		65	19	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dibromoethane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Isopropylbenzene	ND		65	9.8	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methyl acetate	ND		330	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methyl tert-butyl ether	ND		65	25	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methylcyclohexane	ND		65	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methylene Chloride	ND		65	13	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Styrene	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Tetrachloroethene	**410**		65	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Toluene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
trans-1,2-Dichloroethene	ND		65	15	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
trans-1,3-Dichloropropene	ND		65	6.4	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Trichloroethene	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Trichlorofluoromethane	ND		65	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Vinyl chloride	ND		65	22	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Xylenes, Total	ND		130	36	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			06/24/22 09:44	06/24/22 21:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		50 - 149	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichloroethane-d4 (Surr)	102		53 - 146	06/24/22 09:44	06/24/22 21:39	1
4-Bromofluorobenzene (Surr)	100		49 - 148	06/24/22 09:44	06/24/22 21:39	1
Dibromofluoromethane (Surr)	97		60 - 140	06/24/22 09:44	06/24/22 21:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Acenaphthylene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Anthracene	ND		210	51	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(b)fluoranthene	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(g,h,i)perylene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(k)fluoranthene	ND	F2	210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Chrysene	ND		210	46	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Dibenzofuran	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Fluoranthene	ND	F2	210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Fluorene	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
m-Cresol	ND		400	32	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Naphthalene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
o-Cresol	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
p-Cresol	ND		400	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Phenol	ND		210	32	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Pyrene	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	12000	T J	ug/Kg	☼	1.84		06/23/22 15:45	06/24/22 14:41	1
Unknown	1100	T J	ug/Kg	☼	3.24		06/23/22 15:45	06/24/22 14:41	1
n-Hexadecanoic acid	220	T J N	ug/Kg	☼	11.41	57-10-3	06/23/22 15:45	06/24/22 14:41	1
Heptacosane	280	T J N	ug/Kg	☼	12.85	593-49-7	06/23/22 15:45	06/24/22 14:41	1
Tetratetracontane	420	T J N	ug/Kg	☼	13.13	7098-22-8	06/23/22 15:45	06/24/22 14:41	1
Nonacosane	390	T J N	ug/Kg	☼	13.40	630-03-5	06/23/22 15:45	06/24/22 14:41	1
Hexatriacontane	400	T J N	ug/Kg	☼	13.66	630-06-8	06/23/22 15:45	06/24/22 14:41	1
Eicosane, 7-hexyl-	310	T J N	ug/Kg	☼	13.91	55333-99-8	06/23/22 15:45	06/24/22 14:41	1
Octacosane	270	T J N	ug/Kg	☼	14.16	630-02-4	06/23/22 15:45	06/24/22 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		54 - 120	06/23/22 15:45	06/24/22 14:41	1
2-Fluorobiphenyl	91		60 - 120	06/23/22 15:45	06/24/22 14:41	1
2-Fluorophenol	82		52 - 120	06/23/22 15:45	06/24/22 14:41	1
Nitrobenzene-d5	89		53 - 120	06/23/22 15:45	06/24/22 14:41	1
Phenol-d5	87		54 - 120	06/23/22 15:45	06/24/22 14:41	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl-d14	*105*		*79 - 130*	*06/23/22 15:45*	*06/24/22 14:41*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
4,4'-DDE	ND		100	21	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
4,4'-DDT	ND		100	24	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Aldrin	ND		100	25	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
alpha-BHC	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
beta-BHC	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Chlordane (.alpha.)	ND		100	51	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
delta-BHC	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Dieldrin	ND		100	24	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan I	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan II	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan sulfate	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endrin	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Heptachlor	ND		100	22	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Lindane	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*S1-*	*45 - 120*	*06/27/22 15:42*	*06/28/22 11:52*	*50*
DCB Decachlorobiphenyl	*0*	*S1-*	*45 - 120*	*06/27/22 15:42*	*06/28/22 11:52*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*30 - 124*	*06/27/22 15:42*	*06/28/22 11:52*	*50*
Tetrachloro-m-xylene	*0*	*S1-*	*30 - 124*	*06/27/22 15:42*	*06/28/22 11:52*	*50*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		20	7.3	ug/Kg	☼	06/27/22 06:56	07/10/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*06/27/22 06:56*	*07/10/22 14:23*	*1*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*	*06/27/22 06:56*	*07/10/22 14:23*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.60	0.39	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoropentanoic acid (PFPeA)	ND		0.24	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorohexanoic acid (PFHxA)	ND		0.24	0.055	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoroheptanoic acid (PFHpA)	ND		0.24	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanoic acid (PFOA)	ND		0.24	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorononanoic acid (PFNA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorodecanoic acid (PFDA)	ND		0.24	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.24	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.4	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.4	0.099	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.4	0.068	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.4	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFHpA	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFOA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFOS	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C5 PFNA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFBA	*105*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFHxA	*100*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFDA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFUnA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFDoA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C8 FOSA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C5 PFPeA	*108*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFTeDA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
d3-NMeFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
M2-6:2 FTS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
M2-8:2 FTS	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C3 PFBS	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**		2.5	0.50	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Barium	**58.8**	**F1**	0.62	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Beryllium	**0.78**		0.25	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Cadmium	**0.21**	**J**	0.25	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Copper	**28.3**		1.2	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Lead	**108**	**F1**	1.2	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Manganese	**732**	**B**	0.25	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Nickel	**24.5**		6.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Selenium	ND		5.0	0.50	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Silver	ND		0.75	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Zinc	**71.8**		2.5	0.80	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.034**		0.025	0.0057	mg/Kg	☼	06/24/22 09:43	06/24/22 12:44	1

Client Sample ID: SB113 (1-5)

Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.4	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 10:20	1
Cyanide, Total	ND	*-	1.1	0.51	mg/Kg	☼	07/01/22 14:08	07/02/22 13:54	1
Chromium, trivalent	**15.8**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB113 (15-18)

Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2,2-Tetrachloroethane	ND	*3	3.9	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2-Trichloroethane	ND	*3	3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.90	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2,4-Trichlorobenzene	ND	*3	3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dibromo-3-Chloropropane	ND	*3	3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichlorobenzene	ND	*3	3.9	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,3-Dichlorobenzene	ND	*3	3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,4-Dichlorobenzene	ND	*3	3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
2-Hexanone	ND	*3	20	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
4-Methyl-2-pentanone (MIBK)	ND	*3	20	1.3	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Acetone	**12**	**J**	20	3.3	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Benzene	**0.46**	**J**	3.9	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromodichloromethane	ND		3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromoform	ND	*3	3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chlorobenzene	ND	*3	3.9	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Dibromochloromethane	ND	*3	3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloroethane	ND		3.9	0.89	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
cis-1,3-Dichloropropene	ND		3.9	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Cyclohexane	**1.6**	**J**	3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Dichlorodifluoromethane	ND		3.9	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Ethylbenzene	ND	*3	3.9	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dibromoethane	ND	*3	3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Isopropylbenzene	ND	*3	3.9	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methylcyclohexane	**0.94**	**J**	3.9	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Styrene	ND	*3	3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	*3	3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Toluene	**1.9**	**J *3**	3.9	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
trans-1,2-Dichloroethene	ND		3.9	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
trans-1,3-Dichloropropene	ND	*3	3.9	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Trichloroethene	ND		3.9	0.87	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Xylenes, Total	**1.1**	**J**	7.9	0.66	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane	*4.9*	*T J N*	*ug/Kg*	☼	*2.95*	*287-92-3*	*06/21/22 18:30*	*06/27/22 13:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*133*	*S1+ *3*	*71 - 125*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
4-Bromofluorobenzene (Surr)	*56*	*S1- *3*	*72 - 126*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
Dibromofluoromethane (Surr)	*119*		*60 - 140*	*06/21/22 18:30*	*06/27/22 13:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Acenaphthylene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Anthracene	ND		880	220	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(a)anthracene	ND		880	88	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(a)pyrene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(b)fluoranthene	ND		880	140	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(g,h,i)perylene	ND		880	93	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(k)fluoranthene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Chrysene	ND		880	200	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Dibenz(a,h)anthracene	ND		880	160	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Dibenzofuran	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Fluoranthene	ND		880	93	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Fluorene	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Hexachlorobenzene	ND		880	120	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Indeno(1,2,3-cd)pyrene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
m-Cresol	ND		1700	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Naphthalene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
o-Cresol	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
p-Cresol	ND		1700	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Pentachlorophenol	ND		1700	880	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Phenanthrene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Phenol	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Pyrene	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*820*	*T J*	*ug/Kg*	☼	*3.37*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*890*	*T J*	*ug/Kg*	☼	*7.93*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*8.60*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Decane	*800*	*T J N*	*ug/Kg*	☼	*9.81*	*124-18-5*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Heptadecane	*950*	*T J N*	*ug/Kg*	☼	*10.33*	*629-78-7*	*06/23/22 15:45*	*06/24/22 16:45*	*5*

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	850	T J	ug/Kg	☼	12.87		06/23/22 15:45	06/24/22 16:45	5
Eicosane	1100	T J N	ug/Kg	☼	13.15	112-95-8	06/23/22 15:45	06/24/22 16:45	5
Tridecane, 1-iodo-	1100	T J N	ug/Kg	☼	13.42	35599-77-0	06/23/22 15:45	06/24/22 16:45	5
Unknown	1100	T J	ug/Kg	☼	13.68		06/23/22 15:45	06/24/22 16:45	5
Unknown	900	T J	ug/Kg	☼	13.93		06/23/22 15:45	06/24/22 16:45	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		54 - 120	06/23/22 15:45	06/24/22 16:45	5
2-Fluorobiphenyl	86		60 - 120	06/23/22 15:45	06/24/22 16:45	5
2-Fluorophenol	78		52 - 120	06/23/22 15:45	06/24/22 16:45	5
Nitrobenzene-d5	83		53 - 120	06/23/22 15:45	06/24/22 16:45	5
Phenol-d5	81		54 - 120	06/23/22 15:45	06/24/22 16:45	5
p-Terphenyl-d14	96		79 - 130	06/23/22 15:45	06/24/22 16:45	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
4,4'-DDE	ND		1.7	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
4,4'-DDT	ND		1.7	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
beta-BHC	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Chlordane (.alpha.)	ND		1.7	0.84	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
delta-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan I	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endrin	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Heptachlor	ND		1.7	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Lindane	ND	F1	1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	77		45 - 120	06/27/22 15:42	06/28/22 10:53	1
DCB Decachlorobiphenyl	84		45 - 120	06/27/22 15:42	06/28/22 10:53	1
Tetrachloro-m-xylene	86		30 - 124	06/27/22 15:42	06/28/22 10:53	1
Tetrachloro-m-xylene	60		30 - 124	06/27/22 15:42	06/28/22 10:53	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		17	6.2	ug/Kg	☼	06/27/22 06:56	07/10/22 14:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	67		28 - 129	06/27/22 06:56	07/10/22 14:42	1
2,4-Dichlorophenylacetic acid	65		28 - 129	06/27/22 06:56	07/10/22 14:42	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.33	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.056	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.059	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.084	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFHpA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFOA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFOS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C5 PFNA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFBA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFHxA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFDA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFUnA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFDoA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C8 FOSA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C5 PFPeA	*102*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
d3-NMeFOSAA	*99*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
d5-NEtFOSAA	*102*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
M2-6:2 FTS	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
M2-8:2 FTS	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C3 PFBS	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		2.1	0.42	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Barium	**28.1**		0.52	0.11	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Beryllium	**0.30**		0.21	0.029	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Cadmium	**0.19**	**J**	0.21	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Copper	**14.8**		1.0	0.22	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2

Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.9**		1.0	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Manganese	**201**	**B**	0.21	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Nickel	**21.9**		5.2	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Selenium	**0.53**	**J**	4.2	0.42	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Silver	ND		0.62	0.21	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Zinc	**39.8**		2.1	0.67	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.022	0.0050	mg/Kg	☼	06/24/22 09:43	06/24/22 12:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.1	0.88	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	**0.66**	**J *-**	0.92	0.44	mg/Kg	☼	06/30/22 09:23	06/30/22 10:17	1
Cyanide, Total	**0.57**	**J H *-**	1.0	0.48	mg/Kg	☼	07/05/22 11:57	07/05/22 13:27	1
Chromium, trivalent	**8.9**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2,2-Tetrachloroethane	ND		42	6.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2-Trichloroethane	ND		42	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1-Dichloroethane	ND		42	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1-Dichloroethene	ND		42	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2,4-Trichlorobenzene	ND		42	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dibromo-3-Chloropropane	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichlorobenzene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichloroethane	ND		42	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichloropropane	ND		42	6.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,3-Dichlorobenzene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,4-Dichlorobenzene	ND		42	5.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
2-Butanone (MEK)	ND		210	130	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
2-Hexanone	ND		210	87	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
4-Methyl-2-pentanone (MIBK)	ND		210	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Acetone	ND		210	170	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Benzene	ND		42	8.0	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromodichloromethane	ND		42	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromoform	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromomethane	ND		42	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Carbon disulfide	ND		42	19	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Carbon tetrachloride	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chlorobenzene	ND		42	5.6	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Dibromochloromethane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chloroethane	ND		42	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3
Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		42	29	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chloromethane	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
cis-1,2-Dichloroethene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
cis-1,3-Dichloropropene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Cyclohexane	ND		42	9.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Dichlorodifluoromethane	ND		42	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Ethylbenzene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dibromoethane	ND		42	7.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Isopropylbenzene	ND		42	6.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methyl acetate	ND		210	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methyl tert-butyl ether	ND		42	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methylcyclohexane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methylene Chloride	ND		42	8.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Styrene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Tetrachloroethene	**140**		42	5.7	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Toluene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
trans-1,2-Dichloroethene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
trans-1,3-Dichloropropene	ND		42	4.2	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Trichloroethene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Trichlorofluoromethane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Vinyl chloride	ND		42	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Xylenes, Total	ND		85	23	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*4500*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:02*	*1*
Unknown	*940*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*50 - 149*	*06/24/22 09:44*	*06/24/22 22:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*06/24/22 09:44*	*06/24/22 22:02*	*1*
4-Bromofluorobenzene (Surr)	*103*		*49 - 148*	*06/24/22 09:44*	*06/24/22 22:02*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*	*06/24/22 09:44*	*06/24/22 22:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Acenaphthylene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Anthracene	ND		180	45	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(a)anthracene	**44**	**J**	180	18	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(a)pyrene	**66**	**J**	180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(b)fluoranthene	**110**	**J**	180	29	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(g,h,i)perylene	**47**	**J**	180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(k)fluoranthene	**30**	**J**	180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Chrysene	**95**	**J**	180	41	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Dibenzofuran	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Fluoranthene	**230**		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Fluorene	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Indeno(1,2,3-cd)pyrene	**40**	**J**	180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3
Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Cresol	ND		350	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Naphthalene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
o-Cresol	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
p-Cresol	ND		350	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Pentachlorophenol	ND		350	180	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Phenanthrene	**110**	**J**	180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Phenol	ND		180	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Pyrene	**210**		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*860*	*T J*	*ug/Kg*	☼	*3.24*		*06/23/22 15:45*	*06/24/22 17:10*	*1*
n-Hexadecanoic acid	*310*	*T J N*	*ug/Kg*	☼	*11.40*	*57-10-3*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Hexatriacontane	*340*	*T J N*	*ug/Kg*	☼	*12.55*	*630-06-8*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Tetradecane	*650*	*T J N*	*ug/Kg*	☼	*12.84*	*629-59-4*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Eicosane	*900*	*T J N*	*ug/Kg*	☼	*13.12*	*112-95-8*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Pentacosane	*1000*	*T J N*	*ug/Kg*	☼	*13.39*	*629-99-2*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Tricosane	*950*	*T J N*	*ug/Kg*	☼	*13.65*	*638-67-5*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Octacosane	*770*	*T J N*	*ug/Kg*	☼	*13.91*	*630-02-4*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Octadecane	*550*	*T J N*	*ug/Kg*	☼	*14.15*	*593-45-3*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Nonadecane	*350*	*T J N*	*ug/Kg*	☼	*14.40*	*629-92-5*	*06/23/22 15:45*	*06/24/22 17:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*54 - 120*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
2-Fluorobiphenyl	*92*		*60 - 120*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
2-Fluorophenol	*87*		*52 - 120*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Nitrobenzene-d5	*89*		*53 - 120*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
Phenol-d5	*91*		*54 - 120*	*06/23/22 15:45*	*06/24/22 17:10*	*1*
p-Terphenyl-d14	*113*		*79 - 130*	*06/23/22 15:45*	*06/24/22 17:10*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.8	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
4,4'-DDE	ND		1.8	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
4,4'-DDT	ND		1.8	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Aldrin	ND		1.8	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
alpha-BHC	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
beta-BHC	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Chlordane (.alpha.)	ND		1.8	0.88	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
delta-BHC	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan I	ND		1.8	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan II	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan sulfate	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endrin	ND		1.8	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Heptachlor	ND		1.8	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Lindane	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:12*	*1*
DCB Decachlorobiphenyl	*94*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:12*	*1*

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:12*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:12*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		18	6.5	ug/Kg	☼	06/27/22 06:56	07/10/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*69*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:00*	*1*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:00*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.060	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.050	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanoic acid (PFOA)	ND		0.22	0.063	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.22	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.090	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFHpA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFOA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFOS	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C5 PFNA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFBA	*95*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFHxA	*92*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFDA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFUnA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFDoA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C8 FOSA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	98		50 - 150	06/27/22 08:23	06/28/22 01:30	1
13C2 PFTeDA	78		50 - 150	06/27/22 08:23	06/28/22 01:30	1
d3-NMeFOSAA	85		50 - 150	06/27/22 08:23	06/28/22 01:30	1
d5-NEtFOSAA	89		50 - 150	06/27/22 08:23	06/28/22 01:30	1
M2-6:2 FTS	70		50 - 150	06/27/22 08:23	06/28/22 01:30	1
M2-8:2 FTS	71		50 - 150	06/27/22 08:23	06/28/22 01:30	1
13C3 PFBS	79		50 - 150	06/27/22 08:23	06/28/22 01:30	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0		2.2	0.44	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Barium	42.0		0.55	0.12	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Beryllium	0.34		0.22	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Cadmium	0.12	J	0.22	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Copper	12.4		1.1	0.23	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Lead	24.6		1.1	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Manganese	179	B	0.22	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Nickel	12.0		5.5	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Selenium	ND		4.4	0.44	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Silver	ND		0.66	0.22	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Zinc	50.1		2.2	0.71	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.020	0.0045	mg/Kg	☼	06/24/22 09:43	06/24/22 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.2	0.91	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	0.99	0.48	mg/Kg	☼	07/01/22 14:08	07/02/22 13:57	1
Chromium, trivalent	10.6		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4

Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2,2-Tetrachloroethane	ND	*3	4.5	0.72	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1-Dichloroethane	ND		4.5	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2,4-Trichlorobenzene	ND	*3	4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichlorobenzene	ND	*3	4.5	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichloroethane	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,3-Dichlorobenzene	ND	*3	4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,4-Dichlorobenzene	ND	*3	4.5	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4
Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	**4.0**	**J**	22	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Acetone	**27**		22	3.8	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Benzene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Carbon disulfide	**5.1**		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
cis-1,3-Dichloropropene	ND		4.5	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Cyclohexane	ND		4.5	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dibromoethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Isopropylbenzene	ND	*3	4.5	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methylene Chloride	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Styrene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Toluene	ND		4.5	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Trichloroethene	ND		4.5	0.98	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Vinyl chloride	ND		4.5	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Xylenes, Total	ND		8.9	0.75	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 13:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*122*		*71 - 125*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*72 - 126*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*06/21/22 18:30*	*06/27/22 13:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Acenaphthylene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Anthracene	ND		220	53	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4
Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)anthracene	ND		220	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(a)pyrene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(b)fluoranthene	ND		220	34	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(g,h,i)perylene	ND		220	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(k)fluoranthene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Chrysene	ND		220	48	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Dibenzofuran	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Fluoranthene	ND		220	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Fluorene	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Indeno(1,2,3-cd)pyrene	ND		220	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
m-Cresol	ND		420	33	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Naphthalene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
o-Cresol	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
p-Cresol	ND		420	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Phenanthrene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Phenol	ND		220	33	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Pyrene	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*930*	*T J*	*ug/Kg*	☼	*3.26*		*06/23/22 15:45*	*06/24/22 17:35*	*1*
Unknown	*180*	*T J*	*ug/Kg*	☼	*11.46*		*06/23/22 15:45*	*06/24/22 17:35*	*1*
Docosane	*190*	*T J N*	*ug/Kg*	☼	*12.60*	*629-97-0*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Hexatriacontane	*290*	*T J N*	*ug/Kg*	☼	*12.89*	*630-06-8*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Eicosane	*430*	*T J N*	*ug/Kg*	☼	*13.17*	*112-95-8*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Heptadecane	*400*	*T J N*	*ug/Kg*	☼	*13.44*	*629-78-7*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Tricosane	*400*	*T J N*	*ug/Kg*	☼	*13.70*	*638-67-5*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Octacosane	*320*	*T J N*	*ug/Kg*	☼	*13.96*	*630-02-4*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Unknown	*260*	*T J*	*ug/Kg*	☼	*14.20*		*06/23/22 15:45*	*06/24/22 17:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*54 - 120*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
2-Fluorobiphenyl	*91*		*60 - 120*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
2-Fluorophenol	*75*		*52 - 120*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Nitrobenzene-d5	*82*		*53 - 120*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Phenol-d5	*80*		*54 - 120*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
p-Terphenyl-d14	*105*		*79 - 130*	*06/23/22 15:45*	*06/24/22 17:35*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Aldrin	ND		2.1	0.52	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
alpha-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
beta-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4
Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endrin	ND		2.1	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:31*	*1*
DCB Decachlorobiphenyl	*91*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:31*	*1*
Tetrachloro-m-xylene	*91*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:31*	*1*
Tetrachloro-m-xylene	*63*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:31*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.4	ug/Kg	☼	06/27/22 06:56	07/10/22 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:19*	*1*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:19*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.63	0.41	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorohexanoic acid (PFHxA)	ND		0.25	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroheptanoic acid (PFHpA)	ND		0.25	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanoic acid (PFOA)	ND		0.25	0.073	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorononanoic acid (PFNA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorodecanoic acid (PFDA)	ND		0.25	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroundecanoic acid (PFUnA)	ND		0.25	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorododecanoic acid (PFDoA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorotridecanoic acid (PFTriA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.25	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.25	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.25	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.25	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.25	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.25	0.024	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.5	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.5	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.5	0.071	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.5	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1

Client Sample ID: SB-114 (6.0-10.0)

Lab Sample ID: 480-199197-4
Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	71		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C4 PFHpA	81		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C4 PFOA	75		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C4 PFOS	60		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C5 PFNA	73		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C4 PFBA	88		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C2 PFHxA	79		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C2 PFDA	72		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C2 PFUnA	70		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C2 PFDoA	68		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C8 FOSA	65		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C5 PFPeA	90		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C2 PFTeDA	69		50 - 150	06/27/22 08:23	06/28/22 01:39	1
d3-NMeFOSAA	83		50 - 150	06/27/22 08:23	06/28/22 01:39	1
d5-NEtFOSAA	82		50 - 150	06/27/22 08:23	06/28/22 01:39	1
M2-6:2 FTS	68		50 - 150	06/27/22 08:23	06/28/22 01:39	1
M2-8:2 FTS	66		50 - 150	06/27/22 08:23	06/28/22 01:39	1
13C3 PFBS	75		50 - 150	06/27/22 08:23	06/28/22 01:39	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.9**		2.6	0.51	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Barium	**125**		0.64	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Beryllium	**0.93**		0.26	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Cadmium	**0.063**	**J**	0.26	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Copper	**17.2**		1.3	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Lead	**16.3**		1.3	0.31	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Manganese	**518**	**B**	0.26	0.041	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Nickel	**30.1**		6.4	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Selenium	ND		5.1	0.51	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Silver	ND		0.77	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Zinc	**59.1**		2.6	0.82	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**	**J**	0.027	0.0061	mg/Kg	☼	06/24/22 09:43	06/24/22 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.1	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.2	0.60	mg/Kg	☼	07/01/22 14:08	07/02/22 13:58	1
Chromium, trivalent	**27.0**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (12-16)

Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.1	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1,2,2-Tetrachloroethane	ND	*3	3.1	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1,2-Trichloroethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1-Dichloroethane	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1-Dichloroethene	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2,4-Trichlorobenzene	ND	*3	3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dibromo-3-Chloropropane	ND	*3	3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichlorobenzene	ND	*3	3.1	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichloroethane	ND		3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichloropropane	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,3-Dichlorobenzene	ND	*3	3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,4-Dichlorobenzene	ND	*3	3.1	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
2-Butanone (MEK)	ND		16	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
2-Hexanone	ND		16	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
4-Methyl-2-pentanone (MIBK)	ND		16	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Acetone	**6.3**	**J**	16	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Benzene	ND		3.1	0.15	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromodichloromethane	ND		3.1	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromoform	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromomethane	ND		3.1	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Carbon disulfide	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Carbon tetrachloride	ND		3.1	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chlorobenzene	ND		3.1	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Dibromochloromethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloroethane	ND		3.1	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloroform	ND		3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloromethane	ND		3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
cis-1,2-Dichloroethene	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
cis-1,3-Dichloropropene	ND		3.1	0.45	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Cyclohexane	ND		3.1	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Dichlorodifluoromethane	ND		3.1	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Ethylbenzene	ND		3.1	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dibromoethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Isopropylbenzene	ND	*3	3.1	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methyl acetate	ND		16	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methyl tert-butyl ether	ND		3.1	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methylcyclohexane	ND		3.1	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methylene Chloride	ND		3.1	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Styrene	ND		3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Tetrachloroethene	ND		3.1	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Toluene	ND		3.1	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
trans-1,2-Dichloroethene	ND		3.1	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
trans-1,3-Dichloropropene	ND		3.1	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Trichloroethene	ND		3.1	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Trichlorofluoromethane	ND		3.1	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Vinyl chloride	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Xylenes, Total	ND		6.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 14:02*	*1*

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	108		71 - 125	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 126	06/21/22 18:30	06/27/22 14:02	1
4-Bromofluorobenzene (Surr)	69	S1-	72 - 126	06/21/22 18:30	06/27/22 14:02	1
Dibromofluoromethane (Surr)	104		60 - 140	06/21/22 18:30	06/27/22 14:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Acenaphthylene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Anthracene	ND		180	44	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(a)anthracene	ND		180	18	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(a)pyrene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(b)fluoranthene	ND		180	28	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(g,h,i)perylene	ND		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(k)fluoranthene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Chrysene	ND		180	40	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Dibenz(a,h)anthracene	ND		180	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Dibenzofuran	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Fluoranthene	ND		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Fluorene	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Indeno(1,2,3-cd)pyrene	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
m-Cresol	ND		340	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Naphthalene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
o-Cresol	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
p-Cresol	ND		340	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Phenanthrene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Phenol	ND		180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Pyrene	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	6000	T J	ug/Kg	☼	1.95		06/23/22 15:45	06/24/22 18:00	1
Unknown	820	T J	ug/Kg	☼	3.39		06/23/22 15:45	06/24/22 18:00	1
Tetradecanoic acid	240	T J N	ug/Kg	☼	11.43	544-63-8	06/23/22 15:45	06/24/22 18:00	1
Tridecane, 2-methyl-	220	T J N	ug/Kg	☼	12.58	1560-96-9	06/23/22 15:45	06/24/22 18:00	1
Pentacosane	330	T J N	ug/Kg	☼	12.87	629-99-2	06/23/22 15:45	06/24/22 18:00	1
Hexadecane	450	T J N	ug/Kg	☼	13.15	544-76-3	06/23/22 15:45	06/24/22 18:00	1
Heptadecane	460	T J N	ug/Kg	☼	13.42	629-78-7	06/23/22 15:45	06/24/22 18:00	1
Dotriacontane	500	T J N	ug/Kg	☼	13.68	544-85-4	06/23/22 15:45	06/24/22 18:00	1
Unknown	370	T J	ug/Kg	☼	13.93		06/23/22 15:45	06/24/22 18:00	1
Octacosane	270	T J N	ug/Kg	☼	14.17	630-02-4	06/23/22 15:45	06/24/22 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	103		54 - 120	06/23/22 15:45	06/24/22 18:00	1
2-Fluorobiphenyl	97		60 - 120	06/23/22 15:45	06/24/22 18:00	1
2-Fluorophenol	88		52 - 120	06/23/22 15:45	06/24/22 18:00	1
Nitrobenzene-d5	90		53 - 120	06/23/22 15:45	06/24/22 18:00	1
Phenol-d5	92		54 - 120	06/23/22 15:45	06/24/22 18:00	1
p-Terphenyl-d14	116		79 - 130	06/23/22 15:45	06/24/22 18:00	1

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
4,4'-DDE	ND		1.7	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
4,4'-DDT	ND		1.7	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Aldrin	ND		1.7	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
beta-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Chlordane (.alpha.)	ND		1.7	0.87	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
delta-BHC	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Dieldrin	ND		1.7	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan I	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endrin	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Heptachlor	ND		1.7	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Lindane	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:51*	*1*
DCB Decachlorobiphenyl	*85*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:51*	*1*
Tetrachloro-m-xylene	*103*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:51*	*1*
Tetrachloro-m-xylene	*69*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:51*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		17	6.2	ug/Kg	☼	06/27/22 06:56	07/10/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:37*	*1*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:37*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.34	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.056	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.059	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1

Client Sample ID: SB-114 (12-16)
Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5
Matrix: Solid
Percent Solids: 94.1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.085	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFHpA	*93*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFOA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFOS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C5 PFNA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFBA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFHxA	*100*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFDA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFUnA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFDoA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C8 FOSA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C5 PFPeA	*105*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFTeDA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
d3-NMeFOSAA	*99*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
d5-NEtFOSAA	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
M2-6:2 FTS	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C3 PFBS	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		2.1	0.41	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Barium	**26.7**		0.52	0.11	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Beryllium	**0.20**	**J**	0.21	0.029	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Cadmium	**0.077**	**J**	0.21	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Copper	**6.7**		2.1	0.43	mg/Kg	☼	06/24/22 10:50	06/28/22 15:09	2
Lead	**4.7**		1.0	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Manganese	**184**	**B**	0.21	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Nickel	**9.1**		5.2	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Selenium	ND		4.1	0.41	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Silver	ND		0.62	0.21	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Zinc	**18.1**		2.1	0.66	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.1	0.88	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	0.98	0.47	mg/Kg	☼	07/01/22 14:08	07/02/22 14:00	1
Chromium, trivalent	**6.8**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-115 (0-3)
Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1-Dichloroethane	ND		5.3	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichloroethane	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichloropropane	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Acetone	ND		26	4.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Benzene	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromoform	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromomethane	ND		5.3	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Carbon disulfide	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Dibromochloromethane	ND		5.3	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
cis-1,2-Dichloroethene	ND		5.3	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Ethylbenzene	ND		5.3	0.36	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methylcyclohexane	ND		5.3	0.80	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Styrene	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Toluene	ND		5.3	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
trans-1,2-Dichloroethene	ND		5.3	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Vinyl chloride	ND		5.3	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			06/21/22 18:30	06/27/22 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		71 - 125	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	06/21/22 18:30	06/27/22 14:26	1
4-Bromofluorobenzene (Surr)	77		72 - 126	06/21/22 18:30	06/27/22 14:26	1
Dibromofluoromethane (Surr)	98		60 - 140	06/21/22 18:30	06/27/22 14:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Acenaphthylene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Anthracene	ND		200	48	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(a)anthracene	ND		200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(a)pyrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(b)fluoranthene	**43**	**J**	200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(g,h,i)perylene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(k)fluoranthene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Chrysene	ND		200	44	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Dibenzofuran	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Fluoranthene	**68**	**J**	200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Fluorene	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Hexachlorobenzene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Indeno(1,2,3-cd)pyrene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
m-Cresol	ND		380	30	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Naphthalene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
o-Cresol	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
p-Cresol	ND		380	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Phenanthrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Phenol	ND		200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Pyrene	**61**	**J**	200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	930	T J	ug/Kg	☼	1.73		06/23/22 15:45	06/24/22 18:24	1
Unknown	640	T J	ug/Kg	☼	3.25		06/23/22 15:45	06/24/22 18:24	1
n-Hexadecanoic acid	260	T J N	ug/Kg	☼	11.44	57-10-3	06/23/22 15:45	06/24/22 18:24	1
Hexatriacontane	710	T J N	ug/Kg	☼	13.16	630-06-8	06/23/22 15:45	06/24/22 18:24	1
Nonacosane	400	T J N	ug/Kg	☼	13.43	630-03-5	06/23/22 15:45	06/24/22 18:24	1
Oxirane, [(dodecyloxy)methyl]-	1000	T J N	ug/Kg	☼	13.70	2461-18-9	06/23/22 15:45	06/24/22 18:24	1
Unknown	340	T J	ug/Kg	☼	13.95		06/23/22 15:45	06/24/22 18:24	1
1,15-Hexadecadiene	270	T J N	ug/Kg	☼	14.06	21964-51-2	06/23/22 15:45	06/24/22 18:24	1
1-Docosene	860	T J N	ug/Kg	☼	14.21	1599-67-3	06/23/22 15:45	06/24/22 18:24	1
Pentacosane	350	T J N	ug/Kg	☼	14.72	629-99-2	06/23/22 15:45	06/24/22 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		54 - 120	06/23/22 15:45	06/24/22 18:24	1
2-Fluorobiphenyl	89		60 - 120	06/23/22 15:45	06/24/22 18:24	1
2-Fluorophenol	74		52 - 120	06/23/22 15:45	06/24/22 18:24	1
Nitrobenzene-d5	81		53 - 120	06/23/22 15:45	06/24/22 18:24	1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5	*82*		*54 - 120*	*06/23/22 15:45*	*06/24/22 18:24*	*1*
p-Terphenyl-d14	*108*		*79 - 130*	*06/23/22 15:45*	*06/24/22 18:24*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
4,4'-DDE	**1.2**	**J**	1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
4,4'-DDT	**0.86**	**J**	1.9	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Aldrin	**0.89**	**J**	1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
beta-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Chlordane (.alpha.)	ND		1.9	0.94	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Dieldrin	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan sulfate	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endrin	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Heptachlor	ND		1.9	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Lindane	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*84*		*45 - 120*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
DCB Decachlorobiphenyl	*95*		*45 - 120*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
Tetrachloro-m-xylene	*97*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
Tetrachloro-m-xylene	*78*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:11*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	6.8	ug/Kg	☼	06/27/22 06:56	07/10/22 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*85*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:14*	*1*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:14*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.054	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanoic acid (PFOA)	**0.12**	**J**	0.23	0.068	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorononanoic acid (PFNA)	**0.043**	**J**	0.23	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanesulfonic acid (PFOS)	**0.21**	**J**	0.23	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.097	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFHpA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFOA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFOS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C5 PFNA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFBA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFHxA	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFDA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFUnA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFDoA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C8 FOSA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C5 PFPeA	*99*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFTeDA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
d5-NEtFOSAA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
M2-6:2 FTS	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
M2-8:2 FTS	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C3 PFBS	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.8**		2.4	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Barium	**47.6**		0.60	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Beryllium	**0.56**		0.24	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Cadmium	**0.24**		0.24	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Copper	**23.6**		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Lead	**22.1**		1.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Manganese	**366**	**B**	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Nickel	**24.7**		6.0	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Selenium	ND		4.8	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Silver	ND		0.72	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Zinc	**70.1**		2.4	0.77	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.047**		0.022	0.0050	mg/Kg	☼	06/24/22 09:43	06/24/22 12:51	1

Client Sample ID: SB-115 (0-3)

Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.98	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.1	0.54	mg/Kg	☼	06/30/22 09:23	06/30/22 10:23	1
Cyanide, Total	ND	H *-	1.1	0.51	mg/Kg	☼	07/05/22 11:57	07/05/22 13:30	1
Chromium, trivalent	**14.9**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-115 (6-8)

Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2,2-Tetrachloroethane	ND	*3	4.7	0.76	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2-Trichloroethane	ND	*3	4.7	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1-Dichloroethene	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2,4-Trichlorobenzene	ND	*3	4.7	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichlorobenzene	ND	*3	4.7	0.36	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichloroethane	ND		4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichloropropane	ND		4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,3-Dichlorobenzene	ND	*3	4.7	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,4-Dichlorobenzene	ND	*3	4.7	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
2-Hexanone	ND	*3	23	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
4-Methyl-2-pentanone (MIBK)	ND	*3	23	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Acetone	**5.8**	**J**	23	3.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Benzene	ND		4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromodichloromethane	ND		4.7	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromoform	ND	*3	4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromomethane	ND		4.7	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Carbon disulfide	ND		4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Carbon tetrachloride	ND		4.7	0.45	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chlorobenzene	ND	*3	4.7	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Dibromochloromethane	ND	*3	4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloroethane	ND		4.7	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloromethane	ND		4.7	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
cis-1,2-Dichloroethene	ND		4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
cis-1,3-Dichloropropene	ND		4.7	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Cyclohexane	ND		4.7	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Dichlorodifluoromethane	ND		4.7	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Ethylbenzene	ND	*3	4.7	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dibromoethane	ND	*3	4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Isopropylbenzene	ND	*3	4.7	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methylcyclohexane	ND		4.7	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methylene Chloride	ND		4.7	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	*3	4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Tetrachloroethene	ND	*3	4.7	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Toluene	ND	*3	4.7	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
trans-1,2-Dichloroethene	ND		4.7	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
trans-1,3-Dichloropropene	ND	*3	4.7	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Trichlorofluoromethane	ND		4.7	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Xylenes, Total	ND		9.3	0.78	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 14:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*117*	*3*	*71 - 125*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
4-Bromofluorobenzene (Surr)	*69*	*S1- *3*	*72 - 126*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
Dibromofluoromethane (Surr)	*108*		*60 - 140*	*06/21/22 18:30*	*06/27/22 14:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Acenaphthylene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Anthracene	ND		210	52	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(b)fluoranthene	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(g,h,i)perylene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(k)fluoranthene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Chrysene	ND		210	47	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Dibenzofuran	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Fluoranthene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Fluorene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
m-Cresol	ND		410	32	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Naphthalene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
o-Cresol	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
p-Cresol	ND		410	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Phenol	ND		210	32	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Pyrene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*970*	*T J*	*ug/Kg*	☼	*3.42*		*06/23/22 15:45*	*06/24/22 18:48*	*1*
n-Hexadecanoic acid	*230*	*T J N*	*ug/Kg*	☼	*11.45*	*57-10-3*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Tricosane	*200*	*T J N*	*ug/Kg*	☼	*12.60*	*638-67-5*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Hexatriacontane	*280*	*T J N*	*ug/Kg*	☼	*12.89*	*630-06-8*	*06/23/22 15:45*	*06/24/22 18:48*	*1*

Client Sample ID: SB-115 (6-8)
Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7
Matrix: Solid
Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	450	T J	ug/Kg	☼	13.17		06/23/22 15:45	06/24/22 18:48	1
Pentacosane	410	T J N	ug/Kg	☼	13.44	629-99-2	06/23/22 15:45	06/24/22 18:48	1
Tridecane, 2-methyl-	420	T J N	ug/Kg	☼	13.70	1560-96-9	06/23/22 15:45	06/24/22 18:48	1
Unknown	290	T J	ug/Kg	☼	13.95		06/23/22 15:45	06/24/22 18:48	1
Unknown	210	T J	ug/Kg	☼	14.20		06/23/22 15:45	06/24/22 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		54 - 120	06/23/22 15:45	06/24/22 18:48	1
2-Fluorobiphenyl	92		60 - 120	06/23/22 15:45	06/24/22 18:48	1
2-Fluorophenol	86		52 - 120	06/23/22 15:45	06/24/22 18:48	1
Nitrobenzene-d5	88		53 - 120	06/23/22 15:45	06/24/22 18:48	1
Phenol-d5	91		54 - 120	06/23/22 15:45	06/24/22 18:48	1
p-Terphenyl-d14	112		79 - 130	06/23/22 15:45	06/24/22 18:48	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Aldrin	ND		2.1	0.51	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
alpha-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
beta-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endrin	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	79		45 - 120	06/27/22 15:42	06/28/22 13:30	1
DCB Decachlorobiphenyl	88		45 - 120	06/27/22 15:42	06/28/22 13:30	1
Tetrachloro-m-xylene	104		30 - 124	06/27/22 15:42	06/28/22 13:30	1
Tetrachloro-m-xylene	73		30 - 124	06/27/22 15:42	06/28/22 13:30	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.5	ug/Kg	☼	06/27/22 06:56	07/10/22 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	68		28 - 129	06/27/22 06:56	07/10/22 16:33	1
2,4-Dichlorophenylacetic acid	69		28 - 129	06/27/22 06:56	07/10/22 16:33	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.60	0.40	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoropentanoic acid (PFPeA)	ND		0.24	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		0.24	0.055	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroheptanoic acid (PFHpA)	ND		0.24	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanoic acid (PFOA)	ND		0.24	0.070	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorononanoic acid (PFNA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorodecanoic acid (PFDA)	ND		0.24	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.24	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.4	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.4	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.4	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.4	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFHpA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFOA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFOS	*64*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C5 PFNA	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFBA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFHxA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFDA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFUnA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFDoA	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C8 FOSA	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C5 PFPeA	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFTeDA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
M2-6:2 FTS	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
M2-8:2 FTS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C3 PFBS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14.0**		2.6	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Barium	**92.0**		0.66	0.15	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Beryllium	**0.84**		0.26	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Cadmium	**0.095**	**J**	0.26	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Copper	**23.7**		1.3	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**15.6**		1.3	0.32	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Manganese	**462**	**B**	0.26	0.042	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Nickel	**34.1**		6.6	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Selenium	ND		5.3	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Silver	ND		0.79	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Zinc	**64.3**		2.6	0.84	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.1	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.2	0.60	mg/Kg	☼	07/01/22 14:08	07/02/22 14:02	1
Chromium, trivalent	**24.3**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2,2-Tetrachloroethane	ND		54	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2-Trichloroethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1-Dichloroethane	ND		54	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1-Dichloroethene	ND		54	19	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2,4-Trichlorobenzene	ND		54	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dibromo-3-Chloropropane	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichlorobenzene	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichloroethane	ND		54	22	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichloropropane	ND		54	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,3-Dichlorobenzene	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,4-Dichlorobenzene	ND		54	7.6	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
2-Butanone (MEK)	ND		270	160	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
2-Hexanone	ND		270	110	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
4-Methyl-2-pentanone (MIBK)	ND		270	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Acetone	ND		270	220	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Benzene	ND		54	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromodichloromethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromoform	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromomethane	ND		54	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Carbon disulfide	ND		54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Carbon tetrachloride	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chlorobenzene	ND		54	7.1	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Dibromochloromethane	ND		54	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chloroethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chloroform	ND		54	37	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
cis-1,2-Dichloroethene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
cis-1,3-Dichloropropene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Cyclohexane	ND		54	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Dichlorodifluoromethane	ND		54	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Ethylbenzene	ND		54	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dibromoethane	ND		54	9.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Isopropylbenzene	ND		54	8.1	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methyl acetate	**140**	**J**	270	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methyl tert-butyl ether	ND		54	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methylcyclohexane	**27**	**J**	54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methylene Chloride	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Styrene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Tetrachloroethene	**140**		54	7.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Toluene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
trans-1,2-Dichloroethene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
trans-1,3-Dichloropropene	ND		54	5.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Trichloroethene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Trichlorofluoromethane	ND		54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Vinyl chloride	ND		54	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Xylenes, Total	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*140*	*T J*	*ug/Kg*	☼	*1.52*		*06/24/22 09:44*	*06/24/22 22:25*	*1*
column bleed	*2100*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:25*	*1*
Unknown	*620*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*50 - 149*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*06/24/22 09:44*	*06/24/22 22:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Acenaphthylene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Anthracene	ND		190	48	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(a)anthracene	**30**	**J**	190	19	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(a)pyrene	**31**	**J**	190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(b)fluoranthene	**44**	**J**	190	31	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(g,h,i)perylene	ND		190	21	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(k)fluoranthene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Chrysene	ND		190	44	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Dibenzofuran	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Fluoranthene	**52**	**J**	190	21	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Fluorene	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Indeno(1,2,3-cd)pyrene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Cresol	ND		380	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Naphthalene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
o-Cresol	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
p-Cresol	ND		380	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Pentachlorophenol	ND		380	190	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Phenanthrene	**29**	**J**	190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Phenol	ND		190	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Pyrene	**49**	**J**	190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6800*	*T J*	*ug/Kg*	☼	*1.95*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Unknown	*910*	*T J*	*ug/Kg*	☼	*3.40*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Heptacosane, 1-chloro-	*690*	*T J N*	*ug/Kg*	☼	*13.15*	*62016-79-9*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Tetratetracontane	*420*	*T J N*	*ug/Kg*	☼	*13.42*	*7098-22-8*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Unknown	*1200*	*T J*	*ug/Kg*	☼	*13.69*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Hentriacontane	*330*	*T J N*	*ug/Kg*	☼	*13.94*	*630-04-6*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Oxirane, hexadecyl-	*730*	*T J N*	*ug/Kg*	☼	*14.05*	*7390-81-0*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Cyclotetracosane	*1500*	*T J N*	*ug/Kg*	☼	*14.20*	*297-03-0*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Octacosane	*440*	*T J N*	*ug/Kg*	☼	*14.70*	*630-02-4*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Eicosane	*460*	*T J N*	*ug/Kg*	☼	*15.30*	*112-95-8*	*06/23/22 15:45*	*06/24/22 19:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
2-Fluorobiphenyl	*91*		*60 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
2-Fluorophenol	*84*		*52 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Nitrobenzene-d5	*84*		*53 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Phenol-d5	*91*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
p-Terphenyl-d14	*108*		*79 - 130*	*06/23/22 15:45*	*06/24/22 19:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.63**	**J**	1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
4,4'-DDE	**1.7**	**J**	1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
4,4'-DDT	**1.6**	**J**	1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Aldrin	ND		1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Chlordane (.alpha.)	ND		1.9	0.96	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Dieldrin	ND		1.9	0.46	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan II	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endrin	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Lindane	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*45 - 120*	*06/27/22 15:42*	*06/28/22 13:50*	*1*
DCB Decachlorobiphenyl	*151*	*S1+*	*45 - 120*	*06/27/22 15:42*	*06/28/22 13:50*	*1*

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8

Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*116*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:50*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:50*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	7.0	ug/Kg	☼	06/27/22 06:56	07/10/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:51*	*1*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:51*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.56	0.37	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoropentanoic acid (PFPeA)	**0.090**	**J**	0.23	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.052	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroheptanoic acid (PFHpA)	**0.045**	**J**	0.23	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.23	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorononanoic acid (PFNA)	**0.056**	**J**	0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroundecanoic acid (PFUnA)	**0.034**	**J**	0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanesulfonic acid (PFOS)	**0.52**		0.23	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.094	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C4 PFHpA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C4 PFOA	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C4 PFOS	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C5 PFNA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C4 PFBA	*110*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C2 PFHxA	*100*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C2 PFDA	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C2 PFUnA	*92*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8

Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	89		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C8 FOSA	83		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C5 PFPeA	107		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C2 PFTeDA	93		50 - 150	06/27/22 08:23	06/28/22 02:36	1
d3-NMeFOSAA	106		50 - 150	06/27/22 08:23	06/28/22 02:36	1
d5-NEtFOSAA	114		50 - 150	06/27/22 08:23	06/28/22 02:36	1
M2-6:2 FTS	106		50 - 150	06/27/22 08:23	06/28/22 02:36	1
M2-8:2 FTS	108		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C3 PFBS	92		50 - 150	06/27/22 08:23	06/28/22 02:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.5		2.4	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Barium	446		0.60	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Beryllium	0.58		0.24	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Cadmium	1.3		0.24	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Copper	15.8		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Lead	43.5		1.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Manganese	3440	B	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Nickel	24.2		6.0	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Selenium	ND		4.8	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Silver	ND		0.72	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Zinc	113		2.4	0.77	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.024	0.0055	mg/Kg	☼	06/24/22 09:43	06/24/22 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.99	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.54	mg/Kg	☼	07/01/22 14:37	07/02/22 17:06	1
Chromium, trivalent	15.9		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9

Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1,2,2-Tetrachloroethane	ND		3.9	0.64	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1,2-Trichloroethane	ND		3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.90	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2,4-Trichlorobenzene	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dibromo-3-Chloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Acetone	ND		20	3.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Benzene	ND		3.9	0.19	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromodichloromethane	ND		3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromoform	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Dibromochloromethane	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloroethane	ND		3.9	0.89	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
cis-1,3-Dichloropropene	ND		3.9	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Cyclohexane	ND		3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Dichlorodifluoromethane	ND		3.9	0.33	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dibromoethane	ND		3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Isopropylbenzene	ND		3.9	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methylcyclohexane	ND		3.9	0.60	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Styrene	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Tetrachloroethene	**0.54**	**J**	3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Toluene	ND		3.9	0.30	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
trans-1,2-Dichloroethene	ND		3.9	0.41	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
trans-1,3-Dichloropropene	ND		3.9	1.7	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Trichloroethene	ND		3.9	0.87	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Xylenes, Total	ND		7.9	0.66	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/24/22 15:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 125*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*	*06/21/22 18:30*	*06/24/22 15:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Anthracene	ND		190	47	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(a)anthracene	ND		190	19	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(a)pyrene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(b)fluoranthene	ND		190	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(g,h,i)perylene	ND		190	20	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(k)fluoranthene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Chrysene	ND		190	42	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Dibenzofuran	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Fluoranthene	ND		190	20	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Fluorene	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Indeno(1,2,3-cd)pyrene	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
m-Cresol	ND		370	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Naphthalene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
o-Cresol	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
p-Cresol	ND		370	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Phenanthrene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Phenol	ND		190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Pyrene	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7100*	*T J*	*ug/Kg*	☼	*1.96*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*850*	*T J*	*ug/Kg*	☼	*3.41*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
n-Hexadecanoic acid	*390*	*T J N*	*ug/Kg*	☼	*11.45*	*57-10-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*12.16*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
Heptadecane	*210*	*T J N*	*ug/Kg*	☼	*12.89*	*629-78-7*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Nonadecane	*340*	*T J N*	*ug/Kg*	☼	*13.16*	*629-92-5*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Hexacosane	*330*	*T J N*	*ug/Kg*	☼	*13.43*	*630-01-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Octadecane	*250*	*T J N*	*ug/Kg*	☼	*13.95*	*593-45-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*14.19*		*06/23/22 15:45*	*06/24/22 19:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
2-Fluorobiphenyl	*83*		*60 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
2-Fluorophenol	*77*		*52 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Nitrobenzene-d5	*76*		*53 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Phenol-d5	*80*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
p-Terphenyl-d14	*107*		*79 - 130*	*06/23/22 15:45*	*06/24/22 19:37*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
4,4'-DDE	ND		1.9	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
4,4'-DDT	ND		1.9	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Aldrin	ND		1.9	0.46	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
beta-BHC	**0.67**	**J**	1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (.alpha.)	ND		1.9	0.93	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Dieldrin	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan sulfate	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endrin	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Heptachlor	ND		1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Lindane	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
DCB Decachlorobiphenyl	*93*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
Tetrachloro-m-xylene	*107*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:10*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		18	6.6	ug/Kg	☼	06/27/22 06:56	07/10/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:10*	*1*
2,4-Dichlorophenylacetic acid	*79*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:10*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.55	0.36	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.061	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanoic acid (PFOA)	ND		0.22	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.22	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.091	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.063	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1

Client Sample ID: SB-116 (6.0-7.5)

Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	65		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C4 PFHpA	78		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C4 PFOA	71		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C4 PFOS	56		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C5 PFNA	65		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C4 PFBA	82		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C2 PFHxA	76		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C2 PFDA	67		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C2 PFUnA	64		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C2 PFDoA	59		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C8 FOSA	58		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C5 PFPeA	83		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C2 PFTeDA	61		50 - 150	06/27/22 08:23	06/28/22 02:44	1
d3-NMeFOSAA	71		50 - 150	06/27/22 08:23	06/28/22 02:44	1
d5-NEtFOSAA	76		50 - 150	06/27/22 08:23	06/28/22 02:44	1
M2-6:2 FTS	65		50 - 150	06/27/22 08:23	06/28/22 02:44	1
M2-8:2 FTS	65		50 - 150	06/27/22 08:23	06/28/22 02:44	1
13C3 PFBS	70		50 - 150	06/27/22 08:23	06/28/22 02:44	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.5**		2.3	0.45	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Barium	**75.6**		0.57	0.12	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Beryllium	**0.74**		0.23	0.032	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Cadmium	**0.085**	**J**	0.23	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Copper	**22.4**		1.1	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Lead	**14.1**		1.1	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Manganese	**305**	**B**	0.23	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Nickel	**27.7**		5.7	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Selenium	ND		4.5	0.45	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Silver	ND		0.68	0.23	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Zinc	**69.0**		2.3	0.72	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.021	0.0048	mg/Kg	☼	06/24/22 09:43	06/24/22 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.2	0.92	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.51	mg/Kg	☼	07/01/22 14:37	07/02/22 17:09	1
Chromium, trivalent	**20.6**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-117 (0.5-3.0)

Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1,2,2-Tetrachloroethane	ND		63	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1,2-Trichloroethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1-Dichloroethane	ND		63	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1-Dichloroethene	ND		63	22	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2,4-Trichlorobenzene	ND		63	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dibromo-3-Chloropropane	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichlorobenzene	ND		63	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichloroethane	ND		63	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichloropropane	ND		63	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,3-Dichlorobenzene	ND		63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,4-Dichlorobenzene	ND		63	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
2-Butanone (MEK)	ND		320	190	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
2-Hexanone	ND		320	130	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
4-Methyl-2-pentanone (MIBK)	ND		320	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Acetone	ND		320	260	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Benzene	ND		63	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromodichloromethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromoform	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromomethane	ND		63	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Carbon disulfide	ND		63	29	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Carbon tetrachloride	ND		63	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chlorobenzene	ND		63	8.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Dibromochloromethane	ND		63	31	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloroethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloroform	ND		63	43	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloromethane	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
cis-1,2-Dichloroethene	ND		63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
cis-1,3-Dichloropropene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Cyclohexane	**51**	**J**	63	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Dichlorodifluoromethane	ND		63	28	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Ethylbenzene	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dibromoethane	ND		63	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Isopropylbenzene	ND		63	9.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methyl acetate	**130**	**J**	320	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methyl tert-butyl ether	ND		63	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methylcyclohexane	**150**		63	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methylene Chloride	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Styrene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Tetrachloroethene	**92**		63	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Toluene	**31**	**J**	63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
trans-1,2-Dichloroethene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
trans-1,3-Dichloropropene	ND		63	6.2	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Trichloroethene	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Trichlorofluoromethane	ND		63	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Vinyl chloride	ND		63	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Xylenes, Total	ND		130	35	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
unknown	*190*	*T J*	*ug/Kg*	☼	*1.52*		*06/24/22 09:44*	*06/24/22 22:49*	*1*
column bleed	*2200*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:49*	*1*
Unknown	*440*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:49*	*1*

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		50 - 149	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichloroethane-d4 (Surr)	101		53 - 146	06/24/22 09:44	06/24/22 22:49	1
4-Bromofluorobenzene (Surr)	105		49 - 148	06/24/22 09:44	06/24/22 22:49	1
Dibromofluoromethane (Surr)	95		60 - 140	06/24/22 09:44	06/24/22 22:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Anthracene	ND		200	50	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(a)anthracene	**150**	**J**	200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(a)pyrene	**180**	**J**	200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(b)fluoranthene	**550**		200	32	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(g,h,i)perylene	**580**		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(k)fluoranthene	**140**	**J**	200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Chrysene	**190**	**J**	200	45	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Dibenz(a,h)anthracene	**130**	**J**	200	36	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Fluoranthene	**120**	**J**	200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Fluorene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Indeno(1,2,3-cd)pyrene	**500**		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
m-Cresol	ND		390	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Naphthalene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
o-Cresol	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
p-Cresol	ND		390	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Phenanthrene	**87**	**J**	200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Phenol	ND		200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Pyrene	**100**	**J**	200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	8300	T J	ug/Kg	☼	1.94		06/23/22 15:45	06/24/22 20:02	1
Unknown	980	T J	ug/Kg	☼	3.38		06/23/22 15:45	06/24/22 20:02	1
n-Hexadecanoic acid	640	T J N	ug/Kg	☼	11.43	57-10-3	06/23/22 15:45	06/24/22 20:02	1
Hexatriacontane	490	T J N	ug/Kg	☼	12.58	630-06-8	06/23/22 15:45	06/24/22 20:02	1
Tetracosane	760	T J N	ug/Kg	☼	12.87	646-31-1	06/23/22 15:45	06/24/22 20:02	1
Tricosane, 2-methyl-	1100	T J N	ug/Kg	☼	13.15	1928-30-9	06/23/22 15:45	06/24/22 20:02	1
Hexacosane	1200	T J N	ug/Kg	☼	13.41	630-01-3	06/23/22 15:45	06/24/22 20:02	1
Pentadecane, 8-heptyl-	1200	T J N	ug/Kg	☼	13.68	71005-15-7	06/23/22 15:45	06/24/22 20:02	1
1-Iodoundecane	960	T J N	ug/Kg	☼	13.93	4282-44-4	06/23/22 15:45	06/24/22 20:02	1
Eicosane	850	T J N	ug/Kg	☼	14.17	112-95-8	06/23/22 15:45	06/24/22 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		54 - 120	06/23/22 15:45	06/24/22 20:02	1
2-Fluorobiphenyl	92		60 - 120	06/23/22 15:45	06/24/22 20:02	1
2-Fluorophenol	81		52 - 120	06/23/22 15:45	06/24/22 20:02	1
Nitrobenzene-d5	87		53 - 120	06/23/22 15:45	06/24/22 20:02	1
Phenol-d5	89		54 - 120	06/23/22 15:45	06/24/22 20:02	1
p-Terphenyl-d14	110		79 - 130	06/23/22 15:45	06/24/22 20:02	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.64**	**J**	2.0	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
4,4'-DDE	**0.74**	**J**	2.0	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
4,4'-DDT	**1.1**	**J**	2.0	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Aldrin	ND		2.0	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
alpha-BHC	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
beta-BHC	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Chlordane (.alpha.)	ND		2.0	0.99	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
delta-BHC	ND		2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Dieldrin	ND		2.0	0.48	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan I	ND		2.0	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan II	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endrin	ND		2.0	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Heptachlor	ND		2.0	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Lindane	**0.55**	**J**	2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:29*	*1*
DCB Decachlorobiphenyl	*252*	*S1+*	*45 - 120*	*06/27/22 15:42*	*06/28/22 14:29*	*1*
Tetrachloro-m-xylene	*97*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:29*	*1*
Tetrachloro-m-xylene	*74*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:29*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		20	7.1	ug/Kg	☼	06/27/22 06:56	07/10/22 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*65*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:28*	*1*
2,4-Dichlorophenylacetic acid	*66*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:28*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.57	0.37	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoropentanoic acid (PFPeA)	**0.068**	**J**	0.23	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.052	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanoic acid (PFOA)	**0.12**	**J**	0.23	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorononanoic acid (PFNA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1

Client Sample ID: SB-117 (0.5-3.0)
Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10
Matrix: Solid
Percent Solids: 83.2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.094	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.065	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFHpA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFOA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFOS	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C5 PFNA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFBA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFHxA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFDA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFUnA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFDoA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C8 FOSA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C5 PFPeA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFTeDA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
d3-NMeFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
d5-NEtFOSAA	*98*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
M2-8:2 FTS	*95*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C3 PFBS	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**18.2**		2.5	0.49	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Barium	**168**		0.62	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Beryllium	**1.3**		0.25	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Cadmium	**0.22**	**J**	0.25	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Copper	**36.6**		1.2	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Lead	**92.4**		1.2	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Manganese	**209**	**B**	0.25	0.039	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Nickel	**31.6**		6.2	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Selenium	**0.50**	**J**	4.9	0.49	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Silver	ND		0.74	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Zinc	**63.6**		2.5	0.79	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**		0.024	0.0056	mg/Kg	☼	06/24/22 09:43	06/24/22 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.99	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.51	mg/Kg	☼	07/01/22 14:37	07/02/22 17:12	1
Chromium, trivalent	**14.5**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.34	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.1	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Acetone	ND		23	3.9	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Benzene	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromomethane	ND		4.6	0.42	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloroform	ND		4.6	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
cis-1,3-Dichloropropene	ND		4.6	0.67	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Cyclohexane	ND		4.6	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Isopropylbenzene	ND		4.6	0.70	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Styrene	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Toluene	ND		4.6	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
trans-1,2-Dichloroethene	ND		4.6	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Trichlorofluoromethane	ND		4.6	0.44	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Xylenes, Total	ND		9.2	0.78	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			06/21/22 18:30	06/24/22 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		71 - 125	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	06/21/22 18:30	06/24/22 15:41	1
4-Bromofluorobenzene (Surr)	79		72 - 126	06/21/22 18:30	06/24/22 15:41	1
Dibromofluoromethane (Surr)	100		60 - 140	06/21/22 18:30	06/24/22 15:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Acenaphthylene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Anthracene	ND		210	53	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(b)fluoranthene	ND		210	34	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(g,h,i)perylene	ND		210	23	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(k)fluoranthene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Chrysene	ND		210	48	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Dibenz(a,h)anthracene	ND		210	38	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Dibenzofuran	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Fluoranthene	ND		210	23	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Fluorene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
m-Cresol	ND		410	33	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Naphthalene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
o-Cresol	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
p-Cresol	ND		410	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Phenol	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Pyrene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	880	T J	ug/Kg	☼	3.33		06/23/22 15:45	06/24/22 20:28	1
Unknown	200	T J	ug/Kg	☼	11.21		06/23/22 15:45	06/24/22 20:28	1
Unknown	230	T J	ug/Kg	☼	11.42		06/23/22 15:45	06/24/22 20:28	1
Unknown	230	T J	ug/Kg	☼	12.54		06/23/22 15:45	06/24/22 20:28	1
Unknown	250	T J	ug/Kg	☼	12.82		06/23/22 15:45	06/24/22 20:28	1
Pentadecane, 2,6,10-trimethyl-	350	T J N	ug/Kg	☼	13.10	3892-00-0	06/23/22 15:45	06/24/22 20:28	1
Docosane, 11-butyl-	300	T J N	ug/Kg	☼	13.37	13475-76-8	06/23/22 15:45	06/24/22 20:28	1
Eicosane, 2-methyl-	330	T J N	ug/Kg	☼	13.63	1560-84-5	06/23/22 15:45	06/24/22 20:28	1
Octacosane	200	T J N	ug/Kg	☼	13.89	630-02-4	06/23/22 15:45	06/24/22 20:28	1
Unknown	180	T J	ug/Kg	☼	15.61		06/23/22 15:45	06/24/22 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		54 - 120	06/23/22 15:45	06/24/22 20:28	1
2-Fluorobiphenyl	89		60 - 120	06/23/22 15:45	06/24/22 20:28	1
2-Fluorophenol	80		52 - 120	06/23/22 15:45	06/24/22 20:28	1
Nitrobenzene-d5	81		53 - 120	06/23/22 15:45	06/24/22 20:28	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*85*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
p-Terphenyl-d14	*105*		*79 - 130*	*06/23/22 15:45*	*06/24/22 20:28*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Aldrin	ND		2.1	0.51	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
alpha-BHC	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
beta-BHC	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan II	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endrin	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*115*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
DCB Decachlorobiphenyl	*97*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
Tetrachloro-m-xylene	*105*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:49*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.6	ug/Kg	☼	06/27/22 06:56	07/10/22 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:46*	*1*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:46*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.63	0.41	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorohexanoic acid (PFHxA)	ND		0.25	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoroheptanoic acid (PFHpA)	ND		0.25	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanoic acid (PFOA)	ND		0.25	0.073	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorononanoic acid (PFNA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorodecanoic acid (PFDA)	ND		0.25	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoroundecanoic acid (PFUnA)	ND		0.25	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorododecanoic acid (PFDoA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorotridecanoic acid (PFTriA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.25	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.25	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.25	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.25	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.25	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.25	0.024	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.5	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.5	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.5	0.071	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.5	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*64*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFHpA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFOA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFOS	*59*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C5 PFNA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFBA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFHxA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFDA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFUnA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFDoA	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C8 FOSA	*61*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C5 PFPeA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFTeDA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
d3-NMeFOSAA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
d5-NEtFOSAA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
M2-6:2 FTS	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
M2-8:2 FTS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C3 PFBS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.6**		2.6	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Barium	**73.2**		0.66	0.15	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Beryllium	**0.60**		0.26	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Cadmium	**0.12**	**J**	0.26	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Copper	**19.8**		1.3	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Lead	**12.7**		1.3	0.32	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Manganese	**484**	**B**	0.26	0.042	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Nickel	**26.0**		6.6	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Selenium	ND		5.3	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Silver	ND		0.79	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Zinc	**48.9**		2.6	0.85	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.022	0.0052	mg/Kg	☼	06/24/22 09:43	06/24/22 13:06	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	**1.3**		1.1	0.54	mg/Kg	☼	06/30/22 12:04	06/30/22 13:40	1
Cyanide, Total	ND	H	1.2	0.59	mg/Kg	☼	07/07/22 12:37	07/07/22 15:51	1
Chromium, trivalent	**16.7**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-205 (1.5)
Lab Sample ID: 480-199197-12
Date Collected: 06/20/22 17:02
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2,2-Tetrachloroethane	ND		78	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2-Trichloroethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1-Dichloroethane	ND		78	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1-Dichloroethene	ND		78	27	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2,4-Trichlorobenzene	ND		78	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dibromo-3-Chloropropane	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichlorobenzene	ND		78	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichloroethane	ND		78	32	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichloropropane	ND		78	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,3-Dichlorobenzene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,4-Dichlorobenzene	ND		78	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
2-Butanone (MEK)	ND		390	230	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
2-Hexanone	ND		390	160	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
4-Methyl-2-pentanone (MIBK)	ND		390	25	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Acetone	ND		390	320	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Benzene	ND		78	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromodichloromethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromoform	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromomethane	ND		78	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Carbon disulfide	ND		78	35	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Carbon tetrachloride	ND		78	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chlorobenzene	ND		78	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Dibromochloromethane	ND		78	38	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloroethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloroform	ND		78	53	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloromethane	ND		78	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
cis-1,2-Dichloroethene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
cis-1,3-Dichloropropene	ND		78	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Cyclohexane	ND		78	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Dichlorodifluoromethane	ND		78	34	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Ethylbenzene	ND		78	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dibromoethane	ND		78	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Isopropylbenzene	ND		78	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methyl acetate	ND		390	37	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methyl tert-butyl ether	ND		78	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methylcyclohexane	ND		78	36	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methylene Chloride	ND		78	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-205 (1.5)
Lab Sample ID: 480-199197-12
Date Collected: 06/20/22 17:02
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		78	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Tetrachloroethene	**490**		78	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Toluene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
trans-1,2-Dichloroethene	ND		78	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
trans-1,3-Dichloropropene	ND		78	7.6	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Trichloroethene	ND		78	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Trichlorofluoromethane	ND		78	36	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Vinyl chloride	ND		78	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Xylenes, Total	ND		160	43	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*1400*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 23:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
4-Bromofluorobenzene (Surr)	*102*		*49 - 148*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*06/24/22 09:44*	*06/24/22 23:12*	*1*

Client Sample ID: SB-205 (7)
Lab Sample ID: 480-199197-13
Date Collected: 06/20/22 17:09
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2,2-Tetrachloroethane	ND		110	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2-Trichloroethane	ND		110	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1-Dichloroethane	ND		110	34	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1-Dichloroethene	ND		110	38	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2,4-Trichlorobenzene	ND		110	42	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dibromo-3-Chloropropane	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichlorobenzene	ND		110	28	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichloroethane	ND		110	45	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichloropropane	ND		110	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,3-Dichlorobenzene	ND		110	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,4-Dichlorobenzene	ND		110	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
2-Butanone (MEK)	ND		550	330	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
2-Hexanone	ND		550	220	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
4-Methyl-2-pentanone (MIBK)	ND		550	35	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Acetone	ND		550	450	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Benzene	ND		110	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromodichloromethane	ND		110	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromoform	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromomethane	ND		110	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Carbon disulfide	ND		110	50	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Carbon tetrachloride	ND		110	28	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chlorobenzene	ND		110	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Dibromochloromethane	ND		110	53	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2

Client Sample ID: SB-205 (7)

Lab Sample ID: 480-199197-13

Date Collected: 06/20/22 17:09
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		110	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chloroform	ND		110	75	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chloromethane	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
cis-1,2-Dichloroethene	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
cis-1,3-Dichloropropene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Cyclohexane	ND		110	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Dichlorodifluoromethane	ND		110	48	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Ethylbenzene	ND		110	32	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dibromoethane	ND		110	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Isopropylbenzene	ND		110	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methyl acetate	ND		550	52	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methyl tert-butyl ether	ND		110	41	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methylcyclohexane	ND		110	51	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methylene Chloride	ND		110	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Styrene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Tetrachloroethene	**8100**		110	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Toluene	ND		110	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
trans-1,2-Dichloroethene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
trans-1,3-Dichloropropene	ND		110	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Trichloroethene	**160**		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Trichlorofluoromethane	ND		110	51	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Vinyl chloride	ND		110	37	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Xylenes, Total	ND		220	61	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/24/22 23:35*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*50 - 149*	*06/24/22 09:44*	*06/24/22 23:35*	*2*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*	*06/24/22 09:44*	*06/24/22 23:35*	*2*
4-Bromofluorobenzene (Surr)	*102*		*49 - 148*	*06/24/22 09:44*	*06/24/22 23:35*	*2*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*06/24/22 09:44*	*06/24/22 23:35*	*2*

Client Sample ID: SB-206 (2)

Lab Sample ID: 480-199197-14

Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2,2-Tetrachloroethane	ND		44	7.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2-Trichloroethane	ND		44	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1-Dichloroethane	ND		44	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1-Dichloroethene	ND		44	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2,4-Trichlorobenzene	ND		44	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dibromo-3-Chloropropane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichlorobenzene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichloroethane	ND		44	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichloropropane	ND		44	7.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-206 (2)
Lab Sample ID: 480-199197-14
Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,4-Dichlorobenzene	ND		44	6.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
2-Butanone (MEK)	ND		220	130	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
2-Hexanone	ND		220	91	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
4-Methyl-2-pentanone (MIBK)	ND		220	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Acetone	ND		220	180	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Benzene	ND		44	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromodichloromethane	ND		44	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromoform	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromomethane	ND		44	9.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Carbon disulfide	ND		44	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Carbon tetrachloride	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chlorobenzene	ND		44	5.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Dibromochloromethane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloroethane	ND		44	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloroform	ND		44	31	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloromethane	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
cis-1,2-Dichloroethene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
cis-1,3-Dichloropropene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Cyclohexane	ND		44	9.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Dichlorodifluoromethane	ND		44	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Ethylbenzene	ND		44	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dibromoethane	ND		44	7.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Isopropylbenzene	ND		44	6.7	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methyl acetate	ND		220	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methyl tert-butyl ether	ND		44	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methylcyclohexane	ND		44	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methylene Chloride	ND		44	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Styrene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Tetrachloroethene	**670**		44	6.0	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Toluene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
trans-1,2-Dichloroethene	ND		44	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
trans-1,3-Dichloropropene	ND		44	4.4	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Trichloroethene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Trichlorofluoromethane	ND		44	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Vinyl chloride	ND		44	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Xylenes, Total	ND		89	25	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/24/22 23:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*49 - 148*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*06/24/22 09:44*	*06/24/22 23:58*	*1*

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-206 (6)
Lab Sample ID: 480-199197-15
Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2,4-Trichlorobenzene	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dibromo-3-Chloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Acetone	**5.3**	**J**	22	3.8	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Benzene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dibromoethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Isopropylbenzene	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Styrene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Toluene	ND		4.5	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-206 (6)
Lab Sample ID: 480-199197-15
Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.9

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			06/21/22 18:30	06/27/22 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	119		71 - 125	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 126	06/21/22 18:30	06/27/22 15:14	1
4-Bromofluorobenzene (Surr)	66	S1-	72 - 126	06/21/22 18:30	06/27/22 15:14	1
Dibromofluoromethane (Surr)	103		60 - 140	06/21/22 18:30	06/27/22 15:14	1

Client Sample ID: SB-207 (1-3)
Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2,2-Tetrachloroethane	ND		92	15	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2-Trichloroethane	ND		92	19	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1-Dichloroethane	ND		92	29	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1-Dichloroethene	ND		92	32	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2,4-Trichlorobenzene	ND		92	35	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dibromo-3-Chloropropane	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dichlorobenzene	ND		92	24	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dichloroethane	ND		92	38	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dichloropropane	ND		92	15	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,3-Dichlorobenzene	ND		92	25	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,4-Dichlorobenzene	ND		92	13	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
2-Butanone (MEK)	ND		460	270	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
2-Hexanone	ND		460	190	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
4-Methyl-2-pentanone (MIBK)	ND		460	30	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Acetone	ND		460	380	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Benzene	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromodichloromethane	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromoform	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromomethane	ND		92	20	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Carbon disulfide	ND		92	42	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Carbon tetrachloride	ND		92	24	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chlorobenzene	ND		92	12	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Dibromochloromethane	ND		92	45	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloroethane	ND		92	19	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloroform	ND		92	63	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloromethane	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
cis-1,2-Dichloroethene	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
cis-1,3-Dichloropropene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Cyclohexane	ND		92	21	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Dichlorodifluoromethane	ND		92	40	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Ethylbenzene	ND		92	27	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dibromoethane	ND		92	16	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Isopropylbenzene	ND		92	14	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methyl acetate	ND		460	44	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methyl tert-butyl ether	ND		92	35	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-207 (1-3)
Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		92	43	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methylene Chloride	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Styrene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Tetrachloroethene	**3400**		92	12	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Toluene	ND		92	25	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
trans-1,2-Dichloroethene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
trans-1,3-Dichloropropene	ND		92	9.1	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Trichloroethene	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Trichlorofluoromethane	ND		92	43	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Vinyl chloride	ND		92	31	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Xylenes, Total	ND		180	51	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/25/22 00:21*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*50 - 149*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
1,2-Dichloroethane-d4 (Surr)	*104*		*53 - 146*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
4-Bromofluorobenzene (Surr)	*101*		*49 - 148*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*06/24/22 09:44*	*06/25/22 00:21*	*2*

Client Sample ID: SB-207 (6-8)
Lab Sample ID: 480-199197-17
Date Collected: 06/20/22 16:15
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 80.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2,2-Tetrachloroethane	ND	*3	4.2	0.69	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2,4-Trichlorobenzene	ND	*3	4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichlorobenzene	ND	*3	4.2	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,3-Dichlorobenzene	ND	*3	4.2	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,4-Dichlorobenzene	ND	*3	4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
2-Butanone (MEK)	**4.0**	**J**	21	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Acetone	**24**		21	3.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Benzene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromodichloromethane	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1

Client Sample ID: SB-207 (6-8)
Lab Sample ID: 480-199197-17

Date Collected: 06/20/22 16:15
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 80.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloromethane	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
cis-1,2-Dichloroethene	**6.1**		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Isopropylbenzene	ND	*3	4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methyl acetate	**9.0**	**J**	21	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Styrene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Toluene	ND		4.2	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
trans-1,2-Dichloroethene	ND		4.2	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*5.8*	*T J*	*ug/Kg*	☼	*9.59*		*06/21/22 18:30*	*06/27/22 15:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*71 - 125*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*06/21/22 18:30*	*06/27/22 15:39*	*1*

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.69	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.97	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2,4-Trichlorobenzene	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Acetone	ND		21	3.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Benzene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromodichloromethane	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloromethane	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dibromoethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Isopropylbenzene	ND		4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methylcyclohexane	ND		4.2	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methylene Chloride	ND		4.2	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Styrene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Toluene	ND		4.2	0.32	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
trans-1,2-Dichloroethene	ND		4.2	0.44	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/24/22 16:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*71 - 125*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
4-Bromofluorobenzene (Surr)	*80*		*72 - 126*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*06/21/22 18:30*	*06/24/22 16:54*	*1*

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid

Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Anthracene	ND		200	49	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(a)anthracene	ND		200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(a)pyrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(b)fluoranthene	ND		200	32	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(g,h,i)perylene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(k)fluoranthene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Chrysene	ND		200	45	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Fluoranthene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Fluorene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Indeno(1,2,3-cd)pyrene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
m-Cresol	ND		390	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Naphthalene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
o-Cresol	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
p-Cresol	ND		390	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Phenanthrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Phenol	ND		200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Pyrene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*770*	*T J*	*ug/Kg*	☼	*3.32*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*310*	*T J*	*ug/Kg*	☼	*11.41*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Eicosane	*290*	*T J N*	*ug/Kg*	☼	*12.84*	*112-95-8*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Octacosane	*490*	*T J N*	*ug/Kg*	☼	*13.12*	*630-02-4*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heneicosane	*520*	*T J N*	*ug/Kg*	☼	*13.39*	*629-94-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Pentadecane, 8-heptyl-	*490*	*T J N*	*ug/Kg*	☼	*13.65*	*71005-15-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heptacosane	*410*	*T J N*	*ug/Kg*	☼	*13.91*	*593-49-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heptadecane, 9-octyl-	*290*	*T J N*	*ug/Kg*	☼	*14.15*	*7225-64-1*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*14.40*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*15.61*		*06/23/22 15:45*	*06/24/22 20:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
2-Fluorobiphenyl	*78*		*60 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
2-Fluorophenol	*71*		*52 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Nitrobenzene-d5	*74*		*53 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Phenol-d5	*78*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
p-Terphenyl-d14	*99*		*79 - 130*	*06/23/22 15:45*	*06/24/22 20:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
4,4'-DDE	ND		1.9	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
4,4'-DDT	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Aldrin	ND		1.9	0.48	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Chlordane (.alpha.)	ND		1.9	0.97	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Dieldrin	ND		1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan II	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endrin	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Lindane	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*45 - 120*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
DCB Decachlorobiphenyl	*216*	*S1+*	*45 - 120*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
Tetrachloro-m-xylene	*101*		*30 - 124*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*06/27/22 15:42*	*06/28/22 15:08*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	7.0	ug/Kg	☼	06/27/22 06:56	07/10/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*54*		*28 - 129*	*06/27/22 06:56*	*07/10/22 18:05*	*1*
2,4-Dichlorophenylacetic acid	*53*		*28 - 129*	*06/27/22 06:56*	*07/10/22 18:05*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.053	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanoic acid (PFOA)	ND		0.23	0.067	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorononanoic acid (PFNA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.096	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid

Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFHpA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFOA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFOS	*63*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C5 PFNA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFBA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFHxA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFDA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFUnA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFDoA	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C8 FOSA	*61*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C5 PFPeA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFTeDA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
d3-NMeFOSAA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
d5-NEtFOSAA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
M2-6:2 FTS	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
M2-8:2 FTS	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C3 PFBS	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**		2.4	0.47	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Barium	**84.8**		0.59	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Beryllium	**0.76**		0.24	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Cadmium	**0.064**	**J**	0.24	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Copper	**18.1**		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Lead	**11.6**		1.2	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Manganese	**296**	**B**	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Nickel	**26.9**		5.9	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Selenium	ND		4.7	0.47	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Silver	ND		0.71	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Zinc	**61.6**		2.4	0.76	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.4	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	07/01/22 14:37	07/02/22 17:13	1
Chromium, trivalent	**23.0**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/24/22 07:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/24/22 07:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/24/22 07:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/24/22 07:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/24/22 07:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/24/22 07:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/24/22 07:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/24/22 07:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/24/22 07:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/24/22 07:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/24/22 07:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/24/22 07:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/24/22 07:40	1
2-Butanone (MEK)	**1.8**	**J**	10	1.3	ug/L			06/24/22 07:40	1
2-Hexanone	ND		5.0	1.2	ug/L			06/24/22 07:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/24/22 07:40	1
Acetone	**5.0**	**J**	10	3.0	ug/L			06/24/22 07:40	1
Benzene	ND		1.0	0.41	ug/L			06/24/22 07:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/24/22 07:40	1
Bromoform	ND		1.0	0.26	ug/L			06/24/22 07:40	1
Bromomethane	ND		1.0	0.69	ug/L			06/24/22 07:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/24/22 07:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/24/22 07:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/24/22 07:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/24/22 07:40	1
Chloroethane	ND		1.0	0.32	ug/L			06/24/22 07:40	1
Chloroform	ND		1.0	0.34	ug/L			06/24/22 07:40	1
Chloromethane	ND		1.0	0.35	ug/L			06/24/22 07:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/24/22 07:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/24/22 07:40	1
Cyclohexane	ND		1.0	0.18	ug/L			06/24/22 07:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/24/22 07:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/24/22 07:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/24/22 07:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/24/22 07:40	1
Methyl acetate	ND		2.5	1.3	ug/L			06/24/22 07:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/24/22 07:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/24/22 07:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/24/22 07:40	1
Styrene	ND		1.0	0.73	ug/L			06/24/22 07:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/24/22 07:40	1
Toluene	ND		1.0	0.51	ug/L			06/24/22 07:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/24/22 07:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/24/22 07:40	1
Trichloroethene	ND		1.0	0.46	ug/L			06/24/22 07:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/24/22 07:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/24/22 07:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/24/22 07:40	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					06/24/22 07:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		80 - 120		06/24/22 07:40	1
1,2-Dichloroethane-d4 (Surr)	87		77 - 120		06/24/22 07:40	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/24/22 07:40	1
Dibromofluoromethane (Surr)	95		75 - 123		06/24/22 07:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		06/23/22 08:12	06/24/22 20:21	1
Acenaphthylene	ND		5.0	0.38	ug/L		06/23/22 08:12	06/24/22 20:21	1
Anthracene	ND		5.0	0.28	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		06/23/22 08:12	06/24/22 20:21	1
Chrysene	ND		5.0	0.33	ug/L		06/23/22 08:12	06/24/22 20:21	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		06/23/22 08:12	06/24/22 20:21	1
Dibenzofuran	ND		10	0.51	ug/L		06/23/22 08:12	06/24/22 20:21	1
Fluoranthene	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
Fluorene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		06/23/22 08:12	06/24/22 20:21	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 20:21	1
m-Cresol	ND		10	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
Naphthalene	ND		5.0	0.76	ug/L		06/23/22 08:12	06/24/22 20:21	1
o-Cresol	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
p-Cresol	ND		10	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Pentachlorophenol	ND		10	2.2	ug/L		06/23/22 08:12	06/24/22 20:21	1
Phenanthrene	ND		5.0	0.44	ug/L		06/23/22 08:12	06/24/22 20:21	1
Phenol	ND		5.0	0.39	ug/L		06/23/22 08:12	06/24/22 20:21	1
Pyrene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 20:21	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	220	T J	ug/L		3.04		06/23/22 08:12	06/24/22 20:21	1
Unknown	9.7	T J	ug/L		4.98		06/23/22 08:12	06/24/22 20:21	1
Column Bleed	1.9	T J	ug/L		7.01		06/23/22 08:12	06/24/22 20:21	1
Unknown	4.9	T J	ug/L		7.89		06/23/22 08:12	06/24/22 20:21	1
Eicosane	3.8	T J N	ug/L		12.18	112-95-8	06/23/22 08:12	06/24/22 20:21	1
Pentacosane	5.2	T J N	ug/L		12.60	629-99-2	06/23/22 08:12	06/24/22 20:21	1
Hexacosane	6.3	T J N	ug/L		13.04	630-01-3	06/23/22 08:12	06/24/22 20:21	1
Heptacosane	6.6	T J N	ug/L		13.51	593-49-7	06/23/22 08:12	06/24/22 20:21	1
Heptadecane	5.2	T J N	ug/L		14.02	629-78-7	06/23/22 08:12	06/24/22 20:21	1
Tetratetracontane	2.8	T J N	ug/L		14.54	7098-22-8	06/23/22 08:12	06/24/22 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		48 - 120	06/23/22 08:12	06/24/22 20:21	1
2-Fluorophenol	32	S1-	35 - 120	06/23/22 08:12	06/24/22 20:21	1
Nitrobenzene-d5	57		46 - 120	06/23/22 08:12	06/24/22 20:21	1
Phenol-d5	23		22 - 120	06/23/22 08:12	06/24/22 20:21	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	*88*		*60 - 148*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
2,4,6-Tribromophenol	*75*		*41 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0096**	**J**	0.050	0.0092	ug/L		06/22/22 15:06	06/24/22 10:17	1
4,4'-DDE	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 10:17	1
4,4'-DDT	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 10:17	1
Aldrin	ND		0.050	0.0081	ug/L		06/22/22 15:06	06/24/22 10:17	1
alpha-BHC	ND		0.050	0.0077	ug/L		06/22/22 15:06	06/24/22 10:17	1
Chlordane (.alpha.)	ND		0.050	0.015	ug/L		06/22/22 15:06	06/24/22 10:17	1
beta-BHC	ND		0.050	0.025	ug/L		06/22/22 15:06	06/24/22 10:17	1
delta-BHC	ND		0.050	0.010	ug/L		06/22/22 15:06	06/24/22 10:17	1
Dieldrin	ND		0.050	0.0098	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan I	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan II	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endrin	ND		0.050	0.014	ug/L		06/22/22 15:06	06/24/22 10:17	1
Lindane	ND		0.050	0.0080	ug/L		06/22/22 15:06	06/24/22 10:17	1
Heptachlor	ND		0.050	0.0085	ug/L		06/22/22 15:06	06/24/22 10:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*33*		*20 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
DCB Decachlorobiphenyl	*58*		*20 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
Tetrachloro-m-xylene	*70*		*44 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
Tetrachloro-m-xylene	*67*		*44 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		0.48	0.048	ug/L		06/23/22 09:32	06/24/22 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*89*		*48 - 132*	*06/23/22 09:32*	*06/24/22 17:06*	*1*
2,4-Dichlorophenylacetic acid	*82*		*48 - 132*	*06/23/22 09:32*	*06/24/22 17:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.42	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.59	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.38	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.48	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.43	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.66	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorobutanoic acid (PFBA)	ND		3.9	0.93	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.53	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.51	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.36	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.38	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.37	ng/L		06/27/22 11:32	06/28/22 00:00	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.50	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.72	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.31	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.32	ng/L		06/27/22 11:32	06/28/22 00:00	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.9	1.5	ng/L		06/27/22 11:32	06/28/22 00:00	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.9	1.2	ng/L		06/27/22 11:32	06/28/22 00:00	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		3.9	1.0	ng/L		06/27/22 11:32	06/28/22 00:00	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.6	0.60	ng/L		06/27/22 11:32	06/28/22 00:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*94*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFHpA	*106*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFOA	*103*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFOS	*91*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C5 PFNA	*95*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFBA	*111*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFHxA	*111*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFDA	*104*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFUnA	*99*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFDoA	*90*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C8 FOSA	*87*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C5 PFPeA	*113*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFTeDA	*89*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
d3-NMeFOSAA	*115*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
d5-NEtFOSAA	*116*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
M2-8:2 FTS	*109*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C3 PFBS	*103*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		06/23/22 08:47	06/24/22 01:38	1
Barium	ND		0.0020	0.00070	mg/L		06/23/22 08:47	06/24/22 01:38	1
Beryllium	ND		0.0020	0.00030	mg/L		06/23/22 08:47	06/24/22 01:38	1
Cadmium	ND		0.0020	0.00050	mg/L		06/23/22 08:47	06/24/22 01:38	1
Copper	ND		0.010	0.0016	mg/L		06/23/22 08:47	06/24/22 01:38	1
Lead	ND		0.010	0.0030	mg/L		06/23/22 08:47	06/24/22 01:38	1
Manganese	**0.0011**	**J B**	0.0030	0.00040	mg/L		06/23/22 08:47	06/24/22 01:38	1
Nickel	ND		0.010	0.0013	mg/L		06/23/22 08:47	06/24/22 01:38	1
Selenium	ND		0.025	0.0087	mg/L		06/23/22 08:47	06/24/22 01:38	1
Silver	ND		0.0060	0.0017	mg/L		06/23/22 08:47	06/24/22 01:38	1
Zinc	**0.030**		0.010	0.0015	mg/L		06/23/22 08:47	06/24/22 01:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/24/22 10:57	06/24/22 14:13	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND	H	0.010	0.0050	mg/L			06/22/22 11:00	1
Cyanide, Total	**0.0070**	**J**	0.010	0.0050	mg/L		06/30/22 14:24	06/30/22 18:26	1

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(50-149)	(53-146)	(49-148)	(60-140)
480-199197-1	SB113 (1-5)	102	102	100	97
480-199197-3	SB-114 (0.5-2.0)	106	103	103	95
480-199197-8	SB-116 (0.5-2.5)	104	101	100	94
480-199197-10	SB-117 (0.5-3.0)	102	101	105	95
480-199197-12	SB-205 (1.5)	102	103	102	96
480-199197-13	SB-205 (7)	104	101	102	94
480-199197-14	SB-206 (2)	102	102	104	96
480-199197-16	SB-207 (1-3)	103	104	101	97
LCS 480-631468/13-A	Lab Control Sample	104	100	105	106
MB 480-631468/3-A	Method Blank	102	104	103	99

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-125)	(64-126)	(72-126)	(60-140)
480-199197-2	SB113 (15-18)	133 S1+ *3	120	56 S1- *3	119
480-199197-4	SB-114 (6.0-10.0)	122	102	66 S1-	99
480-199197-5	SB-114 (12-16)	108	104	69 S1-	104
480-199197-6	SB-115 (0-3)	106	101	77	98
480-199197-7	SB-115 (6-8)	117 *3	111	69 S1- *3	108
480-199197-9	SB-116 (6.0-7.5)	98	94	85	92
480-199197-11	SB-117 (8-10)	105	101	79	100
480-199197-15	SB-206 (6)	119	104	66 S1-	103
480-199197-17	SB-207 (6-8)	110	102	73	103
480-199197-18	Field Duplicate	95	100	80	101
LCS 480-631414/1-A	Lab Control Sample	95	98	85	96
LCS 480-631627/1-A	Lab Control Sample	94	97	85	97
MB 480-631414/2-A	Method Blank	92	99	92	99
MB 480-631627/2-A	Method Blank	95	98	96	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-199197-19	Equipment Blank	92	87	100	95

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
LCS 480-631347/6	Lab Control Sample	95	92	104	96
MB 480-631347/8	Method Blank	92	86	101	97

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-199197-1	SB113 (1-5)	91	91	82	89	87	105
480-199197-1 MS	SB113 (1-5)	96	72	61	65	67	109
480-199197-1 MSD	SB113 (1-5)	84	69	61	63	67	97
480-199197-2	SB113 (15-18)	61	86	78	83	81	96
480-199197-3	SB-114 (0.5-2.0)	94	92	87	89	91	113
480-199197-4	SB-114 (6.0-10.0)	89	91	75	82	80	105
480-199197-5	SB-114 (12-16)	103	97	88	90	92	116
480-199197-6	SB-115 (0-3)	89	89	74	81	82	108
480-199197-7	SB-115 (6-8)	90	92	86	88	91	112
480-199197-8	SB-116 (0.5-2.5)	90	91	84	84	91	108
480-199197-9	SB-116 (6.0-7.5)	87	83	77	76	80	107
480-199197-10	SB-117 (0.5-3.0)	99	92	81	87	89	110
480-199197-11	SB-117 (8-10)	89	89	80	81	85	105
480-199197-18	Field Duplicate	79	78	71	74	78	99
LCS 480-631383/2-A	Lab Control Sample	93	83	70	78	75	109
MB 480-631383/1-A	Method Blank	93	94	87	90	90	109

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHd14	TBP
Lab Sample ID	Client Sample ID	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)	(41-120)
480-199197-19	Equipment Blank	69	32 S1-	57	23	88	75
LCS 480-631241/2-A	Lab Control Sample	95	62	77	47	100	110
LCSD 480-631241/3-A	Lab Control Sample Dup	98	61	76	47	104	112
MB 480-631241/1-A	Method Blank	93	55	76	41	98	68

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (45-120)	DCBP2 (45-120)	TCX1 (30-124)	TCX2 (30-124)
480-199197-1	SB113 (1-5)	0 S1-	0 S1-	0 S1-	0 S1-
480-199197-2	SB113 (15-18)	77	84	86	60
480-199197-2 MS	SB113 (15-18)	79	91	87	62
480-199197-2 MSD	SB113 (15-18)	78	83	84	55
480-199197-3	SB-114 (0.5-2.0)	83	94	101	72
480-199197-4	SB-114 (6.0-10.0)	76	91	91	63
480-199197-5	SB-114 (12-16)	77	85	103	69
480-199197-6	SB-115 (0-3)	84	95	97	78
480-199197-7	SB-115 (6-8)	79	88	104	73
480-199197-8	SB-116 (0.5-2.5)	105	151 S1+	116	79
480-199197-9	SB-116 (6.0-7.5)	83	93	107	79
480-199197-10	SB-117 (0.5-3.0)	84	252 S1+	97	74
480-199197-11	SB-117 (8-10)	115	97	105	72
480-199197-18	Field Duplicate	85	216 S1+	101	79
LCS 480-631723/2-A	Lab Control Sample	89	103	95	73
MB 480-631723/1-A	Method Blank	80	102	100	75

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCBP1 (20-120)	DCBP2 (20-120)	TCX1 (44-120)	TCX2 (44-120)
480-199197-19	Equipment Blank	33	58	70	67
LCS 480-631179/2-A	Lab Control Sample	34	54	61	68
LCSD 480-631179/3-A	Lab Control Sample Dup	40	60	73	84
MB 480-631179/1-A	Method Blank	36	57	64	72

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (28-129)	DCPAA2 (28-129)
480-199197-1	SB113 (1-5)	72	73
480-199197-2	SB113 (15-18)	67	65
480-199197-3	SB-114 (0.5-2.0)	69	67

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 8151A - Herbicides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (28-129)	DCPAA2 (28-129)
480-199197-4	SB-114 (6.0-10.0)	67	63
480-199197-5	SB-114 (12-16)	67	63
480-199197-6	SB-115 (0-3)	85	74
480-199197-7	SB-115 (6-8)	68	69
480-199197-8	SB-116 (0.5-2.5)	72	72
480-199197-9	SB-116 (6.0-7.5)	81	79
480-199197-10	SB-117 (0.5-3.0)	65	66
480-199197-11	SB-117 (8-10)	73	63
480-199197-18	Field Duplicate	54	53
LCS 480-631635/2-A	Lab Control Sample	75	72
MB 480-631635/1-A	Method Blank	74	71

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (48-132)	DCPAA2 (48-132)
480-199197-19	Equipment Blank	89	82
LCS 480-631266/2-A	Lab Control Sample	96	89
LCSD 480-631266/3-A	Lab Control Sample Dup	102	92
MB 480-631266/1-A	Method Blank	100	94

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Isotope Dilution Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-199197-1	SB113 (1-5)	77	96	87	69	84	105	100	85
480-199197-2	SB113 (15-18)	77	90	87	76	81	97	94	83
480-199197-3	SB-114 (0.5-2.0)	73	83	83	65	79	95	92	81
480-199197-4	SB-114 (6.0-10.0)	71	81	75	60	73	88	79	72
480-199197-5	SB-114 (12-16)	82	93	90	76	90	101	100	94
480-199197-5 MS	SB-114 (12-16)	78	88	88	74	87	101	91	85
480-199197-5 MSD	SB-114 (12-16)	77	90	89	73	78	95	90	86
480-199197-6	SB-115 (0-3)	79	87	83	70	80	101	91	84
480-199197-7	SB-115 (6-8)	70	84	79	64	72	89	85	74
480-199197-8	SB-116 (0.5-2.5)	85	97	96	80	87	110	100	91
480-199197-9	SB-116 (6.0-7.5)	65	78	71	56	65	82	76	67
480-199197-10	SB-117 (0.5-3.0)	83	90	88	75	86	97	94	86
480-199197-11	SB-117 (8-10)	64	78	77	59	68	86	82	73
480-199197-18	Field Duplicate	67	80	76	63	74	86	87	80
LCS 200-181138/2-A	Lab Control Sample	88	99	94	80	89	106	100	92
MB 200-181138/1-A	Method Blank	89	101	96	79	88	107	101	86

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-199197-1	SB113 (1-5)	81	77	74	108	86	97	97	77
480-199197-2	SB113 (15-18)	82	77	79	102	81	99	102	83
480-199197-3	SB-114 (0.5-2.0)	73	76	69	98	78	85	89	70
480-199197-4	SB-114 (6.0-10.0)	70	68	65	90	69	83	82	68
480-199197-5	SB-114 (12-16)	78	74	80	105	77	99	96	87
480-199197-5 MS	SB-114 (12-16)	76	76	72	104	78	101	98	79
480-199197-5 MSD	SB-114 (12-16)	83	78	70	99	73	98	100	78
480-199197-6	SB-115 (0-3)	75	79	70	99	83	90	101	89
480-199197-7	SB-115 (6-8)	70	72	66	91	75	89	88	75
480-199197-8	SB-116 (0.5-2.5)	92	89	83	107	93	106	114	106
480-199197-9	SB-116 (6.0-7.5)	64	59	58	83	61	71	76	65
480-199197-10	SB-117 (0.5-3.0)	81	78	73	101	85	97	98	91
480-199197-11	SB-117 (8-10)	68	67	61	89	69	76	74	69
480-199197-18	Field Duplicate	68	66	61	89	69	81	80	67
LCS 200-181138/2-A	Lab Control Sample	81	73	76	109	79	101	96	100
MB 200-181138/1-A	Method Blank	79	70	75	113	81	103	97	102

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)						
480-199197-1	SB113 (1-5)	80	84						
480-199197-2	SB113 (15-18)	87	85						
480-199197-3	SB-114 (0.5-2.0)	71	79						
480-199197-4	SB-114 (6.0-10.0)	66	75						
480-199197-5	SB-114 (12-16)	84	87						
480-199197-5 MS	SB-114 (12-16)	84	85						
480-199197-5 MSD	SB-114 (12-16)	82	82						
480-199197-6	SB-115 (0-3)	96	84						
480-199197-7	SB-115 (6-8)	76	76						
480-199197-8	SB-116 (0.5-2.5)	108	92						
480-199197-9	SB-116 (6.0-7.5)	65	70						

Isotope Dilution Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M282FTS	C3PFBS						
Lab Sample ID	Client Sample ID	(50-150)	(50-150)						
480-199197-10	SB-117 (0.5-3.0)	95	90						
480-199197-11	SB-117 (8-10)	70	70						
480-199197-18	Field Duplicate	66	72						
LCS 200-181138/2-A	Lab Control Sample	94	96						
MB 200-181138/1-A	Method Blank	94	98						

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFHxS	C4PFHA	PFOA	PFOS	PFNA	PFBA	PFHxA	PFDA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-199197-19	Equipment Blank	94	106	103	91	95	111	111	104
LCS 200-181147/2-A	Lab Control Sample	100	103	102	86	102	116	110	101
LCSD 200-181147/3-A	Lab Control Sample Dup	96	105	103	91	98	113	113	108
MB 200-181147/1-A	Method Blank	100	107	107	91	101	116	109	97

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA	PFDoA	PFOSA	PFPeA	PFTDA	d3NMFOS	d5NEFOS	M262FTS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-199197-19	Equipment Blank	99	90	87	113	89	115	116	108
LCS 200-181147/2-A	Lab Control Sample	89	83	83	119	85	119	112	105
LCSD 200-181147/3-A	Lab Control Sample Dup	93	79	83	115	76	117	112	102
MB 200-181147/1-A	Method Blank	96	87	81	120	83	116	116	109

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M282FTS	C3PFBS						
Lab Sample ID	Client Sample ID	(50-150)	(50-150)						
480-199197-19	Equipment Blank	109	103						
LCS 200-181147/2-A	Lab Control Sample	107	105						
LCSD 200-181147/3-A	Lab Control Sample Dup	118	101						
MB 200-181147/1-A	Method Blank	113	107						

Isotope Dilution Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-631347/8
Matrix: Water
Analysis Batch: 631347

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		1.0	0.82	ug/L			06/24/22 01:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/24/22 01:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/24/22 01:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/24/22 01:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/24/22 01:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/24/22 01:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/24/22 01:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/24/22 01:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/24/22 01:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/24/22 01:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/24/22 01:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/24/22 01:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/24/22 01:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/24/22 01:06	1
2-Hexanone	ND		5.0	1.2	ug/L			06/24/22 01:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/24/22 01:06	1
Acetone	ND		10	3.0	ug/L			06/24/22 01:06	1
Benzene	ND		1.0	0.41	ug/L			06/24/22 01:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/24/22 01:06	1
Bromoform	ND		1.0	0.26	ug/L			06/24/22 01:06	1
Bromomethane	ND		1.0	0.69	ug/L			06/24/22 01:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/24/22 01:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/24/22 01:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/24/22 01:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/24/22 01:06	1
Chloroethane	ND		1.0	0.32	ug/L			06/24/22 01:06	1
Chloroform	ND		1.0	0.34	ug/L			06/24/22 01:06	1
Chloromethane	ND		1.0	0.35	ug/L			06/24/22 01:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/24/22 01:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/24/22 01:06	1
Cyclohexane	ND		1.0	0.18	ug/L			06/24/22 01:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/24/22 01:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/24/22 01:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/24/22 01:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/24/22 01:06	1
Methyl acetate	ND		2.5	1.3	ug/L			06/24/22 01:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/24/22 01:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/24/22 01:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/24/22 01:06	1
Styrene	ND		1.0	0.73	ug/L			06/24/22 01:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/24/22 01:06	1
Toluene	ND		1.0	0.51	ug/L			06/24/22 01:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/24/22 01:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/24/22 01:06	1
Trichloroethene	ND		1.0	0.46	ug/L			06/24/22 01:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/24/22 01:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/24/22 01:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/24/22 01:06	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-631347/8
Matrix: Water
Analysis Batch: 631347

Client Sample ID: Method Blank
Prep Type: Total/NA

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					06/24/22 01:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		80 - 120		06/24/22 01:06	1
1,2-Dichloroethane-d4 (Surr)	86		77 - 120		06/24/22 01:06	1
4-Bromofluorobenzene (Surr)	101		73 - 120		06/24/22 01:06	1
Dibromofluoromethane (Surr)	97		75 - 123		06/24/22 01:06	1

Lab Sample ID: LCS 480-631347/6
Matrix: Water
Analysis Batch: 631347

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	25.0	23.5		ug/L		94	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	76 - 120
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.0		ug/L		92	61 - 148
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	23.4		ug/L		93	66 - 127
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	21.1		ug/L		85	56 - 134
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	21.2		ug/L		85	75 - 120
1,2-Dichloropropane	25.0	25.5		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.1		ug/L		93	80 - 120
2-Butanone (MEK)	125	109		ug/L		88	57 - 140
2-Hexanone	125	108		ug/L		87	65 - 127
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	71 - 125
Acetone	125	109		ug/L		87	56 - 142
Benzene	25.0	24.2		ug/L		97	71 - 124
Bromodichloromethane	25.0	23.3		ug/L		93	80 - 122
Bromoform	25.0	24.1		ug/L		97	61 - 132
Bromomethane	25.0	21.5		ug/L		86	55 - 144
Carbon disulfide	25.0	22.9		ug/L		92	59 - 134
Carbon tetrachloride	25.0	22.1		ug/L		89	72 - 134
Chlorobenzene	25.0	23.9		ug/L		95	80 - 120
Dibromochloromethane	25.0	23.8		ug/L		95	75 - 125
Chloroethane	25.0	22.6		ug/L		90	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	19.8		ug/L		79	68 - 124
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124
Cyclohexane	25.0	25.0		ug/L		100	59 - 135
Dichlorodifluoromethane	25.0	16.0		ug/L		64	59 - 135
Ethylbenzene	25.0	23.2		ug/L		93	77 - 123
1,2-Dibromoethane	25.0	23.6		ug/L		94	77 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-631347/6
Matrix: Water
Analysis Batch: 631347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isopropylbenzene	25.0	22.8		ug/L		91	77 - 122
Methyl acetate	50.0	47.1		ug/L		94	74 - 133
Methyl tert-butyl ether	25.0	22.7		ug/L		91	77 - 120
Methylcyclohexane	25.0	23.9		ug/L		96	68 - 134
Methylene Chloride	25.0	24.7		ug/L		99	75 - 124
Styrene	25.0	24.3		ug/L		97	80 - 120
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	22.7		ug/L		91	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	22.7		ug/L		91	80 - 120
Trichloroethene	25.0	23.0		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	21.9		ug/L		88	62 - 150
Vinyl chloride	25.0	22.4		ug/L		89	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: MB 480-631414/2-A
Matrix: Solid
Analysis Batch: 631472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
2-Hexanone	ND		25	2.5	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Acetone	ND		25	4.2	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Benzene	ND		5.0	0.25	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Bromoform	ND		5.0	2.5	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Bromomethane	ND		5.0	0.45	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		06/23/22 19:56	06/24/22 12:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-631414/2-A
Matrix: Solid
Analysis Batch: 631472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5.0	0.66	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Chloroethane	ND		5.0	1.1	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Chloroform	ND		5.0	0.31	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Chloromethane	ND		5.0	0.30	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Cyclohexane	ND		5.0	0.70	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Methyl acetate	ND		25	3.0	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Styrene	ND		5.0	0.25	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Toluene	ND		5.0	0.38	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Trichloroethene	ND		5.0	1.1	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		06/23/22 19:56	06/24/22 12:42	1
Xylenes, Total	ND		10	0.84	ug/Kg		06/23/22 19:56	06/24/22 12:42	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*06/23/22 19:56*	*06/24/22 12:42*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*71 - 125*	*06/23/22 19:56*	*06/24/22 12:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*	*06/23/22 19:56*	*06/24/22 12:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*06/23/22 19:56*	*06/24/22 12:42*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*06/23/22 19:56*	*06/24/22 12:42*	*1*

Lab Sample ID: LCS 480-631414/1-A
Matrix: Solid
Analysis Batch: 631472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	45.6		ug/Kg		91	77 - 121
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/Kg		111	80 - 120
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.5		ug/Kg		87	60 - 140
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	73 - 126
1,1-Dichloroethene	50.0	43.3		ug/Kg		87	59 - 125
1,2,4-Trichlorobenzene	50.0	47.5		ug/Kg		95	64 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-631414/1-A
Matrix: Solid
Analysis Batch: 631472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	50.0	56.1		ug/Kg		112	63 - 124
1,2-Dichlorobenzene	50.0	51.6		ug/Kg		103	75 - 120
1,2-Dichloroethane	50.0	49.5		ug/Kg		99	77 - 122
1,2-Dichloropropane	50.0	48.5		ug/Kg		97	75 - 124
1,3-Dichlorobenzene	50.0	48.6		ug/Kg		97	74 - 120
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	73 - 120
2-Butanone (MEK)	250	241		ug/Kg		96	70 - 134
2-Hexanone	250	264		ug/Kg		106	59 - 130
4-Methyl-2-pentanone (MIBK)	250	284		ug/Kg		114	65 - 133
Acetone	250	206		ug/Kg		82	61 - 137
Benzene	50.0	47.1		ug/Kg		94	79 - 127
Bromodichloromethane	50.0	52.7		ug/Kg		105	80 - 122
Bromoform	50.0	55.3		ug/Kg		111	68 - 126
Bromomethane	50.0	53.3		ug/Kg		107	37 - 149
Carbon disulfide	50.0	43.2		ug/Kg		86	64 - 131
Carbon tetrachloride	50.0	45.9		ug/Kg		92	75 - 135
Chlorobenzene	50.0	48.3		ug/Kg		97	76 - 124
Dibromochloromethane	50.0	56.7		ug/Kg		113	76 - 125
Chloroethane	50.0	53.4		ug/Kg		107	69 - 135
Chloroform	50.0	46.8		ug/Kg		94	80 - 120
Chloromethane	50.0	55.1		ug/Kg		110	63 - 127
cis-1,2-Dichloroethene	50.0	46.4		ug/Kg		93	81 - 120
cis-1,3-Dichloropropene	50.0	46.9		ug/Kg		94	80 - 120
Cyclohexane	50.0	44.4		ug/Kg		89	65 - 120
Dichlorodifluoromethane	50.0	45.4		ug/Kg		91	57 - 142
Ethylbenzene	50.0	48.9		ug/Kg		98	80 - 120
1,2-Dibromoethane	50.0	49.4		ug/Kg		99	78 - 120
Isopropylbenzene	50.0	52.7		ug/Kg		105	72 - 120
Methyl acetate	100	97.1		ug/Kg		97	55 - 136
Methyl tert-butyl ether	50.0	47.3		ug/Kg		95	63 - 125
Methylcyclohexane	50.0	42.7		ug/Kg		85	60 - 140
Methylene Chloride	50.0	50.5		ug/Kg		101	61 - 127
Styrene	50.0	47.6		ug/Kg		95	80 - 120
Tetrachloroethene	50.0	46.6		ug/Kg		93	74 - 122
Toluene	50.0	47.2		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	78 - 126
trans-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	73 - 123
Trichloroethene	50.0	46.7		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	46.5		ug/Kg		93	65 - 146
Vinyl chloride	50.0	49.1		ug/Kg		98	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*71 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-631468/3-A
Matrix: Solid
Analysis Batch: 631522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,1-Dichloroethane	ND		100	31	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,1-Dichloroethene	ND		100	35	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2-Dichloroethane	ND		100	41	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2-Dichloropropane	ND		100	16	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
2-Butanone (MEK)	ND		500	300	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
2-Hexanone	ND		500	210	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Acetone	ND		500	410	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Benzene	ND		100	19	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Bromodichloromethane	ND		100	20	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Bromoform	ND		100	50	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Bromomethane	ND		100	22	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Carbon disulfide	ND		100	46	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Carbon tetrachloride	ND		100	26	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Chlorobenzene	ND		100	13	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Dibromochloromethane	ND		100	48	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Chloroethane	ND		100	21	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Chloroform	ND		100	69	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Chloromethane	ND		100	24	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Cyclohexane	ND		100	22	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Ethylbenzene	ND		100	29	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
1,2-Dibromoethane	ND		100	18	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Isopropylbenzene	ND		100	15	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Methyl acetate	ND		500	48	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Methylcyclohexane	ND		100	47	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Methylene Chloride	ND		100	20	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Styrene	ND		100	24	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Tetrachloroethene	ND		100	13	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Toluene	ND		100	27	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Trichloroethene	ND		100	28	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Trichlorofluoromethane	ND		100	47	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Vinyl chloride	ND		100	34	ug/Kg		06/24/22 09:44	06/24/22 17:57	1
Xylenes, Total	ND		200	55	ug/Kg		06/24/22 09:44	06/24/22 17:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-631468/3-A
Matrix: Solid
Analysis Batch: 631522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631468

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg				06/24/22 09:44	06/24/22 17:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		50 - 149	06/24/22 09:44	06/24/22 17:57	1
1,2-Dichloroethane-d4 (Surr)	104		53 - 146	06/24/22 09:44	06/24/22 17:57	1
4-Bromofluorobenzene (Surr)	103		49 - 148	06/24/22 09:44	06/24/22 17:57	1
Dibromofluoromethane (Surr)	99		60 - 140	06/24/22 09:44	06/24/22 17:57	1

Lab Sample ID: LCS 480-631468/13-A
Matrix: Solid
Analysis Batch: 631522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	2500	2760		ug/Kg		110	68 - 130
1,1,2,2-Tetrachloroethane	2500	2360		ug/Kg		94	73 - 120
1,1,2-Trichloroethane	2500	2580		ug/Kg		103	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2540		ug/Kg		102	10 - 179
1,1-Dichloroethane	2500	2660		ug/Kg		106	78 - 121
1,1-Dichloroethene	2500	2710		ug/Kg		108	48 - 133
1,2,4-Trichlorobenzene	2500	2740		ug/Kg		109	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2010		ug/Kg		81	56 - 122
1,2-Dichlorobenzene	2500	2660		ug/Kg		106	78 - 125
1,2-Dichloroethane	2500	2530		ug/Kg		101	74 - 127
1,2-Dichloropropane	2500	2700		ug/Kg		108	80 - 120
1,3-Dichlorobenzene	2500	2700		ug/Kg		108	80 - 120
1,4-Dichlorobenzene	2500	2680		ug/Kg		107	80 - 120
2-Butanone (MEK)	12500	10600		ug/Kg		85	54 - 149
2-Hexanone	12500	11400		ug/Kg		91	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	10800		ug/Kg		87	74 - 120
Acetone	12500	9840		ug/Kg		79	47 - 141
Benzene	2500	2780		ug/Kg		111	77 - 125
Bromodichloromethane	2500	2580		ug/Kg		103	71 - 121
Bromoform	2500	2290		ug/Kg		92	48 - 125
Bromomethane	2500	2330		ug/Kg		93	39 - 149
Carbon disulfide	2500	2490		ug/Kg		100	40 - 136
Carbon tetrachloride	2500	2670		ug/Kg		107	54 - 135
Chlorobenzene	2500	2770		ug/Kg		111	76 - 126
Dibromochloromethane	2500	2510		ug/Kg		100	64 - 120
Chloroethane	2500	2400		ug/Kg		96	23 - 150
Chloroform	2500	2660		ug/Kg		106	78 - 120
Chloromethane	2500	2060		ug/Kg		82	61 - 124
cis-1,2-Dichloroethene	2500	2730		ug/Kg		109	79 - 124
cis-1,3-Dichloropropene	2500	2680		ug/Kg		107	75 - 121
Cyclohexane	2500	2540		ug/Kg		102	49 - 129
Dichlorodifluoromethane	2500	1810		ug/Kg		72	10 - 150
Ethylbenzene	2500	2750		ug/Kg		110	78 - 124
1,2-Dibromoethane	2500	2640		ug/Kg		106	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-631468/13-A
Matrix: Solid
Analysis Batch: 631522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631468

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Isopropylbenzene			2500	2690		ug/Kg		108	76 - 120		
Methyl acetate			5000	4440		ug/Kg		89	71 - 123		
Methyl tert-butyl ether			2500	2470		ug/Kg		99	67 - 137		
Methylcyclohexane			2500	2750		ug/Kg		110	50 - 130		
Methylene Chloride			2500	2820		ug/Kg		113	75 - 118		
Styrene			2500	2880		ug/Kg		115	80 - 120		
Tetrachloroethene			2500	2870		ug/Kg		115	73 - 133		
Toluene			2500	2750		ug/Kg		110	75 - 124		
trans-1,2-Dichloroethene			2500	2770		ug/Kg		111	74 - 129		
trans-1,3-Dichloropropene			2500	2470		ug/Kg		99	73 - 120		
Trichloroethene			2500	2790		ug/Kg		112	75 - 131		
Trichlorofluoromethane			2500	2400		ug/Kg		96	29 - 158		
Vinyl chloride			2500	2300		ug/Kg		92	59 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*50 - 149*
1,2-Dichloroethane-d4 (Surr)	*100*		*53 - 146*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*
Dibromofluoromethane (Surr)	*106*		*60 - 140*

Lab Sample ID: MB 480-631627/2-A
Matrix: Solid
Analysis Batch: 631682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
2-Hexanone	ND		25	2.5	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Acetone	ND		25	4.2	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Benzene	ND		5.0	0.25	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Bromoform	ND		5.0	2.5	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Bromomethane	ND		5.0	0.45	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		06/26/22 20:08	06/27/22 12:49	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-631627/2-A
Matrix: Solid
Analysis Batch: 631682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5.0	0.66	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Chloroethane	ND		5.0	1.1	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Chloroform	ND		5.0	0.31	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Chloromethane	ND		5.0	0.30	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Cyclohexane	ND		5.0	0.70	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Methyl acetate	ND		25	3.0	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Styrene	ND		5.0	0.25	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Toluene	ND		5.0	0.38	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Trichloroethene	ND		5.0	1.1	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		06/26/22 20:08	06/27/22 12:49	1
Xylenes, Total	ND		10	0.84	ug/Kg		06/26/22 20:08	06/27/22 12:49	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*06/26/22 20:08*	*06/27/22 12:49*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*71 - 125*	*06/26/22 20:08*	*06/27/22 12:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*	*06/26/22 20:08*	*06/27/22 12:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*06/26/22 20:08*	*06/27/22 12:49*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*06/26/22 20:08*	*06/27/22 12:49*	*1*

Lab Sample ID: LCS 480-631627/1-A
Matrix: Solid
Analysis Batch: 631682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	44.4		ug/Kg		89	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.1		ug/Kg		102	80 - 120
1,1,2-Trichloroethane	50.0	49.4		ug/Kg		99	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	39.5		ug/Kg		79	60 - 140
1,1-Dichloroethane	50.0	46.8		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	41.4		ug/Kg		83	59 - 125
1,2,4-Trichlorobenzene	50.0	47.0		ug/Kg		94	64 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-631627/1-A
Matrix: Solid
Analysis Batch: 631682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	50.0	56.4		ug/Kg		113	63 - 124
1,2-Dichlorobenzene	50.0	48.2		ug/Kg		96	75 - 120
1,2-Dichloroethane	50.0	48.7		ug/Kg		97	77 - 122
1,2-Dichloropropane	50.0	47.3		ug/Kg		95	75 - 124
1,3-Dichlorobenzene	50.0	47.6		ug/Kg		95	74 - 120
1,4-Dichlorobenzene	50.0	47.5		ug/Kg		95	73 - 120
2-Butanone (MEK)	250	254		ug/Kg		102	70 - 134
2-Hexanone	250	262		ug/Kg		105	59 - 130
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	65 - 133
Acetone	250	232		ug/Kg		93	61 - 137
Benzene	50.0	45.3		ug/Kg		91	79 - 127
Bromodichloromethane	50.0	51.3		ug/Kg		103	80 - 122
Bromoform	50.0	50.4		ug/Kg		101	68 - 126
Bromomethane	50.0	52.2		ug/Kg		104	37 - 149
Carbon disulfide	50.0	40.4		ug/Kg		81	64 - 131
Carbon tetrachloride	50.0	44.9		ug/Kg		90	75 - 135
Chlorobenzene	50.0	45.9		ug/Kg		92	76 - 124
Dibromochloromethane	50.0	54.2		ug/Kg		108	76 - 125
Chloroethane	50.0	53.9		ug/Kg		108	69 - 135
Chloroform	50.0	45.8		ug/Kg		92	80 - 120
Chloromethane	50.0	52.5		ug/Kg		105	63 - 127
cis-1,2-Dichloroethene	50.0	45.1		ug/Kg		90	81 - 120
cis-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	80 - 120
Cyclohexane	50.0	40.3		ug/Kg		81	65 - 120
Dichlorodifluoromethane	50.0	39.9		ug/Kg		80	57 - 142
Ethylbenzene	50.0	46.4		ug/Kg		93	80 - 120
1,2-Dibromoethane	50.0	47.1		ug/Kg		94	78 - 120
Isopropylbenzene	50.0	45.3		ug/Kg		91	72 - 120
Methyl acetate	100	98.4		ug/Kg		98	55 - 136
Methyl tert-butyl ether	50.0	44.5		ug/Kg		89	63 - 125
Methylcyclohexane	50.0	37.8		ug/Kg		76	60 - 140
Methylene Chloride	50.0	48.8		ug/Kg		98	61 - 127
Styrene	50.0	43.8		ug/Kg		88	80 - 120
Tetrachloroethene	50.0	44.2		ug/Kg		88	74 - 122
Toluene	50.0	45.0		ug/Kg		90	74 - 128
trans-1,2-Dichloroethene	50.0	44.7		ug/Kg		89	78 - 126
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	73 - 123
Trichloroethene	50.0	44.6		ug/Kg		89	77 - 129
Trichlorofluoromethane	50.0	46.9		ug/Kg		94	65 - 146
Vinyl chloride	50.0	48.7		ug/Kg		97	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*71 - 125*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*
Dibromofluoromethane (Surr)	*97*		*60 - 140*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-631241/1-A
Matrix: Water
Analysis Batch: 631456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		06/23/22 08:12	06/24/22 17:35	1
Acenaphthylene	ND		5.0	0.38	ug/L		06/23/22 08:12	06/24/22 17:35	1
Anthracene	ND		5.0	0.28	ug/L		06/23/22 08:12	06/24/22 17:35	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 17:35	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 17:35	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 17:35	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		06/23/22 08:12	06/24/22 17:35	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		06/23/22 08:12	06/24/22 17:35	1
Chrysene	ND		5.0	0.33	ug/L		06/23/22 08:12	06/24/22 17:35	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		06/23/22 08:12	06/24/22 17:35	1
Dibenzofuran	ND		10	0.51	ug/L		06/23/22 08:12	06/24/22 17:35	1
Fluoranthene	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 17:35	1
Fluorene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 17:35	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		06/23/22 08:12	06/24/22 17:35	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 17:35	1
m-Cresol	ND		10	0.40	ug/L		06/23/22 08:12	06/24/22 17:35	1
Naphthalene	ND		5.0	0.76	ug/L		06/23/22 08:12	06/24/22 17:35	1
o-Cresol	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 17:35	1
p-Cresol	ND		10	0.36	ug/L		06/23/22 08:12	06/24/22 17:35	1
Pentachlorophenol	ND		10	2.2	ug/L		06/23/22 08:12	06/24/22 17:35	1
Phenanthrene	ND		5.0	0.44	ug/L		06/23/22 08:12	06/24/22 17:35	1
Phenol	ND		5.0	0.39	ug/L		06/23/22 08:12	06/24/22 17:35	1
Pyrene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 17:35	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	295	T J	ug/L		3.07		06/23/22 08:12	06/24/22 17:35	1
Unknown	11.8	T J	ug/L		4.97		06/23/22 08:12	06/24/22 17:35	1
Column Bleed	2.26	T J	ug/L		7.01		06/23/22 08:12	06/24/22 17:35	1
Heneicosane	5.15	T J N	ug/L		12.18	629-94-7	06/23/22 08:12	06/24/22 17:35	1
Pentacosane	7.50	T J N	ug/L		12.59	629-99-2	06/23/22 08:12	06/24/22 17:35	1
Hexatriacontane	9.69	T J N	ug/L		13.04	630-06-8	06/23/22 08:12	06/24/22 17:35	1
Heptacosane	9.68	T J N	ug/L		13.51	593-49-7	06/23/22 08:12	06/24/22 17:35	1
Octacosane	7.71	T J N	ug/L		14.02	630-02-4	06/23/22 08:12	06/24/22 17:35	1
Heptadecane	5.04	T J N	ug/L		14.54	629-78-7	06/23/22 08:12	06/24/22 17:35	1
Triacontane	2.68	T J N	ug/L		15.08	638-68-6	06/23/22 08:12	06/24/22 17:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		48 - 120	06/23/22 08:12	06/24/22 17:35	1
2-Fluorophenol	55		35 - 120	06/23/22 08:12	06/24/22 17:35	1
Nitrobenzene-d5	76		46 - 120	06/23/22 08:12	06/24/22 17:35	1
Phenol-d5	41		22 - 120	06/23/22 08:12	06/24/22 17:35	1
p-Terphenyl-d14	98		60 - 148	06/23/22 08:12	06/24/22 17:35	1
2,4,6-Tribromophenol	68		41 - 120	06/23/22 08:12	06/24/22 17:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-631241/2-A
Matrix: Water
Analysis Batch: 631456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631241

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	30.3		ug/L		95	60 - 120
Acenaphthylene	32.0	28.0		ug/L		88	63 - 120
Anthracene	32.0	31.5		ug/L		98	67 - 120
Benzo(a)anthracene	32.0	31.2		ug/L		97	70 - 121
Benzo(a)pyrene	32.0	29.0		ug/L		91	60 - 123
Benzo(b)fluoranthene	32.0	32.3		ug/L		101	66 - 126
Benzo(g,h,i)perylene	32.0	36.1		ug/L		113	66 - 150
Benzo(k)fluoranthene	32.0	32.7		ug/L		102	65 - 124
Chrysene	32.0	30.7		ug/L		96	69 - 120
Dibenz(a,h)anthracene	32.0	34.6		ug/L		108	65 - 135
Dibenzofuran	32.0	30.8		ug/L		96	66 - 120
Fluoranthene	32.0	34.2		ug/L		107	69 - 126
Fluorene	32.0	32.4		ug/L		101	66 - 120
Hexachlorobenzene	32.0	35.3		ug/L		110	61 - 120
Indeno(1,2,3-cd)pyrene	32.0	34.3		ug/L		107	69 - 146
Naphthalene	32.0	26.8		ug/L		84	57 - 120
o-Cresol	32.0	24.4		ug/L		76	39 - 120
p-Cresol	32.0	24.2		ug/L		76	29 - 131
Pentachlorophenol	64.0	48.5		ug/L		76	29 - 136
Phenanthrene	32.0	31.5		ug/L		98	68 - 120
Phenol	32.0	15.3		ug/L		48	17 - 120
Pyrene	32.0	31.8		ug/L		100	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*48 - 120*
2-Fluorophenol	*62*		*35 - 120*
Nitrobenzene-d5	*77*		*46 - 120*
Phenol-d5	*47*		*22 - 120*
p-Terphenyl-d14	*100*		*60 - 148*
2,4,6-Tribromophenol	*110*		*41 - 120*

Lab Sample ID: LCSD 480-631241/3-A
Matrix: Water
Analysis Batch: 631456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631241

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	32.0	30.3		ug/L		95	60 - 120	0	24
Acenaphthylene	32.0	28.4		ug/L		89	63 - 120	1	18
Anthracene	32.0	32.3		ug/L		101	67 - 120	3	15
Benzo(a)anthracene	32.0	32.1		ug/L		100	70 - 121	3	15
Benzo(a)pyrene	32.0	29.2		ug/L		91	60 - 123	1	15
Benzo(b)fluoranthene	32.0	32.5		ug/L		102	66 - 126	0	15
Benzo(g,h,i)perylene	32.0	35.0		ug/L		109	66 - 150	3	15
Benzo(k)fluoranthene	32.0	32.1		ug/L		100	65 - 124	2	22
Chrysene	32.0	30.6		ug/L		96	69 - 120	0	15
Dibenz(a,h)anthracene	32.0	34.3		ug/L		107	65 - 135	1	15
Dibenzofuran	32.0	31.6		ug/L		99	66 - 120	3	15
Fluoranthene	32.0	34.3		ug/L		107	69 - 126	0	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-631241/3-A
Matrix: Water
Analysis Batch: 631456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631241

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			32.0	32.8		ug/L		102	66 - 120	1	15
Hexachlorobenzene			32.0	36.2		ug/L		113	61 - 120	3	15
Indeno(1,2,3-cd)pyrene			32.0	34.7		ug/L		108	69 - 146	1	15
Naphthalene			32.0	23.7		ug/L		74	57 - 120	12	29
o-Cresol			32.0	21.3		ug/L		67	39 - 120	13	27
p-Cresol			32.0	23.2		ug/L		73	29 - 131	4	24
Pentachlorophenol			64.0	52.0		ug/L		81	29 - 136	7	37
Phenanthrene			32.0	31.5		ug/L		98	68 - 120	0	15
Phenol			32.0	15.7		ug/L		49	17 - 120	3	34
Pyrene			32.0	32.7		ug/L		102	70 - 125	3	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*48 - 120*
2-Fluorophenol	*61*		*35 - 120*
Nitrobenzene-d5	*76*		*46 - 120*
Phenol-d5	*47*		*22 - 120*
p-Terphenyl-d14	*104*		*60 - 148*
2,4,6-Tribromophenol	*112*		*41 - 120*

Lab Sample ID: MB 480-631383/1-A
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631383

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Acenaphthylene	ND		170	22	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Anthracene	ND		170	41	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Benzo(a)anthracene	ND		170	17	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Benzo(a)pyrene	ND		170	25	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Benzo(b)fluoranthene	ND		170	27	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Benzo(g,h,i)perylene	ND		170	18	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Benzo(k)fluoranthene	ND		170	22	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Chrysene	ND		170	37	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Dibenzofuran	ND		170	20	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Fluoranthene	ND		170	18	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Fluorene	ND		170	20	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Hexachlorobenzene	ND		170	23	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Indeno(1,2,3-cd)pyrene	ND		170	21	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
m-Cresol	ND		320	26	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Naphthalene	ND		170	22	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
o-Cresol	ND		170	20	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
p-Cresol	ND		320	20	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Pentachlorophenol	ND		320	170	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Phenanthrene	ND		170	25	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Phenol	ND		170	26	ug/Kg		06/23/22 15:45	06/24/22 13:03	1
Pyrene	ND		170	20	ug/Kg		06/23/22 15:45	06/24/22 13:03	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-631383/1-A
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631383

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	5300	T J	ug/Kg		1.95		06/23/22 15:45	06/24/22 13:03	1
Unknown	915	T J	ug/Kg		3.40		06/23/22 15:45	06/24/22 13:03	1
Octacosane	139	T J N	ug/Kg		12.89	630-02-4	06/23/22 15:45	06/24/22 13:03	1
Hexacosane	216	T J N	ug/Kg		13.17	630-01-3	06/23/22 15:45	06/24/22 13:03	1
Heptadecane	195	T J N	ug/Kg		13.44	629-78-7	06/23/22 15:45	06/24/22 13:03	1
Hexatriacontane	175	T J N	ug/Kg		13.71	630-06-8	06/23/22 15:45	06/24/22 13:03	1
Unknown	138	T J	ug/Kg		13.98		06/23/22 15:45	06/24/22 13:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		60 - 120	06/23/22 15:45	06/24/22 13:03	1
2-Fluorophenol	87		52 - 120	06/23/22 15:45	06/24/22 13:03	1
Nitrobenzene-d5	90		53 - 120	06/23/22 15:45	06/24/22 13:03	1
Phenol-d5	90		54 - 120	06/23/22 15:45	06/24/22 13:03	1
p-Terphenyl-d14	109		79 - 130	06/23/22 15:45	06/24/22 13:03	1
2,4,6-Tribromophenol	93		54 - 120	06/23/22 15:45	06/24/22 13:03	1

Lab Sample ID: LCS 480-631383/2-A
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1650	1440		ug/Kg		87	62 - 120
Acenaphthylene	1650	1460		ug/Kg		89	58 - 121
Anthracene	1650	1570		ug/Kg		95	62 - 120
Benzo(a)anthracene	1650	1570		ug/Kg		95	65 - 120
Benzo(a)pyrene	1650	1580		ug/Kg		96	64 - 120
Benzo(b)fluoranthene	1650	1530		ug/Kg		93	64 - 120
Benzo(g,h,i)perylene	1650	1560		ug/Kg		95	45 - 145
Benzo(k)fluoranthene	1650	1590		ug/Kg		96	65 - 120
Chrysene	1650	1570		ug/Kg		95	64 - 120
Dibenz(a,h)anthracene	1650	1560		ug/Kg		95	54 - 132
Dibenzofuran	1650	1490		ug/Kg		91	63 - 120
Fluoranthene	1650	1530		ug/Kg		93	62 - 120
Fluorene	1650	1490		ug/Kg		91	63 - 120
Hexachlorobenzene	1650	1500		ug/Kg		91	60 - 120
Indeno(1,2,3-cd)pyrene	1650	1570		ug/Kg		95	56 - 134
Naphthalene	1650	1320		ug/Kg		80	55 - 120
o-Cresol	1650	1320		ug/Kg		80	54 - 120
p-Cresol	1650	1360		ug/Kg		83	55 - 120
Pentachlorophenol	3290	3110		ug/Kg		94	51 - 120
Phenanthrene	1650	1550		ug/Kg		94	60 - 120
Phenol	1650	1280		ug/Kg		78	53 - 120
Pyrene	1650	1820		ug/Kg		111	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	83		60 - 120
2-Fluorophenol	70		52 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-631383/2-A
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631383

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	78		53 - 120
Phenol-d5	75		54 - 120
p-Terphenyl-d14	109		79 - 130
2,4,6-Tribromophenol	93		54 - 120

Lab Sample ID: 480-199197-1 MS
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 631383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		2000	1710		ug/Kg	☼	85	60 - 120
Acenaphthylene	ND		2000	1710		ug/Kg	☼	85	58 - 121
Anthracene	ND		2000	1950		ug/Kg	☼	97	62 - 120
Benzo(a)anthracene	ND		2000	1990		ug/Kg	☼	99	65 - 120
Benzo(a)pyrene	ND		2000	2000		ug/Kg	☼	100	64 - 120
Benzo(b)fluoranthene	ND		2000	2070		ug/Kg	☼	103	10 - 150
Benzo(g,h,i)perylene	ND		2000	1710		ug/Kg	☼	85	45 - 145
Benzo(k)fluoranthene	ND	F2	2000	2170		ug/Kg	☼	108	23 - 150
Chrysene	ND		2000	1920		ug/Kg	☼	96	64 - 120
Dibenz(a,h)anthracene	ND		2000	1790		ug/Kg	☼	89	54 - 132
Dibenzofuran	ND		2000	1700		ug/Kg	☼	85	62 - 120
Fluoranthene	ND	F2	2000	2030		ug/Kg	☼	101	62 - 120
Fluorene	ND		2000	1710		ug/Kg	☼	85	63 - 120
Hexachlorobenzene	ND		2000	2040		ug/Kg	☼	102	60 - 120
Indeno(1,2,3-cd)pyrene	ND		2000	1750		ug/Kg	☼	87	56 - 134
Naphthalene	ND		2000	1320		ug/Kg	☼	66	46 - 120
o-Cresol	ND		2000	1450		ug/Kg	☼	73	48 - 120
p-Cresol	ND		2000	1580		ug/Kg	☼	79	50 - 120
Pentachlorophenol	ND		4010	4160		ug/Kg	☼	104	25 - 136
Phenanthrene	ND		2000	1940		ug/Kg	☼	97	60 - 122
Phenol	ND		2000	1360		ug/Kg	☼	68	50 - 120
Pyrene	ND		2000	2260		ug/Kg	☼	113	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	72		60 - 120
2-Fluorophenol	61		52 - 120
Nitrobenzene-d5	65		53 - 120
Phenol-d5	67		54 - 120
p-Terphenyl-d14	109		79 - 130
2,4,6-Tribromophenol	96		54 - 120

Lab Sample ID: 480-199197-1 MSD
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 631383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		2010	1550		ug/Kg	☼	77	60 - 120	10	35
Acenaphthylene	ND		2010	1560		ug/Kg	☼	78	58 - 121	9	18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-199197-1 MSD
Matrix: Solid
Analysis Batch: 631452

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 631383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Anthracene	ND		2010	1720		ug/Kg	☼	85	62 - 120	13	15
Benzo(a)anthracene	ND		2010	1770		ug/Kg	☼	88	65 - 120	12	15
Benzo(a)pyrene	ND		2010	1750		ug/Kg	☼	87	64 - 120	13	15
Benzo(b)fluoranthene	ND		2010	1830		ug/Kg	☼	91	10 - 150	12	15
Benzo(g,h,i)perylene	ND		2010	1490		ug/Kg	☼	74	45 - 145	14	15
Benzo(k)fluoranthene	ND	F2	2010	1710	F2	ug/Kg	☼	85	23 - 150	24	22
Chrysene	ND		2010	1760		ug/Kg	☼	87	64 - 120	9	15
Dibenz(a,h)anthracene	ND		2010	1560		ug/Kg	☼	77	54 - 132	14	15
Dibenzofuran	ND		2010	1560		ug/Kg	☼	78	62 - 120	8	15
Fluoranthene	ND	F2	2010	1670	F2	ug/Kg	☼	83	62 - 120	19	15
Fluorene	ND		2010	1610		ug/Kg	☼	80	63 - 120	6	15
Hexachlorobenzene	ND		2010	1810		ug/Kg	☼	90	60 - 120	12	15
Indeno(1,2,3-cd)pyrene	ND		2010	1580		ug/Kg	☼	78	56 - 134	10	15
Naphthalene	ND		2010	1340		ug/Kg	☼	67	46 - 120	2	29
o-Cresol	ND		2010	1440		ug/Kg	☼	72	48 - 120	1	27
p-Cresol	ND		2010	1530		ug/Kg	☼	76	50 - 120	3	24
Pentachlorophenol	ND		4030	3480		ug/Kg	☼	86	25 - 136	18	35
Phenanthrene	ND		2010	1740		ug/Kg	☼	86	60 - 122	11	15
Phenol	ND		2010	1390		ug/Kg	☼	69	50 - 120	2	35
Pyrene	ND		2010	1960		ug/Kg	☼	97	61 - 133	14	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*60 - 120*
2-Fluorophenol	*61*		*52 - 120*
Nitrobenzene-d5	*63*		*53 - 120*
Phenol-d5	*67*		*54 - 120*
p-Terphenyl-d14	*97*		*79 - 130*
2,4,6-Tribromophenol	*84*		*54 - 120*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-631179/1-A
Matrix: Water
Analysis Batch: 631424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		06/22/22 15:06	06/24/22 09:19	1
4,4'-DDE	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 09:19	1
4,4'-DDT	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 09:19	1
Aldrin	ND		0.050	0.0081	ug/L		06/22/22 15:06	06/24/22 09:19	1
alpha-BHC	ND		0.050	0.0077	ug/L		06/22/22 15:06	06/24/22 09:19	1
beta-BHC	ND		0.050	0.025	ug/L		06/22/22 15:06	06/24/22 09:19	1
Chlordane (.alpha.)	ND		0.050	0.015	ug/L		06/22/22 15:06	06/24/22 09:19	1
delta-BHC	ND		0.050	0.010	ug/L		06/22/22 15:06	06/24/22 09:19	1
Dieldrin	ND		0.050	0.0098	ug/L		06/22/22 15:06	06/24/22 09:19	1
Endosulfan I	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 09:19	1
Endosulfan II	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 09:19	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		06/22/22 15:06	06/24/22 09:19	1
Endrin	ND		0.050	0.014	ug/L		06/22/22 15:06	06/24/22 09:19	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-631179/1-A
Matrix: Water
Analysis Batch: 631424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		0.050	0.0085	ug/L		06/22/22 15:06	06/24/22 09:19	1
Lindane	ND		0.050	0.0080	ug/L		06/22/22 15:06	06/24/22 09:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*36*		*20 - 120*	*06/22/22 15:06*	*06/24/22 09:19*	*1*
DCB Decachlorobiphenyl	*57*		*20 - 120*	*06/22/22 15:06*	*06/24/22 09:19*	*1*
Tetrachloro-m-xylene	*64*		*44 - 120*	*06/22/22 15:06*	*06/24/22 09:19*	*1*
Tetrachloro-m-xylene	*72*		*44 - 120*	*06/22/22 15:06*	*06/24/22 09:19*	*1*

Lab Sample ID: LCS 480-631179/2-A
Matrix: Water
Analysis Batch: 631424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.400	0.365		ug/L		91	64 - 129
4,4'-DDE	0.400	0.342		ug/L		86	50 - 120
4,4'-DDT	0.400	0.410		ug/L		102	59 - 120
Aldrin	0.400	0.233		ug/L		58	40 - 125
alpha-BHC	0.400	0.286		ug/L		72	52 - 125
beta-BHC	0.400	0.385		ug/L		96	51 - 120
Chlordane (.alpha.)	0.400	0.363		ug/L		91	52 - 120
delta-BHC	0.400	0.359		ug/L		90	51 - 120
Dieldrin	0.400	0.380		ug/L		95	66 - 128
Endosulfan I	0.400	0.377		ug/L		94	57 - 120
Endosulfan II	0.400	0.366		ug/L		92	66 - 131
Endosulfan sulfate	0.400	0.418		ug/L		105	66 - 136
Endrin	0.400	0.402		ug/L		101	65 - 135
Heptachlor	0.400	0.338		ug/L		84	58 - 120
Lindane	0.400	0.303		ug/L		76	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*34*		*20 - 120*
DCB Decachlorobiphenyl	*54*		*20 - 120*
Tetrachloro-m-xylene	*61*		*44 - 120*
Tetrachloro-m-xylene	*68*		*44 - 120*

Lab Sample ID: LCSD 480-631179/3-A
Matrix: Water
Analysis Batch: 631424

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631179

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	0.400	0.403		ug/L		101	64 - 129	10	23
4,4'-DDE	0.400	0.379		ug/L		95	50 - 120	10	22
4,4'-DDT	0.400	0.453		ug/L		113	59 - 120	10	24
Aldrin	0.400	0.286		ug/L		72	40 - 125	21	25
alpha-BHC	0.400	0.340		ug/L		85	52 - 125	17	24
beta-BHC	0.400	0.419		ug/L		105	51 - 120	9	24
Chlordane (.alpha.)	0.400	0.408		ug/L		102	52 - 120	12	23

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 480-631179/3-A
Matrix: Water
Analysis Batch: 631424

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631179

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
delta-BHC			0.400	0.398		ug/L		99	51 - 120	10	24
Dieldrin			0.400	0.420		ug/L		105	66 - 128	10	24
Endosulfan I			0.400	0.424		ug/L		106	57 - 120	12	30
Endosulfan II			0.400	0.397		ug/L		99	66 - 131	8	40
Endosulfan sulfate			0.400	0.429		ug/L		107	66 - 136	2	24
Endrin			0.400	0.447		ug/L		112	65 - 135	10	24
Heptachlor			0.400	0.399		ug/L		100	58 - 120	16	25
Lindane			0.400	0.350		ug/L		88	56 - 120	14	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*40*		*20 - 120*
DCB Decachlorobiphenyl	*60*		*20 - 120*
Tetrachloro-m-xylene	*73*		*44 - 120*
Tetrachloro-m-xylene	*84*		*44 - 120*

Lab Sample ID: MB 480-631723/1-A
Matrix: Solid
Analysis Batch: 631751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.32	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
4,4'-DDE	ND		1.6	0.34	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
4,4'-DDT	ND		1.6	0.38	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Aldrin	ND		1.6	0.40	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
alpha-BHC	ND		1.6	0.29	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
beta-BHC	ND		1.6	0.29	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Chlordane (.alpha.)	ND		1.6	0.82	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
delta-BHC	ND		1.6	0.30	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Dieldrin	ND		1.6	0.39	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Endosulfan I	ND		1.6	0.31	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Endosulfan II	ND		1.6	0.29	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Endosulfan sulfate	ND		1.6	0.31	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Endrin	ND		1.6	0.32	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Heptachlor	ND		1.6	0.35	ug/Kg		06/27/22 15:42	06/28/22 09:35	1
Lindane	ND		1.6	0.30	ug/Kg		06/27/22 15:42	06/28/22 09:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*45 - 120*	*06/27/22 15:42*	*06/28/22 09:35*	*1*
DCB Decachlorobiphenyl	*102*		*45 - 120*	*06/27/22 15:42*	*06/28/22 09:35*	*1*
Tetrachloro-m-xylene	*100*		*30 - 124*	*06/27/22 15:42*	*06/28/22 09:35*	*1*
Tetrachloro-m-xylene	*75*		*30 - 124*	*06/27/22 15:42*	*06/28/22 09:35*	*1*

Lab Sample ID: LCS 480-631723/2-A
Matrix: Solid
Analysis Batch: 631751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631723

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,4'-DDD			16.5	17.1		ug/Kg		104	56 - 120		

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-631723/2-A
Matrix: Solid
Analysis Batch: 631751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDE	16.5	14.1		ug/Kg		85	44 - 120
4,4'-DDT	16.5	17.3		ug/Kg		105	38 - 120
Aldrin	16.5	11.8		ug/Kg		72	38 - 120
alpha-BHC	16.5	9.29		ug/Kg		56	39 - 120
beta-BHC	16.5	13.3		ug/Kg		81	40 - 120
Chlordane (.alpha.)	16.5	13.0		ug/Kg		79	47 - 120
delta-BHC	16.5	11.9		ug/Kg		72	45 - 120
Dieldrin	16.5	16.1		ug/Kg		98	58 - 120
Endosulfan I	16.5	15.1		ug/Kg		92	49 - 120
Endosulfan II	16.5	15.5		ug/Kg		94	55 - 120
Endosulfan sulfate	16.5	16.2		ug/Kg		98	49 - 124
Endrin	16.5	18.4		ug/Kg		112	58 - 120
Heptachlor	16.5	15.1		ug/Kg		91	50 - 120
Lindane	16.5	11.1		ug/Kg		67	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*45 - 120*
DCB Decachlorobiphenyl	*103*		*45 - 120*
Tetrachloro-m-xylene	*95*		*30 - 124*
Tetrachloro-m-xylene	*73*		*30 - 124*

Lab Sample ID: 480-199197-2 MS
Matrix: Solid
Analysis Batch: 631751

Client Sample ID: SB113 (15-18)
Prep Type: Total/NA
Prep Batch: 631723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	ND		17.1	11.2		ug/Kg	☼	65	37 - 126
4,4'-DDE	ND		17.1	10.0		ug/Kg	☼	59	34 - 120
4,4'-DDT	ND		17.1	12.0		ug/Kg	☼	70	43 - 123
Aldrin	ND		17.1	9.23		ug/Kg	☼	54	37 - 125
alpha-BHC	ND		17.1	8.05		ug/Kg	☼	47	39 - 120
beta-BHC	ND		17.1	9.66		ug/Kg	☼	56	36 - 120
Chlordane (.alpha.)	ND		17.1	10.1		ug/Kg	☼	59	35 - 120
delta-BHC	ND		17.1	9.01		ug/Kg	☼	53	34 - 120
Dieldrin	ND		17.1	12.7		ug/Kg	☼	74	45 - 120
Endosulfan I	ND		17.1	11.1		ug/Kg	☼	65	39 - 120
Endosulfan II	ND		17.1	11.1		ug/Kg	☼	65	34 - 126
Endosulfan sulfate	ND		17.1	13.6		ug/Kg	☼	80	27 - 130
Endrin	ND		17.1	12.5		ug/Kg	☼	73	47 - 121
Heptachlor	ND		17.1	11.2		ug/Kg	☼	65	42 - 120
Lindane	ND	F1	17.1	7.94	F1	ug/Kg	☼	46	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*79*		*45 - 120*
DCB Decachlorobiphenyl	*91*		*45 - 120*
Tetrachloro-m-xylene	*87*		*30 - 124*
Tetrachloro-m-xylene	*62*		*30 - 124*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-199197-2 MSD
Matrix: Solid
Analysis Batch: 631751

Client Sample ID: SB113 (15-18)
Prep Type: Total/NA
Prep Batch: 631723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD	ND		17.2	11.3		ug/Kg	☼	66	37 - 126	1	21
4,4'-DDE	ND		17.2	10.3		ug/Kg	☼	60	34 - 120	2	18
4,4'-DDT	ND		17.2	11.8		ug/Kg	☼	69	43 - 123	1	25
Aldrin	ND		17.2	9.36		ug/Kg	☼	54	37 - 125	1	12
alpha-BHC	ND		17.2	8.06		ug/Kg	☼	47	39 - 120	0	15
beta-BHC	ND		17.2	9.67		ug/Kg	☼	56	36 - 120	0	19
Chlordane (.alpha.)	ND		17.2	10.3		ug/Kg	☼	60	35 - 120	2	23
delta-BHC	ND		17.2	9.24		ug/Kg	☼	54	34 - 120	3	14
Dieldrin	ND		17.2	13.1		ug/Kg	☼	76	45 - 120	3	12
Endosulfan I	ND		17.2	11.3		ug/Kg	☼	66	39 - 120	3	18
Endosulfan II	ND		17.2	11.2		ug/Kg	☼	65	34 - 126	1	26
Endosulfan sulfate	ND		17.2	13.8		ug/Kg	☼	80	27 - 130	1	35
Endrin	ND		17.2	12.7		ug/Kg	☼	73	47 - 121	2	20
Heptachlor	ND		17.2	11.2		ug/Kg	☼	65	42 - 120	0	22
Lindane	ND	F1	17.2	7.90	F1	ug/Kg	☼	46	50 - 120	1	12

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*78*		*45 - 120*
DCB Decachlorobiphenyl	*83*		*45 - 120*
Tetrachloro-m-xylene	*84*		*30 - 124*
Tetrachloro-m-xylene	*55*		*30 - 124*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-631266/1-A
Matrix: Water
Analysis Batch: 631497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		0.50	0.050	ug/L		06/23/22 09:32	06/24/22 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*100*		*48 - 132*	*06/23/22 09:32*	*06/24/22 12:07*	*1*
2,4-Dichlorophenylacetic acid	*94*		*48 - 132*	*06/23/22 09:32*	*06/24/22 12:07*	*1*

Lab Sample ID: LCS 480-631266/2-A
Matrix: Water
Analysis Batch: 631497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-TP (Silvex)			2.00	1.76		ug/L		88	49 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*96*		*48 - 132*
2,4-Dichlorophenylacetic acid	*89*		*48 - 132*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 480-631266/3-A
Matrix: Water
Analysis Batch: 631497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631266

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-TP (Silvex)			2.00	1.84		ug/L		92	49 - 150	5	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*102*		*48 - 132*
2,4-Dichlorophenylacetic acid	*92*		*48 - 132*

Lab Sample ID: MB 480-631635/1-A
Matrix: Solid
Analysis Batch: 633008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631635

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		17	5.9	ug/Kg		06/27/22 06:56	07/10/22 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*06/27/22 06:56*	*07/10/22 12:51*	*1*
2,4-Dichlorophenylacetic acid	*71*		*28 - 129*	*06/27/22 06:56*	*07/10/22 12:51*	*1*

Lab Sample ID: LCS 480-631635/2-A
Matrix: Solid
Analysis Batch: 633008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631635

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-TP (Silvex)			64.9	43.9		ug/Kg		68	39 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*75*		*28 - 129*
2,4-Dichlorophenylacetic acid	*72*		*28 - 129*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-181138/1-A
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181138

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg		06/27/22 08:23	06/28/22 00:58	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-181138/1-A
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181138

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		06/27/22 08:23	06/28/22 00:58	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		06/27/22 08:23	06/28/22 00:58	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C4 PFHpA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C4 PFOA	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C4 PFOS	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C5 PFNA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C4 PFBA	*107*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C2 PFHxA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C2 PFDA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C2 PFUnA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C2 PFDoA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C8 FOSA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C5 PFPeA	*113*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
d3-NMeFOSAA	*103*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
M2-6:2 FTS	*102*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
M2-8:2 FTS	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*
13C3 PFBS	*98*		*50 - 150*	*06/27/22 08:23*	*06/28/22 00:58*	*1*

Lab Sample ID: LCS 200-181138/2-A
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	2.00	2.14		ug/Kg		107	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	2.10		ug/Kg		105	60 - 140
Perfluorononanoic acid (PFNA)	2.00	2.11		ug/Kg		106	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.77	1.90		ug/Kg		107	60 - 140
Perfluorobutanoic acid (PFBA)	2.00	2.19		ug/Kg		109	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.86		ug/Kg		102	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	2.25		ug/Kg		112	60 - 140
Perfluorohexanoic acid (PFHxA)	2.00	2.17		ug/Kg		109	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	2.01		ug/Kg		108	60 - 140

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-181138/2-A
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	2.00	2.21		ug/Kg		111	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	2.16		ug/Kg		108	60 - 140
Perfluorododecanoic acid (PFDoA)	2.00	2.29		ug/Kg		114	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	2.26		ug/Kg		113	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	2.18		ug/Kg		109	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	2.09		ug/Kg		104	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.87		ug/Kg		97	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	2.20		ug/Kg		115	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.12		ug/Kg		106	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.05		ug/Kg		103	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.84	J	ug/Kg		97	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	1.60	J	ug/Kg		84	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*88*		*50 - 150*
13C4 PFHpA	*99*		*50 - 150*
13C4 PFOA	*94*		*50 - 150*
13C4 PFOS	*80*		*50 - 150*
13C5 PFNA	*89*		*50 - 150*
13C4 PFBA	*106*		*50 - 150*
13C2 PFHxA	*100*		*50 - 150*
13C2 PFDA	*92*		*50 - 150*
13C2 PFUnA	*81*		*50 - 150*
13C2 PFDoA	*73*		*50 - 150*
13C8 FOSA	*76*		*50 - 150*
13C5 PFPeA	*109*		*50 - 150*
13C2 PFTeDA	*79*		*50 - 150*
d3-NMeFOSAA	*101*		*50 - 150*
d5-NEtFOSAA	*96*		*50 - 150*
M2-6:2 FTS	*100*		*50 - 150*
M2-8:2 FTS	*94*		*50 - 150*
13C3 PFBS	*96*		*50 - 150*

Lab Sample ID: 480-199197-5 MS
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: SB-114 (12-16)
Prep Type: Total/NA
Prep Batch: 181138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	ND		2.01	2.30		ug/Kg	☼	114	60 - 140
Perfluorooctanoic acid (PFOA)	ND		2.01	2.15		ug/Kg	☼	107	60 - 140
Perfluorononanoic acid (PFNA)	ND		2.01	2.21		ug/Kg	☼	110	60 - 140

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-199197-5 MS
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: SB-114 (12-16)
Prep Type: Total/NA
Prep Batch: 181138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	ND		1.78	1.92		ug/Kg	☼	108	60 - 140
Perfluorobutanoic acid (PFBA)	ND		2.01	2.22		ug/Kg	☼	111	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		1.83	1.95		ug/Kg	☼	107	60 - 140
Perfluoropentanoic acid (PFPeA)	ND		2.01	2.15		ug/Kg	☼	107	60 - 140
Perfluorohexanoic acid (PFHxA)	ND		2.01	2.16		ug/Kg	☼	108	60 - 140
Perfluorooctanesulfonic acid (PFOS)	ND		1.87	2.03		ug/Kg	☼	109	60 - 140
Perfluoroundecanoic acid (PFUnA)	ND		2.01	2.31		ug/Kg	☼	115	60 - 140
Perfluorodecanoic acid (PFDA)	ND		2.01	2.21		ug/Kg	☼	110	60 - 140
Perfluorododecanoic acid (PFDoA)	ND		2.01	2.17		ug/Kg	☼	108	60 - 140
Perfluorotridecanoic acid (PFTriA)	ND		2.01	2.39		ug/Kg	☼	119	60 - 140
Perfluorotetradecanoic acid (PFTeA)	ND		2.01	2.15		ug/Kg	☼	107	60 - 140
Perfluorooctanesulfonamide (PFOSA)	ND		2.01	2.15		ug/Kg	☼	107	60 - 140
Perfluorodecanesulfonic acid (PFDS)	ND		1.94	1.90		ug/Kg	☼	98	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.92	2.18		ug/Kg	☼	114	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.01	2.12		ug/Kg	☼	106	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.01	2.01		ug/Kg	☼	100	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		1.91	1.90	J	ug/Kg	☼	100	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.93	1.67	J	ug/Kg	☼	87	60 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
18O2 PFHxS	*78*		*50 - 150*
13C4 PFHpA	*88*		*50 - 150*
13C4 PFOA	*88*		*50 - 150*
13C4 PFOS	*74*		*50 - 150*
13C5 PFNA	*87*		*50 - 150*
13C4 PFBA	*101*		*50 - 150*
13C2 PFHxA	*91*		*50 - 150*
13C2 PFDA	*85*		*50 - 150*
13C2 PFUnA	*76*		*50 - 150*
13C2 PFDoA	*76*		*50 - 150*
13C8 FOSA	*72*		*50 - 150*
13C5 PFPeA	*104*		*50 - 150*
13C2 PFTeDA	*78*		*50 - 150*
d3-NMeFOSAA	*101*		*50 - 150*
d5-NEtFOSAA	*98*		*50 - 150*
M2-6:2 FTS	*79*		*50 - 150*
M2-8:2 FTS	*84*		*50 - 150*
13C3 PFBS	*85*		*50 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-199197-5 MSD
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: SB-114 (12-16)
Prep Type: Total/NA
Prep Batch: 181138

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoroheptanoic acid (PFHpA)	ND		2.05	2.16		ug/Kg	☼	105	60 - 140	6	30
Perfluorooctanoic acid (PFOA)	ND		2.05	2.00		ug/Kg	☼	98	60 - 140	7	30
Perfluorononanoic acid (PFNA)	ND		2.05	2.27		ug/Kg	☼	111	60 - 140	3	30
Perfluorobutanesulfonic acid (PFBS)	ND		1.81	1.97		ug/Kg	☼	108	60 - 140	2	30
Perfluorobutanoic acid (PFBA)	ND		2.05	2.29		ug/Kg	☼	112	60 - 140	3	30
Perfluorohexanesulfonic acid (PFHxS)	ND		1.87	1.97		ug/Kg	☼	105	60 - 140	1	30
Perfluoropentanoic acid (PFPeA)	ND		2.05	2.25		ug/Kg	☼	110	60 - 140	4	30
Perfluorohexanoic acid (PFHxA)	ND		2.05	2.26		ug/Kg	☼	110	60 - 140	4	30
Perfluorooctanesulfonic acid (PFOS)	ND		1.90	2.02		ug/Kg	☼	106	60 - 140	0	30
Perfluoroundecanoic acid (PFUnA)	ND		2.05	2.23		ug/Kg	☼	109	60 - 140	3	30
Perfluorodecanoic acid (PFDA)	ND		2.05	2.24		ug/Kg	☼	109	60 - 140	2	30
Perfluorododecanoic acid (PFDoA)	ND		2.05	2.22		ug/Kg	☼	108	60 - 140	2	30
Perfluorotridecanoic acid (PFTriA)	ND		2.05	2.31		ug/Kg	☼	113	60 - 140	3	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.05	2.31		ug/Kg	☼	112	60 - 140	7	30
Perfluorooctanesulfonamide (PFOSA)	ND		2.05	2.20		ug/Kg	☼	107	60 - 140	3	30
Perfluorodecanesulfonic acid (PFDS)	ND		1.98	2.11		ug/Kg	☼	107	60 - 140	11	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.95	2.16		ug/Kg	☼	111	60 - 140	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.05	2.19		ug/Kg	☼	107	60 - 140	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.05	2.07	J	ug/Kg	☼	101	60 - 140	3	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		1.94	1.92	J	ug/Kg	☼	99	50 - 150	1	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.96	1.74	J	ug/Kg	☼	88	60 - 140	4	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
18O2 PFHxS	*77*		*50 - 150*
13C4 PFHpA	*90*		*50 - 150*
13C4 PFOA	*89*		*50 - 150*
13C4 PFOS	*73*		*50 - 150*
13C5 PFNA	*78*		*50 - 150*
13C4 PFBA	*95*		*50 - 150*
13C2 PFHxA	*90*		*50 - 150*
13C2 PFDA	*86*		*50 - 150*
13C2 PFUnA	*83*		*50 - 150*
13C2 PFDoA	*78*		*50 - 150*
13C8 FOSA	*70*		*50 - 150*
13C5 PFPeA	*99*		*50 - 150*
13C2 PFTeDA	*73*		*50 - 150*
d3-NMeFOSAA	*98*		*50 - 150*
d5-NEtFOSAA	*100*		*50 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-199197-5 MSD
Matrix: Solid
Analysis Batch: 181170

Client Sample ID: SB-114 (12-16)
Prep Type: Total/NA
Prep Batch: 181138

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
M2-6:2 FTS	78		50 - 150
M2-8:2 FTS	82		50 - 150
13C3 PFBS	82		50 - 150

Lab Sample ID: MB 200-181147/1-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		06/27/22 11:32	06/27/22 23:36	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		06/27/22 11:32	06/27/22 23:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		06/27/22 11:32	06/27/22 23:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		06/27/22 11:32	06/27/22 23:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		06/27/22 11:32	06/27/22 23:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		06/27/22 11:32	06/27/22 23:36	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C4 PFHpA	107		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C4 PFOA	107		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C4 PFOS	91		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C5 PFNA	101		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C4 PFBA	116		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C2 PFHxA	109		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C2 PFDA	97		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C2 PFUnA	96		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C2 PFDoA	87		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C8 FOSA	81		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C5 PFPeA	120		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C2 PFTeDA	83		50 - 150	06/27/22 11:32	06/27/22 23:36	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 200-181147/1-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181147

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
d3-NMeFOSAA	116		50 - 150	06/27/22 11:32	06/27/22 23:36	1
d5-NEtFOSAA	116		50 - 150	06/27/22 11:32	06/27/22 23:36	1
M2-6:2 FTS	109		50 - 150	06/27/22 11:32	06/27/22 23:36	1
M2-8:2 FTS	113		50 - 150	06/27/22 11:32	06/27/22 23:36	1
13C3 PFBS	107		50 - 150	06/27/22 11:32	06/27/22 23:36	1

Lab Sample ID: LCS 200-181147/2-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	40.0	46.9		ng/L		117	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	44.2		ng/L		110	70 - 130
Perfluorononanoic acid (PFNA)	40.0	42.4		ng/L		106	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	38.7		ng/L		110	70 - 130
Perfluorobutanoic acid (PFBA)	40.0	45.9		ng/L		115	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.6		ng/L		106	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	44.8		ng/L		112	70 - 130
Perfluorohexanoic acid (PFHxA)	40.0	43.5		ng/L		109	70 - 130
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	45.4		ng/L		114	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	43.3		ng/L		108	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	43.3		ng/L		108	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	43.7		ng/L		109	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	43.1		ng/L		108	70 - 130
Perfluorooctanesulfonamide (PFOSA)	40.0	40.3		ng/L		101	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	41.0		ng/L		106	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	38.1	45.1		ng/L		118	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.0		ng/L		105	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	40.9		ng/L		102	70 - 130
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	37.9	38.3		ng/L		101	60 - 140
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	38.3	33.8		ng/L		88	70 - 130

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	100		50 - 150
13C4 PFHpA	103		50 - 150
13C4 PFOA	102		50 - 150
13C4 PFOS	86		50 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-181147/2-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C5 PFNA	*102*		*50 - 150*
13C4 PFBA	*116*		*50 - 150*
13C2 PFHxA	*110*		*50 - 150*
13C2 PFDA	*101*		*50 - 150*
13C2 PFUnA	*89*		*50 - 150*
13C2 PFDoA	*83*		*50 - 150*
13C8 FOSA	*83*		*50 - 150*
13C5 PFPeA	*119*		*50 - 150*
13C2 PFTeDA	*85*		*50 - 150*
d3-NMeFOSAA	*119*		*50 - 150*
d5-NEtFOSAA	*112*		*50 - 150*
M2-6:2 FTS	*105*		*50 - 150*
M2-8:2 FTS	*107*		*50 - 150*
13C3 PFBS	*105*		*50 - 150*

Lab Sample ID: LCSD 200-181147/3-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181147

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoroheptanoic acid (PFHpA)			40.0	45.1		ng/L		113	70 - 130	4	30
Perfluorooctanoic acid (PFOA)			40.0	44.0		ng/L		110	70 - 130	0	30
Perfluorononanoic acid (PFNA)			40.0	45.3		ng/L		113	70 - 130	7	30
Perfluorobutanesulfonic acid (PFBS)			35.4	40.4		ng/L		114	70 - 130	4	30
Perfluorobutanoic acid (PFBA)			40.0	45.8		ng/L		115	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	40.6		ng/L		111	70 - 130	5	30
Perfluoropentanoic acid (PFPeA)			40.0	46.9		ng/L		117	70 - 130	5	30
Perfluorohexanoic acid (PFHxA)			40.0	43.9		ng/L		110	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)			37.1	41.4		ng/L		112	70 - 130	0	30
Perfluoroundecanoic acid (PFUnA)			40.0	46.0		ng/L		115	70 - 130	1	30
Perfluorodecanoic acid (PFDA)			40.0	43.5		ng/L		109	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)			40.0	40.7		ng/L		102	70 - 130	6	30
Perfluorotridecanoic acid (PFTriA)			40.0	42.6		ng/L		106	70 - 130	3	30
Perfluorotetradecanoic acid (PFTeA)			40.0	44.5		ng/L		111	70 - 130	3	30
Perfluorooctanesulfonamide (PFOSA)			40.0	40.8		ng/L		102	70 - 130	1	30
Perfluorodecanesulfonic acid (PFDS)			38.6	37.3		ng/L		97	70 - 130	10	30
Perfluoroheptanesulfonic acid (PFHpS)			38.1	44.6		ng/L		117	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	43.9		ng/L		110	70 - 130	5	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	41.4		ng/L		104	70 - 130	1	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 200-181147/3-A
Matrix: Water
Analysis Batch: 181168

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181147

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			37.9	38.1		ng/L		100	60 - 140	1	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			38.3	33.4		ng/L		87	70 - 130	1	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*96*		*50 - 150*
13C4 PFHpA	*105*		*50 - 150*
13C4 PFOA	*103*		*50 - 150*
13C4 PFOS	*91*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C4 PFBA	*113*		*50 - 150*
13C2 PFHxA	*113*		*50 - 150*
13C2 PFDA	*108*		*50 - 150*
13C2 PFUnA	*93*		*50 - 150*
13C2 PFDoA	*79*		*50 - 150*
13C8 FOSA	*83*		*50 - 150*
13C5 PFPeA	*115*		*50 - 150*
13C2 PFTeDA	*76*		*50 - 150*
d3-NMeFOSAA	*117*		*50 - 150*
d5-NEtFOSAA	*112*		*50 - 150*
M2-6:2 FTS	*102*		*50 - 150*
M2-8:2 FTS	*118*		*50 - 150*
13C3 PFBS	*101*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-631187/1-A
Matrix: Water
Analysis Batch: 631484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		06/23/22 08:47	06/24/22 00:34	1
Barium	ND		0.0020	0.00070	mg/L		06/23/22 08:47	06/24/22 00:34	1
Beryllium	ND		0.0020	0.00030	mg/L		06/23/22 08:47	06/24/22 00:34	1
Cadmium	ND		0.0020	0.00050	mg/L		06/23/22 08:47	06/24/22 00:34	1
Copper	ND		0.010	0.0016	mg/L		06/23/22 08:47	06/24/22 00:34	1
Lead	ND		0.010	0.0030	mg/L		06/23/22 08:47	06/24/22 00:34	1
Manganese	0.000600	J	0.0030	0.00040	mg/L		06/23/22 08:47	06/24/22 00:34	1
Nickel	ND		0.010	0.0013	mg/L		06/23/22 08:47	06/24/22 00:34	1
Selenium	ND		0.025	0.0087	mg/L		06/23/22 08:47	06/24/22 00:34	1
Silver	ND		0.0060	0.0017	mg/L		06/23/22 08:47	06/24/22 00:34	1
Zinc	ND		0.010	0.0015	mg/L		06/23/22 08:47	06/24/22 00:34	1

Lab Sample ID: LCS 480-631187/2-A
Matrix: Water
Analysis Batch: 631484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631187

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic			0.200	0.197		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-631187/2-A
Matrix: Water
Analysis Batch: 631484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.200	0.211		mg/L		105	80 - 120
Beryllium	0.200	0.206		mg/L		103	80 - 120
Cadmium	0.200	0.198		mg/L		99	80 - 120
Copper	0.200	0.205		mg/L		103	80 - 120
Lead	0.200	0.198		mg/L		99	80 - 120
Manganese	0.200	0.208		mg/L		104	80 - 120
Nickel	0.200	0.193		mg/L		96	80 - 120
Selenium	0.200	0.196		mg/L		98	80 - 120
Silver	0.0500	0.0492		mg/L		98	80 - 120
Zinc	0.200	0.201		mg/L		101	80 - 120

Lab Sample ID: MB 480-631437/1-A
Matrix: Solid
Analysis Batch: 631791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.40	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Barium	ND		0.49	0.11	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Beryllium	ND		0.20	0.028	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Cadmium	ND		0.20	0.030	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Copper	ND		0.99	0.21	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Lead	ND		0.99	0.24	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Manganese	0.0534	J	0.20	0.032	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Nickel	ND		4.9	0.23	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Selenium	ND		4.0	0.40	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Silver	ND		0.59	0.20	mg/Kg		06/24/22 10:50	06/28/22 03:54	1
Zinc	ND		2.0	0.63	mg/Kg		06/24/22 10:50	06/28/22 03:54	1

Lab Sample ID: LCSSRM 480-631437/2-A
Matrix: Solid
Analysis Batch: 631791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631437

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	84.5	67.89		mg/Kg		80.3	70.1 - 130.2
Barium	249	201.1		mg/Kg		80.8	75.1 - 124.9
Beryllium	163	137.9		mg/Kg		84.6	74.8 - 125.2
Cadmium	99.0	78.95		mg/Kg		79.8	74.9 - 125.3
Copper	61.5	49.19		mg/Kg		80.0	75.0 - 124.9
Lead	123	112.9		mg/Kg		91.8	71.8 - 128.5
Manganese	456	383.1		mg/Kg		84.0	76.8 - 123.5
Nickel	135	132.1		mg/Kg		97.8	70.1 - 130.4
Selenium	121	94.64		mg/Kg		78.2	66.4 - 133.9

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-631437/2-A
Matrix: Solid
Analysis Batch: 631791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631437

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Silver	33.6	34.07		mg/Kg		101.4	68.5 - 131.3
Zinc	295	248.6		mg/Kg		84.3	70.2 - 130.2

Lab Sample ID: 480-199197-1 MS
Matrix: Solid
Analysis Batch: 631791

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 631437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	7.2		50.3	52.59		mg/Kg	☼	90	75 - 125
Barium	58.8	F1	50.3	130.1	F1	mg/Kg	☼	142	75 - 125
Beryllium	0.78		50.3	46.22		mg/Kg	☼	90	75 - 125
Cadmium	0.21	J	50.3	45.46		mg/Kg	☼	90	75 - 125
Copper	28.3		50.3	73.02		mg/Kg	☼	89	75 - 125
Lead	108	F1	50.3	223.8	F1	mg/Kg	☼	229	75 - 125
Manganese	732	B	50.3	601.4	4	mg/Kg	☼	-259	75 - 125
Nickel	24.5		50.3	69.66		mg/Kg	☼	90	75 - 125
Selenium	ND		50.3	44.95		mg/Kg	☼	89	75 - 125
Silver	ND		12.6	11.57		mg/Kg	☼	92	75 - 125
Zinc	71.8		50.3	112.8		mg/Kg	☼	81	75 - 125

Lab Sample ID: 480-199197-1 MSD
Matrix: Solid
Analysis Batch: 631791

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 631437

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	7.2		48.4	50.01		mg/Kg	☼	88	75 - 125	5	20
Barium	58.8	F1	48.4	127.5	F1	mg/Kg	☼	142	75 - 125	2	20
Beryllium	0.78		48.4	44.22		mg/Kg	☼	90	75 - 125	4	20
Cadmium	0.21	J	48.4	43.34		mg/Kg	☼	89	75 - 125	5	20
Copper	28.3		48.4	70.70		mg/Kg	☼	88	75 - 125	3	20
Lead	108	F1	48.4	202.1	F1	mg/Kg	☼	194	75 - 125	10	20
Manganese	732	B	48.4	634.9	4	mg/Kg	☼	-200	75 - 125	5	20
Nickel	24.5		48.4	67.23		mg/Kg	☼	88	75 - 125	4	20
Selenium	ND		48.4	43.27		mg/Kg	☼	89	75 - 125	4	20
Silver	ND		12.1	10.96		mg/Kg	☼	91	75 - 125	5	20
Zinc	71.8		48.4	117.6		mg/Kg	☼	94	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-631475/1-A
Matrix: Water
Analysis Batch: 631543

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/24/22 10:57	06/24/22 13:57	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 480-631475/2-A
Matrix: Water
Analysis Batch: 631543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631475

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00667	0.00677		mg/L		101	80 - 120		

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-631367/1-A
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		06/24/22 09:43	06/24/22 12:17	1

Lab Sample ID: LCSSRM 480-631367/2-A ^10
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631367

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			18.9	20.06		mg/Kg		106.2	59.8 - 139.7		

Lab Sample ID: MB 480-631369/1-A
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0044	mg/Kg		06/24/22 09:43	06/24/22 12:57	1

Lab Sample ID: LCDSRM 480-631369/24-A ^10
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631369

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			18.9	17.57		mg/Kg		92.9	59.8 - 139.7	1	20

Lab Sample ID: LCSSRM 480-631369/2-A ^10
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631369

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			18.9	17.77		mg/Kg		94.0	59.8 - 139.7		

Lab Sample ID: 480-199197-10 MS
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: SB-117 (0.5-3.0)
Prep Type: Total/NA
Prep Batch: 631369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.17		0.394	0.516		mg/Kg	☼	88	80 - 120		

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-199197-10 MSD
Matrix: Solid
Analysis Batch: 631528

Client Sample ID: SB-117 (0.5-3.0)
Prep Type: Total/NA
Prep Batch: 631369

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.17		0.395	0.541		mg/Kg	☼	95	80 - 120	5	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-631122/3
Matrix: Water
Analysis Batch: 631122

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			06/22/22 11:00	1

Lab Sample ID: LCS 480-631122/4
Matrix: Water
Analysis Batch: 631122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.0500	0.0499		mg/L		100	85 - 115

Lab Sample ID: 480-199197-19 DU
Matrix: Water
Analysis Batch: 631122

Client Sample ID: Equipment Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	ND	H	ND		mg/L		NC	20

Lab Sample ID: MB 460-852601/1-A
Matrix: Solid
Analysis Batch: 852940

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 852601

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.0	0.85	mg/Kg		06/29/22 09:40	06/30/22 10:20	1

Lab Sample ID: LCSI 460-852601/3-A
Matrix: Solid
Analysis Batch: 852940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 852601

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	708	591.1		mg/Kg		83	80 - 120

Lab Sample ID: LCSSRM 460-852601/2-A
Matrix: Solid
Analysis Batch: 852940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 852601

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	15.9	15.03		mg/Kg		94.6	84.1 - 114.4

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 480-632161/1-A
Matrix: Solid
Analysis Batch: 632202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.87	0.42	mg/Kg		06/30/22 09:23	06/30/22 09:54	1

Lab Sample ID: LCSSRM 480-632161/2-A
Matrix: Solid
Analysis Batch: 632202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632161

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	250	4.59	*-	mg/Kg		2	29 - 122

Lab Sample ID: MB 480-632260/1-A
Matrix: Water
Analysis Batch: 632311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		06/30/22 14:24	06/30/22 18:09	1

Lab Sample ID: LCS 480-632260/2-A
Matrix: Water
Analysis Batch: 632311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.256		mg/L		102	90 - 110

Lab Sample ID: MB 480-632392/1-A
Matrix: Solid
Analysis Batch: 632449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.90	0.43	mg/Kg		07/01/22 14:08	07/02/22 13:32	1

Lab Sample ID: LCSSRM 480-632392/2-A
Matrix: Solid
Analysis Batch: 632449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632392

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	70.2	21.37	*-	mg/Kg		30.4	40.0 - 159.5

Lab Sample ID: MB 480-632404/1-A
Matrix: Solid
Analysis Batch: 632445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632404

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.85	0.41	mg/Kg		07/01/22 14:37	07/02/22 17:03	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCSSRM 480-632404/2-A
Matrix: Solid
Analysis Batch: 632445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632404

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			70.2	29.82		mg/Kg		42.5	40.0 - 159.5		

Lab Sample ID: 480-199197-9 MS
Matrix: Solid
Analysis Batch: 632445

Client Sample ID: SB-116 (6.0-7.5)
Prep Type: Total/NA
Prep Batch: 632404

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.0634	ND		mg/Kg	☼	NC	85 - 115		

Lab Sample ID: 480-199197-8 DU
Matrix: Solid
Analysis Batch: 632445

Client Sample ID: SB-116 (0.5-2.5)
Prep Type: Total/NA
Prep Batch: 632404

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	ND			ND		mg/Kg	☼			NC	15

Lab Sample ID: MB 480-632532/1-A
Matrix: Solid
Analysis Batch: 632557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.87	0.42	mg/Kg		07/05/22 11:57	07/05/22 13:24	1

Lab Sample ID: LCSSRM 480-632532/2-A ^10X
Matrix: Solid
Analysis Batch: 632557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632532

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			70.2	28.01	*-	mg/Kg		39.9	40.0 - 159.5		

Lab Sample ID: 480-199197-6 MS
Matrix: Solid
Analysis Batch: 632557

Client Sample ID: SB-115 (0-3)
Prep Type: Total/NA
Prep Batch: 632532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	H *-	0.0698	ND		mg/Kg	☼	NC	85 - 115		

Lab Sample ID: 480-199197-2 DU
Matrix: Solid
Analysis Batch: 632557

Client Sample ID: SB113 (15-18)
Prep Type: Total/NA
Prep Batch: 632532

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	0.57	J H *-		ND	*-	mg/Kg	☼			NC	15

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: MB 480-632821/1-A
Matrix: Solid
Analysis Batch: 632862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632821

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.89	0.43	mg/Kg		07/07/22 12:37	07/07/22 15:48	1

Lab Sample ID: LCSSRM 480-632821/2-A ^10X
Matrix: Solid
Analysis Batch: 632862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632821

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			70.2	30.22		mg/Kg		43.0	40.0 - 159.5		

Lab Sample ID: 480-199197-11 DU
Matrix: Solid
Analysis Batch: 632862

Client Sample ID: SB-117 (8-10)
Prep Type: Total/NA
Prep Batch: 632821

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	ND	H		ND		mg/Kg	☼			NC	15

GC/MS VOA

Analysis Batch: 631347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8260C	
MB 480-631347/8	Method Blank	Total/NA	Water	8260C	
LCS 480-631347/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 631414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	5035A_L	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	5035A_L	
480-199197-18	Field Duplicate	Total/NA	Solid	5035A_L	
MB 480-631414/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-631414/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Prep Batch: 631468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	5035A_H	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	5035A_H	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	5035A_H	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	5035A_H	
480-199197-12	SB-205 (1.5)	Total/NA	Solid	5035A_H	
480-199197-13	SB-205 (7)	Total/NA	Solid	5035A_H	
480-199197-14	SB-206 (2)	Total/NA	Solid	5035A_H	
480-199197-16	SB-207 (1-3)	Total/NA	Solid	5035A_H	
MB 480-631468/3-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-631468/13-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Analysis Batch: 631472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8260C	631414
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8260C	631414
480-199197-18	Field Duplicate	Total/NA	Solid	8260C	631414
MB 480-631414/2-A	Method Blank	Total/NA	Solid	8260C	631414
LCS 480-631414/1-A	Lab Control Sample	Total/NA	Solid	8260C	631414

Analysis Batch: 631522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8260C	631468
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8260C	631468
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8260C	631468
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8260C	631468
480-199197-12	SB-205 (1.5)	Total/NA	Solid	8260C	631468
480-199197-13	SB-205 (7)	Total/NA	Solid	8260C	631468
480-199197-14	SB-206 (2)	Total/NA	Solid	8260C	631468
480-199197-16	SB-207 (1-3)	Total/NA	Solid	8260C	631468
MB 480-631468/3-A	Method Blank	Total/NA	Solid	8260C	631468
LCS 480-631468/13-A	Lab Control Sample	Total/NA	Solid	8260C	631468

Prep Batch: 631627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	5035A_L	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	5035A_L	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	5035A_L	

GC/MS VOA (Continued)

Prep Batch: 631627 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-6	SB-115 (0-3)	Total/NA	Solid	5035A_L	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	5035A_L	
480-199197-15	SB-206 (6)	Total/NA	Solid	5035A_L	
480-199197-17	SB-207 (6-8)	Total/NA	Solid	5035A_L	
MB 480-631627/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-631627/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 631682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	8260C	631627
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8260C	631627
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8260C	631627
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8260C	631627
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8260C	631627
480-199197-15	SB-206 (6)	Total/NA	Solid	8260C	631627
480-199197-17	SB-207 (6-8)	Total/NA	Solid	8260C	631627
MB 480-631627/2-A	Method Blank	Total/NA	Solid	8260C	631627
LCS 480-631627/1-A	Lab Control Sample	Total/NA	Solid	8260C	631627

GC/MS Semi VOA

Prep Batch: 631241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	3510C	
MB 480-631241/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-631241/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-631241/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 631383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	3550C	
480-199197-2	SB113 (15-18)	Total/NA	Solid	3550C	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	3550C	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	3550C	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	3550C	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	3550C	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	3550C	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	3550C	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	3550C	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	3550C	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	3550C	
480-199197-18	Field Duplicate	Total/NA	Solid	3550C	
MB 480-631383/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-631383/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	3550C	
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	3550C	

Analysis Batch: 631452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8270D	631383
480-199197-2	SB113 (15-18)	Total/NA	Solid	8270D	631383

GC/MS Semi VOA (Continued)

Analysis Batch: 631452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8270D	631383
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8270D	631383
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8270D	631383
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8270D	631383
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8270D	631383
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8270D	631383
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8270D	631383
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8270D	631383
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8270D	631383
480-199197-18	Field Duplicate	Total/NA	Solid	8270D	631383
MB 480-631383/1-A	Method Blank	Total/NA	Solid	8270D	631383
LCS 480-631383/2-A	Lab Control Sample	Total/NA	Solid	8270D	631383
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	8270D	631383
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	8270D	631383

Analysis Batch: 631456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8270D	631241
MB 480-631241/1-A	Method Blank	Total/NA	Water	8270D	631241
LCS 480-631241/2-A	Lab Control Sample	Total/NA	Water	8270D	631241
LCSD 480-631241/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	631241

GC Semi VOA

Prep Batch: 631179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	3510C	
MB 480-631179/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-631179/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-631179/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 631266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8151A	
MB 480-631266/1-A	Method Blank	Total/NA	Water	8151A	
LCS 480-631266/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 480-631266/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 631424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8081B	631179
MB 480-631179/1-A	Method Blank	Total/NA	Water	8081B	631179
LCS 480-631179/2-A	Lab Control Sample	Total/NA	Water	8081B	631179
LCSD 480-631179/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	631179

Analysis Batch: 631497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8151A	631266
MB 480-631266/1-A	Method Blank	Total/NA	Water	8151A	631266
LCS 480-631266/2-A	Lab Control Sample	Total/NA	Water	8151A	631266
LCSD 480-631266/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	631266

GC Semi VOA

Prep Batch: 631635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8151A	
480-199197-2	SB113 (15-18)	Total/NA	Solid	8151A	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8151A	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8151A	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8151A	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8151A	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8151A	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8151A	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8151A	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8151A	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8151A	
480-199197-18	Field Duplicate	Total/NA	Solid	8151A	
MB 480-631635/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-631635/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Prep Batch: 631723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	3550C	
480-199197-2	SB113 (15-18)	Total/NA	Solid	3550C	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	3550C	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	3550C	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	3550C	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	3550C	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	3550C	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	3550C	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	3550C	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	3550C	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	3550C	
480-199197-18	Field Duplicate	Total/NA	Solid	3550C	
MB 480-631723/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-631723/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-199197-2 MS	SB113 (15-18)	Total/NA	Solid	3550C	
480-199197-2 MSD	SB113 (15-18)	Total/NA	Solid	3550C	

Analysis Batch: 631751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8081B	631723
480-199197-2	SB113 (15-18)	Total/NA	Solid	8081B	631723
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8081B	631723
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8081B	631723
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8081B	631723
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8081B	631723
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8081B	631723
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8081B	631723
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8081B	631723
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8081B	631723
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8081B	631723
480-199197-18	Field Duplicate	Total/NA	Solid	8081B	631723
MB 480-631723/1-A	Method Blank	Total/NA	Solid	8081B	631723
LCS 480-631723/2-A	Lab Control Sample	Total/NA	Solid	8081B	631723
480-199197-2 MS	SB113 (15-18)	Total/NA	Solid	8081B	631723

GC Semi VOA (Continued)

Analysis Batch: 631751 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2 MSD	SB113 (15-18)	Total/NA	Solid	8081B	631723

Analysis Batch: 633008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8151A	631635
480-199197-2	SB113 (15-18)	Total/NA	Solid	8151A	631635
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8151A	631635
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8151A	631635
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8151A	631635
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8151A	631635
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8151A	631635
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8151A	631635
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8151A	631635
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8151A	631635
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8151A	631635
480-199197-18	Field Duplicate	Total/NA	Solid	8151A	631635
MB 480-631635/1-A	Method Blank	Total/NA	Solid	8151A	631635
LCS 480-631635/2-A	Lab Control Sample	Total/NA	Solid	8151A	631635

LCMS

Prep Batch: 181138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	SHAKE	
480-199197-2	SB113 (15-18)	Total/NA	Solid	SHAKE	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	SHAKE	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	SHAKE	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	SHAKE	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	SHAKE	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	SHAKE	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	SHAKE	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	SHAKE	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	SHAKE	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	SHAKE	
480-199197-18	Field Duplicate	Total/NA	Solid	SHAKE	
MB 200-181138/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-181138/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
480-199197-5 MS	SB-114 (12-16)	Total/NA	Solid	SHAKE	
480-199197-5 MSD	SB-114 (12-16)	Total/NA	Solid	SHAKE	

Prep Batch: 181147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	3535	
MB 200-181147/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-181147/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-181147/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 181168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	537 (modified)	181147
MB 200-181147/1-A	Method Blank	Total/NA	Water	537 (modified)	181147

LCMS (Continued)

Analysis Batch: 181168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 200-181147/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	181147
LCSD 200-181147/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	181147

Analysis Batch: 181170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	537 (modified)	181138
480-199197-2	SB113 (15-18)	Total/NA	Solid	537 (modified)	181138
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	537 (modified)	181138
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	537 (modified)	181138
480-199197-5	SB-114 (12-16)	Total/NA	Solid	537 (modified)	181138
480-199197-6	SB-115 (0-3)	Total/NA	Solid	537 (modified)	181138
480-199197-7	SB-115 (6-8)	Total/NA	Solid	537 (modified)	181138
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	537 (modified)	181138
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	537 (modified)	181138
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	537 (modified)	181138
480-199197-11	SB-117 (8-10)	Total/NA	Solid	537 (modified)	181138
480-199197-18	Field Duplicate	Total/NA	Solid	537 (modified)	181138
MB 200-181138/1-A	Method Blank	Total/NA	Solid	537 (modified)	181138
LCS 200-181138/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	181138
480-199197-5 MS	SB-114 (12-16)	Total/NA	Solid	537 (modified)	181138
480-199197-5 MSD	SB-114 (12-16)	Total/NA	Solid	537 (modified)	181138

Metals

Prep Batch: 631187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	3005A	
MB 480-631187/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-631187/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 631367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	7471B	
480-199197-2	SB113 (15-18)	Total/NA	Solid	7471B	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	7471B	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	7471B	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	7471B	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	7471B	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	7471B	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	7471B	
MB 480-631367/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-631367/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 631369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	7471B	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	7471B	
480-199197-18	Field Duplicate	Total/NA	Solid	7471B	
MB 480-631369/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-631369/24-A ^	Lab Control Sample Dup	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 631369 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 480-631369/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-199197-10 MS	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	
480-199197-10 MSD	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	

Prep Batch: 631437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	3050B	
480-199197-2	SB113 (15-18)	Total/NA	Solid	3050B	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	3050B	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	3050B	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	3050B	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	3050B	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	3050B	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	3050B	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	3050B	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	3050B	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	3050B	
480-199197-18	Field Duplicate	Total/NA	Solid	3050B	
MB 480-631437/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-631437/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	3050B	
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	3050B	

Prep Batch: 631475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	7470A	
MB 480-631475/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-631475/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 631484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	6010C	631187
MB 480-631187/1-A	Method Blank	Total/NA	Water	6010C	631187
LCS 480-631187/2-A	Lab Control Sample	Total/NA	Water	6010C	631187

Analysis Batch: 631528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	7471B	631367
480-199197-2	SB113 (15-18)	Total/NA	Solid	7471B	631367
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	7471B	631367
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	7471B	631367
480-199197-5	SB-114 (12-16)	Total/NA	Solid	7471B	631367
480-199197-6	SB-115 (0-3)	Total/NA	Solid	7471B	631367
480-199197-7	SB-115 (6-8)	Total/NA	Solid	7471B	631367
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	7471B	631367
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	7471B	631369
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	631369
480-199197-11	SB-117 (8-10)	Total/NA	Solid	7471B	631369
480-199197-18	Field Duplicate	Total/NA	Solid	7471B	631369
MB 480-631367/1-A	Method Blank	Total/NA	Solid	7471B	631367
MB 480-631369/1-A	Method Blank	Total/NA	Solid	7471B	631369

Metals (Continued)

Analysis Batch: 631528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCDSRM 480-631369/24-A ^	Lab Control Sample Dup	Total/NA	Solid	7471B	631369
LCSSRM 480-631367/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	631367
LCSSRM 480-631369/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	631369
480-199197-10 MS	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	631369
480-199197-10 MSD	SB-117 (0.5-3.0)	Total/NA	Solid	7471B	631369

Analysis Batch: 631543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	7470A	631475
MB 480-631475/1-A	Method Blank	Total/NA	Water	7470A	631475
LCS 480-631475/2-A	Lab Control Sample	Total/NA	Water	7470A	631475

Analysis Batch: 631791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	6010C	631437
480-199197-2	SB113 (15-18)	Total/NA	Solid	6010C	631437
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	6010C	631437
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	6010C	631437
480-199197-5	SB-114 (12-16)	Total/NA	Solid	6010C	631437
480-199197-6	SB-115 (0-3)	Total/NA	Solid	6010C	631437
480-199197-7	SB-115 (6-8)	Total/NA	Solid	6010C	631437
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	6010C	631437
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	6010C	631437
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	6010C	631437
480-199197-11	SB-117 (8-10)	Total/NA	Solid	6010C	631437
480-199197-18	Field Duplicate	Total/NA	Solid	6010C	631437
MB 480-631437/1-A	Method Blank	Total/NA	Solid	6010C	631437
LCSSRM 480-631437/2-A	Lab Control Sample	Total/NA	Solid	6010C	631437
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	6010C	631437
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	6010C	631437

Analysis Batch: 631995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-5	SB-114 (12-16)	Total/NA	Solid	6010C	631437

General Chemistry

Analysis Batch: 631122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	7196A	
MB 480-631122/3	Method Blank	Total/NA	Water	7196A	
LCS 480-631122/4	Lab Control Sample	Total/NA	Water	7196A	
480-199197-19 MS	Equipment Blank	Total/NA	Water	7196A	
480-199197-19 DU	Equipment Blank	Total/NA	Water	7196A	

Analysis Batch: 631201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	Moisture	
480-199197-2	SB113 (15-18)	Total/NA	Solid	Moisture	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	Moisture	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 631201 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-5	SB-114 (12-16)	Total/NA	Solid	Moisture	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	Moisture	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	Moisture	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	Moisture	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	Moisture	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	Moisture	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	Moisture	
480-199197-18	Field Duplicate	Total/NA	Solid	Moisture	

Analysis Batch: 631626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-12	SB-205 (1.5)	Total/NA	Solid	Moisture	
480-199197-13	SB-205 (7)	Total/NA	Solid	Moisture	
480-199197-14	SB-206 (2)	Total/NA	Solid	Moisture	
480-199197-15	SB-206 (6)	Total/NA	Solid	Moisture	
480-199197-16	SB-207 (1-3)	Total/NA	Solid	Moisture	
480-199197-17	SB-207 (6-8)	Total/NA	Solid	Moisture	

Prep Batch: 632161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	9012B	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	9012B	
MB 480-632161/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-632161/2-A	Lab Control Sample	Total/NA	Solid	9012B	

Analysis Batch: 632202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	9012B	632161
480-199197-6	SB-115 (0-3)	Total/NA	Solid	9012B	632161
MB 480-632161/1-A	Method Blank	Total/NA	Solid	9012B	632161
LCSSRM 480-632161/2-A	Lab Control Sample	Total/NA	Solid	9012B	632161

Prep Batch: 632217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-11	SB-117 (8-10)	Total/NA	Solid	9012B	

Analysis Batch: 632254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-11	SB-117 (8-10)	Total/NA	Solid	9012B	632217

Prep Batch: 632260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	9012B	
MB 480-632260/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-632260/2-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 632311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	9012B	632260
MB 480-632260/1-A	Method Blank	Total/NA	Water	9012B	632260
LCS 480-632260/2-A	Lab Control Sample	Total/NA	Water	9012B	632260

General Chemistry

Prep Batch: 632392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	9012B	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	9012B	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	9012B	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	9012B	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	9012B	
MB 480-632392/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-632392/2-A	Lab Control Sample	Total/NA	Solid	9012B	

Prep Batch: 632404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	9012B	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	9012B	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	9012B	
480-199197-18	Field Duplicate	Total/NA	Solid	9012B	
MB 480-632404/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-632404/2-A	Lab Control Sample	Total/NA	Solid	9012B	
480-199197-9 MS	SB-116 (6.0-7.5)	Total/NA	Solid	9012B	
480-199197-8 DU	SB-116 (0.5-2.5)	Total/NA	Solid	9012B	

Analysis Batch: 632442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	SM 3500 CR D	
480-199197-2	SB113 (15-18)	Total/NA	Solid	SM 3500 CR D	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	SM 3500 CR D	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	SM 3500 CR D	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	SM 3500 CR D	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	SM 3500 CR D	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	SM 3500 CR D	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	SM 3500 CR D	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	SM 3500 CR D	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	SM 3500 CR D	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	SM 3500 CR D	
480-199197-18	Field Duplicate	Total/NA	Solid	SM 3500 CR D	

Analysis Batch: 632445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	9012B	632404
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	9012B	632404
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	9012B	632404
480-199197-18	Field Duplicate	Total/NA	Solid	9012B	632404
MB 480-632404/1-A	Method Blank	Total/NA	Solid	9012B	632404
LCSSRM 480-632404/2-A	Lab Control Sample	Total/NA	Solid	9012B	632404
480-199197-9 MS	SB-116 (6.0-7.5)	Total/NA	Solid	9012B	632404
480-199197-8 DU	SB-116 (0.5-2.5)	Total/NA	Solid	9012B	632404

Analysis Batch: 632449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	9012B	632392
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	9012B	632392
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	9012B	632392
480-199197-5	SB-114 (12-16)	Total/NA	Solid	9012B	632392

General Chemistry (Continued)

Analysis Batch: 632449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-7	SB-115 (6-8)	Total/NA	Solid	9012B	632392
MB 480-632392/1-A	Method Blank	Total/NA	Solid	9012B	632392
LCSSRM 480-632392/2-A	Lab Control Sample	Total/NA	Solid	9012B	632392

Prep Batch: 632532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	9012B	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	9012B	
MB 480-632532/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-632532/2-A ^1	Lab Control Sample	Total/NA	Solid	9012B	
480-199197-6 MS	SB-115 (0-3)	Total/NA	Solid	9012B	
480-199197-2 DU	SB113 (15-18)	Total/NA	Solid	9012B	

Analysis Batch: 632557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-2	SB113 (15-18)	Total/NA	Solid	9012B	632532
480-199197-6	SB-115 (0-3)	Total/NA	Solid	9012B	632532
MB 480-632532/1-A	Method Blank	Total/NA	Solid	9012B	632532
LCSSRM 480-632532/2-A ^1	Lab Control Sample	Total/NA	Solid	9012B	632532
480-199197-6 MS	SB-115 (0-3)	Total/NA	Solid	9012B	632532
480-199197-2 DU	SB113 (15-18)	Total/NA	Solid	9012B	632532

Prep Batch: 632821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-11	SB-117 (8-10)	Total/NA	Solid	9012B	
MB 480-632821/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-632821/2-A ^1	Lab Control Sample	Total/NA	Solid	9012B	
480-199197-11 DU	SB-117 (8-10)	Total/NA	Solid	9012B	

Analysis Batch: 632862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-11	SB-117 (8-10)	Total/NA	Solid	9012B	632821
MB 480-632821/1-A	Method Blank	Total/NA	Solid	9012B	632821
LCSSRM 480-632821/2-A ^1	Lab Control Sample	Total/NA	Solid	9012B	632821
480-199197-11 DU	SB-117 (8-10)	Total/NA	Solid	9012B	632821

Prep Batch: 852601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	3060A	
480-199197-2	SB113 (15-18)	Total/NA	Solid	3060A	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	3060A	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	3060A	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	3060A	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	3060A	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	3060A	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	3060A	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	3060A	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	3060A	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	3060A	
480-199197-18	Field Duplicate	Total/NA	Solid	3060A	
MB 460-852601/1-A	Method Blank	Total/NA	Solid	3060A	

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

General Chemistry (Continued)

Prep Batch: 852601 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSI 460-852601/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSSRM 460-852601/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Analysis Batch: 852940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	7196A	852601
480-199197-2	SB113 (15-18)	Total/NA	Solid	7196A	852601
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	7196A	852601
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	7196A	852601
480-199197-5	SB-114 (12-16)	Total/NA	Solid	7196A	852601
480-199197-6	SB-115 (0-3)	Total/NA	Solid	7196A	852601
480-199197-7	SB-115 (6-8)	Total/NA	Solid	7196A	852601
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	7196A	852601
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	7196A	852601
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	7196A	852601
480-199197-11	SB-117 (8-10)	Total/NA	Solid	7196A	852601
480-199197-18	Field Duplicate	Total/NA	Solid	7196A	852601
MB 460-852601/1-A	Method Blank	Total/NA	Solid	7196A	852601
LCSI 460-852601/3-A	Lab Control Sample	Total/NA	Solid	7196A	852601
LCSSRM 460-852601/2-A	Lab Control Sample	Total/NA	Solid	7196A	852601

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 21:39	CRL	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 14:41	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		50	631751	06/28/22 11:52	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 14:23	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 01:14	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:02	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:44	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 10:20	GSM	TAL EDI
Total/NA	Prep	9012B			632392	07/01/22 14:08	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632449	07/02/22 13:54	EJL	TAL BUF

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 13:13	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		5	631452	06/24/22 16:45	JMM	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB113 (15-18)

Date Collected: 06/20/22 10:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-2

Matrix: Solid
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 10:53	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 14:42	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 01:22	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:33	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:45	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632161	06/30/22 09:23	EJL	TAL BUF
Total/NA	Analysis	9012B		1	632202	06/30/22 10:17	EJL	TAL BUF
Total/NA	Prep	9012B			632532	07/05/22 11:57	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632557	07/05/22 13:27	EJL	TAL BUF

Client Sample ID: SB-114 (0.5-2.0)

Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-114 (0.5-2.0)

Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3

Matrix: Solid
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 22:02	CRL	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 17:10	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 12:12	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 15:00	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 01:30	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:37	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:47	NVK	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-114 (0.5-2.0)

Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3

Matrix: Solid
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632392	07/01/22 14:08	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632449	07/02/22 13:57	EJL	TAL BUF

Client Sample ID: SB-114 (6.0-10.0)

Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-114 (6.0-10.0)

Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4

Matrix: Solid
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 13:38	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 17:35	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 12:31	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 15:19	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 01:39	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:41	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:48	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632392	07/01/22 14:08	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632449	07/02/22 13:58	EJL	TAL BUF

Client Sample ID: SB-114 (12-16)

Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-114 (12-16)

Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 14:02	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 18:00	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 12:51	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 15:37	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 01:47	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:45	LMH	TAL BUF
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		2	631995	06/28/22 15:09	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:49	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632392	07/01/22 14:08	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632449	07/02/22 14:00	EJL	TAL BUF

Client Sample ID: SB-115 (0-3)

Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-115 (0-3)

Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 14:26	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 18:24	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 13:11	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 16:14	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 02:19	BWC	TAL BUR

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-115 (0-3)

Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6

Matrix: Solid
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:49	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:51	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632161	06/30/22 09:23	EJL	TAL BUF
Total/NA	Analysis	9012B		1	632202	06/30/22 10:23	EJL	TAL BUF
Total/NA	Prep	9012B			632532	07/05/22 11:57	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632557	07/05/22 13:30	EJL	TAL BUF

Client Sample ID: SB-115 (6-8)

Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-115 (6-8)

Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7

Matrix: Solid
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 14:50	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 18:48	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 13:30	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 16:33	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 02:28	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:52	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:52	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632392	07/01/22 14:08	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632449	07/02/22 14:02	EJL	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 22:25	CRL	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 19:13	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 13:50	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 16:51	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 02:36	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 04:56	LMH	TAL BUF
Total/NA	Prep	7471B			631367	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 12:56	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632404	07/01/22 14:37	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632445	07/02/22 17:06	EJL	TAL BUF

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631414	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631472	06/24/22 15:17	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 19:37	JMM	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-116 (6.0-7.5)

Date Collected: 06/20/22 15:10
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-9

Matrix: Solid
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 14:10	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 17:10	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 02:44	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 05:00	LMH	TAL BUF
Total/NA	Prep	7471B			631369	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 13:00	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632404	07/01/22 14:37	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632445	07/02/22 17:09	EJL	TAL BUF

Client Sample ID: SB-117 (0.5-3.0)

Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-117 (0.5-3.0)

Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10

Matrix: Solid
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 22:49	CRL	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 20:02	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 14:29	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 17:28	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 02:52	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 05:16	LMH	TAL BUF
Total/NA	Prep	7471B			631369	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 13:01	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			632404	07/01/22 14:37	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632445	07/02/22 17:12	EJL	TAL BUF

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631414	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631472	06/24/22 15:41	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 20:28	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 14:49	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 17:46	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 03:00	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 05:19	LMH	TAL BUF
Total/NA	Prep	7471B			631369	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 13:06	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632217	06/30/22 12:04	EJL	TAL BUF
Total/NA	Analysis	9012B		1	632254	06/30/22 13:40	EJL	TAL BUF
Total/NA	Prep	9012B			632821	07/07/22 12:37	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632862	07/07/22 15:51	EJL	TAL BUF

Client Sample ID: SB-205 (1.5)
Lab Sample ID: 480-199197-12
Date Collected: 06/20/22 17:02
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-205 (1.5)

Lab Sample ID: 480-199197-12
Date Collected: 06/20/22 17:02
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 23:12	CRL	TAL BUF

Client Sample ID: SB-205 (7)

Lab Sample ID: 480-199197-13
Date Collected: 06/20/22 17:09
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Client Sample ID: SB-205 (7)

Lab Sample ID: 480-199197-13
Date Collected: 06/20/22 17:09
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		2	631522	06/24/22 23:35	CRL	TAL BUF

Client Sample ID: SB-206 (2)

Lab Sample ID: 480-199197-14
Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Client Sample ID: SB-206 (2)

Lab Sample ID: 480-199197-14
Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	631522	06/24/22 23:58	CRL	TAL BUF

Client Sample ID: SB-206 (6)

Lab Sample ID: 480-199197-15
Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Client Sample ID: SB-206 (6)

Lab Sample ID: 480-199197-15
Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 15:14	CDC	TAL BUF

Client Sample ID: SB-207 (1-3)

Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Client Sample ID: SB-207 (1-3)

Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			631468	06/24/22 09:44	LCH	TAL BUF
Total/NA	Analysis	8260C		2	631522	06/25/22 00:21	CRL	TAL BUF

Client Sample ID: SB-207 (6-8)

Lab Sample ID: 480-199197-17
Date Collected: 06/20/22 16:15
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631626	06/26/22 19:47	CDC	TAL BUF

Client Sample ID: SB-207 (6-8)

Lab Sample ID: 480-199197-17
Date Collected: 06/20/22 16:15
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631627	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631682	06/27/22 15:39	CDC	TAL BUF

Client Sample ID: Field Duplicate

Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	631201	06/22/22 16:07	JMM	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	632442	07/02/22 12:17	JJP	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			631414	06/21/22 18:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	631472	06/24/22 16:54	CDC	TAL BUF
Total/NA	Prep	3550C			631383	06/23/22 15:45	SJM	TAL BUF
Total/NA	Analysis	8270D		1	631452	06/24/22 20:53	JMM	TAL BUF
Total/NA	Prep	3550C			631723	06/27/22 15:42	SJM	TAL BUF
Total/NA	Analysis	8081B		1	631751	06/28/22 15:08	MAN	TAL BUF
Total/NA	Prep	8151A			631635	06/27/22 06:56	SMP	TAL BUF
Total/NA	Analysis	8151A		1	633008	07/10/22 18:05	MAN	TAL BUF
Total/NA	Prep	SHAKE			181138	06/27/22 08:23	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	181170	06/28/22 03:08	BWC	TAL BUR
Total/NA	Prep	3050B			631437	06/24/22 10:50	NVK	TAL BUF
Total/NA	Analysis	6010C		1	631791	06/28/22 05:23	LMH	TAL BUF
Total/NA	Prep	7471B			631369	06/24/22 09:43	NVK	TAL BUF
Total/NA	Analysis	7471B		1	631528	06/24/22 13:08	NVK	TAL BUF
Total/NA	Prep	3060A			852601	06/29/22 09:40	GSM	TAL EDI
Total/NA	Analysis	7196A		1	852940	06/30/22 11:30	GSM	TAL EDI
Total/NA	Prep	9012B			632404	07/01/22 14:37	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632445	07/02/22 17:13	EJL	TAL BUF

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	631347	06/24/22 07:40	CRL	TAL BUF
Total/NA	Prep	3510C			631241	06/23/22 08:12	MS	TAL BUF
Total/NA	Analysis	8270D		1	631456	06/24/22 20:21	JMM	TAL BUF
Total/NA	Prep	3510C			631179	06/22/22 15:06	CMC	TAL BUF
Total/NA	Analysis	8081B		1	631424	06/24/22 10:17	JLS	TAL BUF
Total/NA	Prep	8151A			631266	06/23/22 09:32	JMP	TAL BUF
Total/NA	Analysis	8151A		1	631497	06/24/22 17:06	MAN	TAL BUF
Total/NA	Prep	3535			181147	06/27/22 11:32	CM	TAL BUR
Total/NA	Analysis	537 (modified)		1	181168	06/28/22 00:00	KFW	TAL BUR
Total/NA	Prep	3005A			631187	06/23/22 08:47	VAK	TAL BUF
Total/NA	Analysis	6010C		1	631484	06/24/22 01:38	LMH	TAL BUF
Total/NA	Prep	7470A			631475	06/24/22 10:57	NVK	TAL BUF
Total/NA	Analysis	7470A		1	631543	06/24/22 14:13	NVK	TAL BUF
Total/NA	Analysis	7196A		1	631122	06/22/22 11:00	EAG	TAL BUF
Total/NA	Prep	9012B			632260	06/30/22 14:24	HJH	TAL BUF
Total/NA	Analysis	9012B		1	632311	06/30/22 18:26	EJL	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

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

Analysis Method	Prep Method	Matrix	Analyte
7196A		Water	Chromium, hexavalent
7470A	7470A	Water	Mercury
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 3500 CR D		Solid	Chromium, trivalent

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-22
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-22
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-31-22

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-22
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-1
Project/Site: Project # 18-046 - Lakeside Village Apts

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR
3550C	Ultrasonic Extraction	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-199197-1	SB113 (1-5)	Solid	06/20/22 09:50	06/21/22 16:23
480-199197-2	SB113 (15-18)	Solid	06/20/22 10:13	06/21/22 16:23
480-199197-3	SB-114 (0.5-2.0)	Solid	06/20/22 11:12	06/21/22 16:23
480-199197-4	SB-114 (6.0-10.0)	Solid	06/20/22 11:23	06/21/22 16:23
480-199197-5	SB-114 (12-16)	Solid	06/20/22 11:38	06/21/22 16:23
480-199197-6	SB-115 (0-3)	Solid	06/20/22 14:05	06/21/22 16:23
480-199197-7	SB-115 (6-8)	Solid	06/20/22 14:13	06/21/22 16:23
480-199197-8	SB-116 (0.5-2.5)	Solid	06/20/22 14:52	06/21/22 16:23
480-199197-9	SB-116 (6.0-7.5)	Solid	06/20/22 15:10	06/21/22 16:23
480-199197-10	SB-117 (0.5-3.0)	Solid	06/20/22 15:33	06/21/22 16:23
480-199197-11	SB-117 (8-10)	Solid	06/20/22 15:39	06/21/22 16:23
480-199197-12	SB-205 (1.5)	Solid	06/20/22 17:02	06/21/22 16:23
480-199197-13	SB-205 (7)	Solid	06/20/22 17:09	06/21/22 16:23
480-199197-14	SB-206 (2)	Solid	06/20/22 10:45	06/21/22 16:23
480-199197-15	SB-206 (6)	Solid	06/20/22 10:53	06/21/22 16:23
480-199197-16	SB-207 (1-3)	Solid	06/20/22 16:11	06/21/22 16:23
480-199197-17	SB-207 (6-8)	Solid	06/20/22 16:15	06/21/22 16:23
480-199197-18	Field Duplicate	Solid	06/20/22 15:21	06/21/22 16:23
480-199197-19	Equipment Blank	Water	06/20/22 17:33	06/21/22 16:23

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Craig D. Zuhl	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-171241-37158.2
Client Contact: Ms. Christine Curtis	Phone: 716-598-1907	E-Mail: Steve.Hartmann@Eurofinset.com	State of Origin:	Page: Page 2 of 2
Company: Matrix Environmental Technologies Inc	PWSID:			Job #:
Address: 3730 California Road PO BOX 427	Due Date Requested:			
City: Orchard Park	TAT Requested (days):			
State, Zip: NY, 14127	Compliance Project: Δ Yes Δ No			
Phone: 908-399-3651(Tel) 518-636-5190(Fax)	PO #: 18-046			
Email: ccurtis@matrixbiotech.com	WO #:			
Project Name: Project # 18-046 - Lakeside Village Apts	Project #: 48024071			
Site: 65-67 Lake Ave., Lancaster, N.Y.	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3

480-199197 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform	PFC_IDA - PFAS, Standard List (21 analytes)	7196A - Hexavalent Chromium	8260C - TCL VOCs	9012B - Cyanide	3500_CR3_D, 6010C, 7471B	8081B, 8151A, 8270D	Total Nu	Special Instructions/Note:
		Preservation Code:					N	N	N	N	N	N		
SB 205 (1')	6-20-22	10:45	G	Solid					X					
SB 205 (7')		10:55	G	Solid					X					
SB 206 (2')		10:45	G	Solid					X					
SB 206 (6')		10:53	G	Solid					X					
SB 207 (1'-3')		4:11	G	Solid					X					
SB 207 (6'-8')	6-20-22	4:15	G	Solid					X					
~~SB 116~~														
Field Duplicate	6-20-22	3:21	G	Solid			X	X	X	X	X	X	X	
Equipment Blank	6-20-22	5:33	G	Water			X	X	X	X	X	X	X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
	Craig D. Zuhl	6-21-22 4:23	Matrix		6.21.22 4:23	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.2 3.5 4.6 3.8 5.1 ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Craig D. Zink	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-171241-37158.1
Client Contact: Ms. Christine Curtis	Phone: 716-598-1907	E-Mail: Steve.Hartmann@Eurofinset.com	State of Origin:	Page: Page 1 of 2
Company: Matrix Environmental Technologies Inc	PWSID:			Job #:
Address: 3730 California Road PO BOX 427	Due Date Requested:			
City: Orchard Park	TAT Requested (days): Standard			
State, Zip: NY, 14127	Compliance Project: Δ Yes Δ No			
Phone: 908-399-3651(Tel) 518-636-5190(Fax)	PO #: 18-046			
Email: ccurtis@matrixbiotech.com	WO #:			
Project Name: Project # 18-046 - Lakeside Village Apts	Project #: 48024071			
Site: 65-67 Lake Ave, Lancaster N.Y.	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	PFC_IDA - PFAS, Standard List (21 analytes)	7196A - Hexavalent Chromium	8260C - TCL VOCs	9012B - Cyanide	3500_CR3_D, 6010C, 7471B	8081B, 8151A, 8270D	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	N	N	N	N	N		
SB113 (1'-5')	6-20-22	9:50	G	Solid		X	X	X	X	X	X		
SB113 (15-18')		10:36	G	Solid									
SB114 (2.5-3.0')		11:12	G	Solid									
SB114 (6.0-10.0')		11:23	G	Solid									
SB114 (12'-16')		11:38	G	Solid									
SB115 (0'-3')		2:05pm	G	Solid									
SB115 (6'-8')		2:13pm	G	Solid									
SB116 0.5-2.5		2:53	G	Solid									
SB116 (6.0-7.5)		3:10	G	Solid									
SB117 (0.5-3.0')		3:33	G	Solid									
SB117 (6'-10')	6-20-22	3:39	G	Solid		X	X	X	X	X	X		

Possible Hazard Identification
Δ Non-Hazard Δ Flammable Δ Skin Irritant Δ Poison B Δ Unknown Δ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Δ Return To Client Δ Disposal By Lab Δ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-73258.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-199197-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/5/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Project # 18-046 - Lakeside Village Apts	Project #: 48024071			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB113 1-5 (480-199197-1)	6/20/22	09:50 Eastern		Solid			X	1	
SB113 15-18 (480-199197-2)	6/20/22	10:13 Eastern		Solid			X	1	
SB-114 .5-2 (480-199197-3)	6/20/22	11:12 Eastern		Solid			X	1	
SB-114 6.0-10 (480-199197-4)	6/20/22	11:23 Eastern		Solid			X	1	
SB-114 12-16 (480-199197-5)	6/20/22	11:38 Eastern		Solid			X	1	
SB-115 0-3 (480-199197-6)	6/20/22	14:05 Eastern		Solid			X	1	
SB-115 6-8 (480-199197-7)	6/20/22	14:13 Eastern		Solid			X	1	
SB-116 0.5-2.5 (480-199197-8)	6/20/22	14:52 Eastern		Solid			X	1	
SB-116 6.0-7.5 (480-199197-9)	6/20/22	15:10 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Unknown Cwolb	Date/Time: 6/22/22 1200	Company TA	Received by: Via Fedex	Date/Time: 6/23/22 / 1040	Company EK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1979620		Cooler Temperature(s) °C and Other Remarks: ID #9 - 1.5 = 1.9		

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-73258.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin: New York	Page: Page 2 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-199197-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/5/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Project # 18-046 - Lakeside Village Apts	Project #: 48024071			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-117 0.5-3.0 (480-199197-10)	6/20/22	15:33 Eastern		Solid			X	1	
SB-117 8-10 (480-199197-11)	6/20/22	15:39 Eastern		Solid			X	1	
FIELD DUP (480-199197-18)	6/20/22	15:21 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by: TA	Date/Time:	Company	Received by: Via Fedex	Date/Time: 6/23/22 10:10	Company EK
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 197920 | Cooler Temperature(s) °C and Other Remarks: ID#9 - 1.5 = 1.9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-199197-1

Login Number: 199197
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	MATRIX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-199197-1

Login Number: 199197
List Number: 3
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington
List Creation: 06/24/22 11:13 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1979623
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	3.9ºC
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	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-199197-1

Login Number: 199197
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 06/23/22 01:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1979620
Sample custody seals, if present, are 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 is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-199197-2
Client Project/Site: Project # 18-046 - Lakeside Village Apts

For:
Matrix Environmental Technologies Inc
3730 California Road
PO BOX 427
Orchard Park, New York 14127

Attn: Ms. Christine Curtis

Authorized for release by:
7/29/2022 2:49:00 PM

Steve Hartmann, Project Manager
(413)572-4000
Steve.Hartmann@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

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

Case Narrative

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-2

Job ID: 480-199197-2

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-199197-2

Comments
No additional comments.

Receipt
The samples were received on 6/21/2022 4:23 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 3.5º C, 3.8º C, 4.2º C, 4.6º C and 5.1º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB113 (1-5) — Lab Sample ID: 480-199197-1

No Detections.

Client Sample ID: SB113 (15-18) — Lab Sample ID: 480-199197-2

No Detections.

Client Sample ID: SB-114 (0.5-2.0) — Lab Sample ID: 480-199197-3

No Detections.

Client Sample ID: SB-114 (6.0-10.0) — Lab Sample ID: 480-199197-4

No Detections.

Client Sample ID: SB-114 (12-16) — Lab Sample ID: 480-199197-5

No Detections.

Client Sample ID: SB-115 (0-3) — Lab Sample ID: 480-199197-6

No Detections.

Client Sample ID: SB-115 (6-8) — Lab Sample ID: 480-199197-7

No Detections.

Client Sample ID: SB-116 (0.5-2.5) — Lab Sample ID: 480-199197-8

No Detections.

Client Sample ID: SB-116 (6.0-7.5) — Lab Sample ID: 480-199197-9

No Detections.

Client Sample ID: SB-117 (0.5-3.0) — Lab Sample ID: 480-199197-10

No Detections.

Client Sample ID: SB-117 (8-10) — Lab Sample ID: 480-199197-11

No Detections.

Client Sample ID: Equipment Blank — Lab Sample ID: 480-199197-19

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB113 (1-5)

Lab Sample ID: 480-199197-1
Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1221	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1232	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1242	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1248	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1254	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1260	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1262	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1268	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
Tetrachloro-m-xylene	*118*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:03*	*1*

Client Sample ID: SB113 (15-18)

Lab Sample ID: 480-199197-2
Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1254	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1260	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1262	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1268	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
Tetrachloro-m-xylene	*111*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:16*	*1*

Client Sample ID: SB-114 (0.5-2.0)

Lab Sample ID: 480-199197-3
Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1221	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1232	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1242	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1248	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1254	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1260	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1

Client Sample ID: SB-114 (0.5-2.0)

Lab Sample ID: 480-199197-3
Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1268	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
Tetrachloro-m-xylene	*114*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
DCB Decachlorobiphenyl	*107*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:30*	*1*

Client Sample ID: SB-114 (6.0-10.0)

Lab Sample ID: 480-199197-4
Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1221	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1232	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1242	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1248	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1262	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1268	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
Tetrachloro-m-xylene	*113*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:43*	*1*

Client Sample ID: SB-114 (12-16)

Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1221	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1232	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1242	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1248	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1254	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1260	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1262	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1268	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:57*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:57*	*1*
DCB Decachlorobiphenyl	*97*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:57*	*1*

Client Sample ID: SB-114 (12-16)

Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:57*	*1*

Client Sample ID: SB-115 (0-3)

Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1254	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1260	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1262	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1268	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
Tetrachloro-m-xylene	*116*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
DCB Decachlorobiphenyl	*95*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
DCB Decachlorobiphenyl	*107*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:10*	*1*

Client Sample ID: SB-115 (6-8)

Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1221	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1232	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1242	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1248	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1262	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1268	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
DCB Decachlorobiphenyl	*95*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:24*	*1*

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1221	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1232	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1242	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1248	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1262	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1268	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
Tetrachloro-m-xylene	*114*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
DCB Decachlorobiphenyl	*99*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
DCB Decachlorobiphenyl	*111*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:37*	*1*

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1262	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1268	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
Tetrachloro-m-xylene	*117*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:50*	*1*

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1221	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1232	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1242	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1248	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1254	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1260	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10

Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1268	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
Tetrachloro-m-xylene	*112*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
DCB Decachlorobiphenyl	*105*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:04*	*1*

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11

Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1221	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1232	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1242	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1248	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1262	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1268	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
Tetrachloro-m-xylene	*110*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
DCB Decachlorobiphenyl	*105*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:17*	*1*

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1221	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1232	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1242	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1248	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1254	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1260	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1262	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1268	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*39 - 121*	*07/18/22 08:37*	*07/19/22 17:24*	*1*
Tetrachloro-m-xylene	*66*		*39 - 121*	*07/18/22 08:37*	*07/19/22 17:24*	*1*
DCB Decachlorobiphenyl	*39*		*19 - 120*	*07/18/22 08:37*	*07/19/22 17:24*	*1*

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43		19 - 120	07/18/22 08:37	07/19/22 17:24	1

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(60-154)	(60-154)	(65-174)	(65-174)
480-199197-1	SB113 (1-5)	97	118	96	106
480-199197-1 MS	SB113 (1-5)	110	130	112	127
480-199197-1 MSD	SB113 (1-5)	107	127	106	120
480-199197-2	SB113 (15-18)	94	111	96	108
480-199197-3	SB-114 (0.5-2.0)	97	114	96	107
480-199197-4	SB-114 (6.0-10.0)	96	113	93	106
480-199197-5	SB-114 (12-16)	96	115	97	108
480-199197-6	SB-115 (0-3)	97	116	95	107
480-199197-7	SB-115 (6-8)	97	115	95	106
480-199197-8	SB-116 (0.5-2.5)	98	114	99	111
480-199197-9	SB-116 (6.0-7.5)	98	117	96	108
480-199197-10	SB-117 (0.5-3.0)	93	112	93	105
480-199197-11	SB-117 (8-10)	92	110	93	105
LCS 480-633623/2-A	Lab Control Sample	115	138	116	133
MB 480-633623/1-A	Method Blank	100	120	99	114

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(39-121)	(39-121)	(19-120)	(19-120)
480-199197-19	Equipment Blank	57	66	39	43
LCS 480-633848/2-A	Lab Control Sample	65	75	36	40
MB 480-633848/1-A	Method Blank	59	69	51	57

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-633623/1-A
Matrix: Solid
Analysis Batch: 633828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1221	ND		0.23	0.044	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1232	ND		0.23	0.044	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1242	ND		0.23	0.044	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1248	ND		0.23	0.044	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1254	ND		0.23	0.11	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1260	ND		0.23	0.11	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1262	ND		0.23	0.11	mg/Kg		07/14/22 15:44	07/17/22 21:43	1
PCB-1268	ND		0.23	0.11	mg/Kg		07/14/22 15:44	07/17/22 21:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*60 - 154*	*07/14/22 15:44*	*07/17/22 21:43*	*1*
Tetrachloro-m-xylene	*120*		*60 - 154*	*07/14/22 15:44*	*07/17/22 21:43*	*1*
DCB Decachlorobiphenyl	*99*		*65 - 174*	*07/14/22 15:44*	*07/17/22 21:43*	*1*
DCB Decachlorobiphenyl	*114*		*65 - 174*	*07/14/22 15:44*	*07/17/22 21:43*	*1*

Lab Sample ID: LCS 480-633623/2-A
Matrix: Solid
Analysis Batch: 633828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633623

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			1.81	2.11		mg/Kg		116	51 - 185		
PCB-1260			1.81	2.13		mg/Kg		117	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*115*		*60 - 154*
Tetrachloro-m-xylene	*138*		*60 - 154*
DCB Decachlorobiphenyl	*116*		*65 - 174*
DCB Decachlorobiphenyl	*133*		*65 - 174*

Lab Sample ID: 480-199197-1 MS
Matrix: Solid
Analysis Batch: 633828

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 633623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016	ND		2.88	3.37		mg/Kg	☼	117	50 - 177		
PCB-1260	ND		2.88	3.47		mg/Kg	☼	120	33 - 200		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*110*		*60 - 154*
Tetrachloro-m-xylene	*130*		*60 - 154*
DCB Decachlorobiphenyl	*112*		*65 - 174*
DCB Decachlorobiphenyl	*127*		*65 - 174*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-199197-1 MSD
Matrix: Solid
Analysis Batch: 633828

Client Sample ID: SB113 (1-5)
Prep Type: Total/NA
Prep Batch: 633623

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		2.52	2.76		mg/Kg	☼	109	50 - 177	20	50
PCB-1260	ND		2.52	2.83		mg/Kg	☼	112	33 - 200	20	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*107*		*60 - 154*
Tetrachloro-m-xylene	*127*		*60 - 154*
DCB Decachlorobiphenyl	*106*		*65 - 174*
DCB Decachlorobiphenyl	*120*		*65 - 174*

Lab Sample ID: MB 480-633848/1-A
Matrix: Water
Analysis Batch: 634080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1221	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1232	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1242	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1248	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1254	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1260	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1262	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 16:17	1
PCB-1268	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*39 - 121*	*07/18/22 08:37*	*07/19/22 16:17*	*1*
Tetrachloro-m-xylene	*69*		*39 - 121*	*07/18/22 08:37*	*07/19/22 16:17*	*1*
DCB Decachlorobiphenyl	*51*		*19 - 120*	*07/18/22 08:37*	*07/19/22 16:17*	*1*
DCB Decachlorobiphenyl	*57*		*19 - 120*	*07/18/22 08:37*	*07/19/22 16:17*	*1*

Lab Sample ID: LCS 480-633848/2-A
Matrix: Water
Analysis Batch: 634080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633848

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			4.00	3.64		ug/L		91	62 - 130		
PCB-1260			4.00	3.44		ug/L		86	56 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*65*		*39 - 121*
Tetrachloro-m-xylene	*75*		*39 - 121*
DCB Decachlorobiphenyl	*36*		*19 - 120*
DCB Decachlorobiphenyl	*40*		*19 - 120*

QC Association Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

GC Semi VOA

Prep Batch: 633623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	3550C	
480-199197-2	SB113 (15-18)	Total/NA	Solid	3550C	
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	3550C	
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	3550C	
480-199197-5	SB-114 (12-16)	Total/NA	Solid	3550C	
480-199197-6	SB-115 (0-3)	Total/NA	Solid	3550C	
480-199197-7	SB-115 (6-8)	Total/NA	Solid	3550C	
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	3550C	
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	3550C	
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	3550C	
480-199197-11	SB-117 (8-10)	Total/NA	Solid	3550C	
MB 480-633623/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-633623/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	3550C	
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	3550C	

Analysis Batch: 633828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-1	SB113 (1-5)	Total/NA	Solid	8082A	633623
480-199197-2	SB113 (15-18)	Total/NA	Solid	8082A	633623
480-199197-3	SB-114 (0.5-2.0)	Total/NA	Solid	8082A	633623
480-199197-4	SB-114 (6.0-10.0)	Total/NA	Solid	8082A	633623
480-199197-5	SB-114 (12-16)	Total/NA	Solid	8082A	633623
480-199197-6	SB-115 (0-3)	Total/NA	Solid	8082A	633623
480-199197-7	SB-115 (6-8)	Total/NA	Solid	8082A	633623
480-199197-8	SB-116 (0.5-2.5)	Total/NA	Solid	8082A	633623
480-199197-9	SB-116 (6.0-7.5)	Total/NA	Solid	8082A	633623
480-199197-10	SB-117 (0.5-3.0)	Total/NA	Solid	8082A	633623
480-199197-11	SB-117 (8-10)	Total/NA	Solid	8082A	633623
MB 480-633623/1-A	Method Blank	Total/NA	Solid	8082A	633623
LCS 480-633623/2-A	Lab Control Sample	Total/NA	Solid	8082A	633623
480-199197-1 MS	SB113 (1-5)	Total/NA	Solid	8082A	633623
480-199197-1 MSD	SB113 (1-5)	Total/NA	Solid	8082A	633623

Prep Batch: 633848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	3510C	
MB 480-633848/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-633848/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 634080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199197-19	Equipment Blank	Total/NA	Water	8082A	633848
MB 480-633848/1-A	Method Blank	Total/NA	Water	8082A	633848
LCS 480-633848/2-A	Lab Control Sample	Total/NA	Water	8082A	633848

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Lakeside Village Apts

Job ID: 480-199197-2

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/17/22 23:03	W1T	TAL BUF

Client Sample ID: SB113 (15-18)
Date Collected: 06/20/22 10:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-2
Matrix: Solid
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/17/22 23:16	W1T	TAL BUF

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/17/22 23:30	W1T	TAL BUF

Client Sample ID: SB-114 (6.0-10.0)
Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4
Matrix: Solid
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/17/22 23:43	W1T	TAL BUF

Client Sample ID: SB-114 (12-16)
Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5
Matrix: Solid
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/17/22 23:57	W1T	TAL BUF

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 00:10	W1T	TAL BUF

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 00:24	W1T	TAL BUF

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 00:37	W1T	TAL BUF

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9
Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 00:50	W1T	TAL BUF

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 01:04	W1T	TAL BUF

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			633623	07/14/22 15:44	SJM	TAL BUF
Total/NA	Analysis	8082A		1	633828	07/18/22 01:17	W1T	TAL BUF

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			633848	07/18/22 08:37	MS	TAL BUF
Total/NA	Analysis	8082A		1	634080	07/19/22 17:24	W1T	TAL BUF

Laboratory References:
TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-199197-1	SB113 (1-5)	Solid	06/20/22 09:50	06/21/22 16:23
480-199197-2	SB113 (15-18)	Solid	06/20/22 10:13	06/21/22 16:23
480-199197-3	SB-114 (0.5-2.0)	Solid	06/20/22 11:12	06/21/22 16:23
480-199197-4	SB-114 (6.0-10.0)	Solid	06/20/22 11:23	06/21/22 16:23
480-199197-5	SB-114 (12-16)	Solid	06/20/22 11:38	06/21/22 16:23
480-199197-6	SB-115 (0-3)	Solid	06/20/22 14:05	06/21/22 16:23
480-199197-7	SB-115 (6-8)	Solid	06/20/22 14:13	06/21/22 16:23
480-199197-8	SB-116 (0.5-2.5)	Solid	06/20/22 14:52	06/21/22 16:23
480-199197-9	SB-116 (6.0-7.5)	Solid	06/20/22 15:10	06/21/22 16:23
480-199197-10	SB-117 (0.5-3.0)	Solid	06/20/22 15:33	06/21/22 16:23
480-199197-11	SB-117 (8-10)	Solid	06/20/22 15:39	06/21/22 16:23
480-199197-19	Equipment Blank	Water	06/20/22 17:33	06/21/22 16:23

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-199197-2

Login Number: 199197
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	MATRIX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Nickolas Ander
Matrix Environmental Technologies Inc
3730 California Road
PO BOX 427
Orchard Park, New York 14127

Generated 7/7/2023 5:36:25 PM

JOB DESCRIPTION

Project # 18-046 - Aquino Lancaster

JOB NUMBER

480-210334-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

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.

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 Environment Testing Northeast, LLC Project Manager.

Authorization

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Authorized for release by
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Designee for
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Table of Contents

Definitions/Glossary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Qualifiers

GC/MS 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.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) 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.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-210334-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-210334-1

Comments
No additional comments.

Receipt
The samples were received on 6/28/2023 1:17 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 was 18.0º C.

GC/MS VOA
Method 8260C: The following samples were diluted due to the nature of the TCLP matrix: LANDFILL PROFILE 1 (0'-7') (480-210334-4), LANDFILL PROFILE 2 (0'-7') (480-210334-5), LANDFILL PROFILE 3 (0'-7') (480-210334-6) and (LB 480-674884/1-A). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-674988 recovered above the upper control limit for 1,1,1-Trichloroethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon tetrachloride, Cyclohexane, Methylcyclohexane, Trichlorofluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: DS 1 (0'-3') (480-210334-1), DS 2 (0'-3') (480-210334-2) and DS 3 (0'-3') (480-210334-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-675021 recovered above the upper control limit for Methylene chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: LANDFILL PROFILE 1 (0'-7') (480-210334-4), LANDFILL PROFILE 2 (0'-7') (480-210334-5) and LANDFILL PROFILE 3 (0'-7') (480-210334-6).

Method 8260C: The following samples were analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: LANDFILL PROFILE 1 (0'-7') (480-210334-4), LANDFILL PROFILE 2 (0'-7') (480-210334-5) and LANDFILL PROFILE 3 (0'-7') (480-210334-6). 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.

Metals
Method 6010C: The continuing calibration blank (CCB) for analytical batch 480-675515 contained Boron above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry
Methods 9045C, 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: LANDFILL PROFILE 1 (0'-7') (480-210334-4), LANDFILL PROFILE 2 (0'-7') (480-210334-5) and LANDFILL PROFILE 3 (0'-7') (480-210334-6).

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

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

Detection Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: DS 1 (0'-3') — Lab Sample ID: 480-210334-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.69	J	3.9	0.52	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: DS 2 (0'-3') — Lab Sample ID: 480-210334-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.8	J	18	3.0	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.8	J	3.6	0.48	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: DS 3 (0'-3') — Lab Sample ID: 480-210334-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		21	3.6	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.6	J	4.3	0.57	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: LANDFILL PROFILE 1 (0'-7') — Lab Sample ID: 480-210334-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	16	J	52	14	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	470		52	7.1	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	19	J	52	15	ug/Kg	1	☼	8260C	Total/NA
Barium	0.92	J ^2	1.0	0.10	mg/L	1		6010C	TCLP
Cadmium	0.0028		0.0020	0.00050	mg/L	1		6010C	TCLP
Lead	0.0047	J	0.020	0.0030	mg/L	1		6010C	TCLP
Flashpoint	98.0		50.0	50.0	Degrees F	1		1010B	Total/NA
pH	8.3	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	18.5	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: LANDFILL PROFILE 2 (0'-7') — Lab Sample ID: 480-210334-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	210		43	12	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	130		43	5.8	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	15	J	43	10	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	16	J	43	12	ug/Kg	1	☼	8260C	Total/NA
Barium	1.0	^2	1.0	0.10	mg/L	1		6010C	TCLP
Cadmium	0.0013	J	0.0020	0.00050	mg/L	1		6010C	TCLP
Lead	0.0078	J	0.020	0.0030	mg/L	1		6010C	TCLP
Flashpoint	>176		50.0	50.0	Degrees F	1		1010B	Total/NA
pH	8.4	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	18.5	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

Client Sample ID: LANDFILL PROFILE 3 (0'-7') — Lab Sample ID: 480-210334-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	480		45	6.0	ug/Kg	1	☼	8260C	Total/NA
Barium	0.67	J ^2	1.0	0.10	mg/L	1		6010C	TCLP
Cadmium	0.0015	J	0.0020	0.00050	mg/L	1		6010C	TCLP
Lead	0.0035	J	0.020	0.0030	mg/L	1		6010C	TCLP
Flashpoint	>176		50.0	50.0	Degrees F	1		1010B	Total/NA
pH	8.3	HF	0.1	0.1	SU	1		9045D	Total/NA
Temperature	18.5	HF	0.001	0.001	Degrees C	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: DS 1 (0'-3')
Date Collected: 06/28/23 11:36
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-1
Matrix: Solid
Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	3.9	U	3.9	0.28	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,1,2,2-Tetrachloroethane	3.9	U	3.9	0.63	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	3.9	U	3.9	0.88	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,1,2-Trichloroethane	3.9	U	3.9	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,1-Dichloroethane	3.9	U	3.9	0.47	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,1-Dichloroethene	3.9	U	3.9	0.47	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2,4-Trichlorobenzene	3.9	U	3.9	0.24	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2-Dibromo-3-Chloropropane	3.9	U	3.9	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2-Dibromoethane	3.9	U	3.9	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2-Dichlorobenzene	3.9	U	3.9	0.30	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2-Dichloroethane	3.9	U	3.9	0.19	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,2-Dichloropropane	3.9	U	3.9	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,3-Dichlorobenzene	3.9	U	3.9	0.20	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
1,4-Dichlorobenzene	3.9	U	3.9	0.54	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
2-Butanone (MEK)	19	U	19	1.4	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
2-Hexanone	19	U	19	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
4-Methyl-2-pentanone (MIBK)	19	U	19	1.3	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Acetone	19	U	19	3.3	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Benzene	3.9	U	3.9	0.19	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Bromodichloromethane	3.9	U	3.9	0.52	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Bromoform	3.9	U	3.9	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Bromomethane	3.9	U	3.9	0.35	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Carbon disulfide	3.9	U	3.9	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Carbon tetrachloride	3.9	U	3.9	0.37	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Chlorobenzene	3.9	U	3.9	0.51	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Chloroethane	3.9	U	3.9	0.88	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Chloroform	3.9	U	3.9	0.24	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Chloromethane	3.9	U	3.9	0.23	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
cis-1,2-Dichloroethene	3.9	U	3.9	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
cis-1,3-Dichloropropene	3.9	U	3.9	0.56	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Cyclohexane	3.9	U	3.9	0.54	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Dibromochloromethane	3.9	U	3.9	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Dichlorodifluoromethane	3.9	U	3.9	0.32	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Ethylbenzene	3.9	U	3.9	0.27	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Isopropylbenzene	3.9	U	3.9	0.58	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Methyl acetate	19	U	19	2.3	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Methyl tert-butyl ether	3.9	U	3.9	0.38	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Methylcyclohexane	3.9	U	3.9	0.59	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Methylene Chloride	3.9	U	3.9	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Styrene	3.9	U	3.9	0.19	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Tetrachloroethene	**0.69**	**J**	3.9	0.52	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Toluene	3.9	U	3.9	0.29	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
trans-1,2-Dichloroethene	3.9	U	3.9	0.40	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
trans-1,3-Dichloropropene	3.9	U	3.9	1.7	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Trichloroethene	3.9	U	3.9	0.85	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Trichlorofluoromethane	3.9	U	3.9	0.37	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Vinyl chloride	3.9	U	3.9	0.47	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1
Xylenes, Total	7.7	U	7.7	0.65	ug/Kg	☼	06/28/23 16:30	06/29/23 22:00	1

Client Sample ID: DS 1 (0'-3')

Lab Sample ID: 480-210334-1
Date Collected: 06/28/23 11:36
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 82.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		64 - 126	06/28/23 16:30	06/29/23 22:00	1
4-Bromofluorobenzene (Surr)	103		72 - 126	06/28/23 16:30	06/29/23 22:00	1
Dibromofluoromethane (Surr)	107		60 - 140	06/28/23 16:30	06/29/23 22:00	1
Toluene-d8 (Surr)	92		71 - 125	06/28/23 16:30	06/29/23 22:00	1

Client Sample ID: DS 2 (0'-3')

Lab Sample ID: 480-210334-2
Date Collected: 06/28/23 10:05
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	3.6	U	3.6	0.26	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,1,2,2-Tetrachloroethane	3.6	U	3.6	0.58	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	3.6	U	3.6	0.81	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,1,2-Trichloroethane	3.6	U	3.6	0.46	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,1-Dichloroethane	3.6	U	3.6	0.43	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,1-Dichloroethene	3.6	U	3.6	0.43	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2,4-Trichlorobenzene	3.6	U	3.6	0.22	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2-Dibromo-3-Chloropropane	3.6	U	3.6	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2-Dibromoethane	3.6	U	3.6	0.46	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2-Dichlorobenzene	3.6	U	3.6	0.28	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2-Dichloroethane	3.6	U	3.6	0.18	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,2-Dichloropropane	3.6	U	3.6	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,3-Dichlorobenzene	3.6	U	3.6	0.18	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
1,4-Dichlorobenzene	3.6	U	3.6	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
2-Butanone (MEK)	18	U	18	1.3	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
2-Hexanone	18	U	18	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
4-Methyl-2-pentanone (MIBK)	18	U	18	1.2	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Acetone	**8.8**	**J**	18	3.0	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Benzene	3.6	U	3.6	0.17	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Bromodichloromethane	3.6	U	3.6	0.48	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Bromoform	3.6	U	3.6	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Bromomethane	3.6	U	3.6	0.32	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Carbon disulfide	3.6	U	3.6	1.8	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Carbon tetrachloride	3.6	U	3.6	0.34	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Chlorobenzene	3.6	U	3.6	0.47	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Chloroethane	3.6	U	3.6	0.80	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Chloroform	3.6	U	3.6	0.22	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Chloromethane	3.6	U	3.6	0.21	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
cis-1,2-Dichloroethene	3.6	U	3.6	0.45	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
cis-1,3-Dichloropropene	3.6	U	3.6	0.51	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Cyclohexane	3.6	U	3.6	0.50	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Dibromochloromethane	3.6	U	3.6	0.45	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Dichlorodifluoromethane	3.6	U	3.6	0.29	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Ethylbenzene	3.6	U	3.6	0.25	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Isopropylbenzene	3.6	U	3.6	0.54	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Methyl acetate	18	U	18	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Methyl tert-butyl ether	3.6	U	3.6	0.35	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Methylcyclohexane	3.6	U	3.6	0.54	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Methylene Chloride	3.6	U	3.6	1.6	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1

Client Sample ID: DS 2 (0'-3')
Lab Sample ID: 480-210334-2

Date Collected: 06/28/23 10:05
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 84.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	3.6	U	3.6	0.18	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Tetrachloroethene	**1.8**	**J**	3.6	0.48	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Toluene	3.6	U	3.6	0.27	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
trans-1,2-Dichloroethene	3.6	U	3.6	0.37	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
trans-1,3-Dichloropropene	3.6	U	3.6	1.6	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Trichloroethene	3.6	U	3.6	0.78	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Trichlorofluoromethane	3.6	U	3.6	0.34	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Vinyl chloride	3.6	U	3.6	0.43	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1
Xylenes, Total	7.1	U	7.1	0.60	ug/Kg	☼	06/28/23 16:30	06/29/23 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*06/28/23 16:30*	*06/29/23 22:25*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*06/28/23 16:30*	*06/29/23 22:25*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*06/28/23 16:30*	*06/29/23 22:25*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*06/28/23 16:30*	*06/29/23 22:25*	*1*

Client Sample ID: DS 3 (0'-3')
Lab Sample ID: 480-210334-3

Date Collected: 06/28/23 11:02
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.3	U	4.3	0.31	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,1,2,2-Tetrachloroethane	4.3	U	4.3	0.69	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.3	U	4.3	0.97	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,1,2-Trichloroethane	4.3	U	4.3	0.56	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,1-Dichloroethane	4.3	U	4.3	0.52	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,1-Dichloroethene	4.3	U	4.3	0.52	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2,4-Trichlorobenzene	4.3	U	4.3	0.26	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2-Dibromo-3-Chloropropane	4.3	U	4.3	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2-Dibromoethane	4.3	U	4.3	0.55	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2-Dichlorobenzene	4.3	U	4.3	0.33	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2-Dichloroethane	4.3	U	4.3	0.21	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,2-Dichloropropane	4.3	U	4.3	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,3-Dichlorobenzene	4.3	U	4.3	0.22	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
1,4-Dichlorobenzene	4.3	U	4.3	0.60	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
2-Butanone (MEK)	21	U	21	1.6	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
2-Hexanone	21	U	21	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
4-Methyl-2-pentanone (MIBK)	21	U	21	1.4	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Acetone	**22**		21	3.6	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Benzene	4.3	U	4.3	0.21	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Bromodichloromethane	4.3	U	4.3	0.57	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Bromoform	4.3	U	4.3	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Bromomethane	4.3	U	4.3	0.38	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Carbon disulfide	4.3	U	4.3	2.1	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Carbon tetrachloride	4.3	U	4.3	0.41	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Chlorobenzene	4.3	U	4.3	0.56	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Chloroethane	4.3	U	4.3	0.97	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Chloroform	4.3	U	4.3	0.26	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Chloromethane	4.3	U	4.3	0.26	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1

Client: Matrix Environmental Technologies Inc
Job ID: 480-210334-1
Project/Site: Project # 18-046 - Aquino Lancaster

Client Sample ID: DS 3 (0'-3')
Lab Sample ID: 480-210334-3
Date Collected: 06/28/23 11:02
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 81.3

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	4.3	U	4.3	0.55	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
cis-1,3-Dichloropropene	4.3	U	4.3	0.62	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Cyclohexane	4.3	U	4.3	0.60	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Dibromochloromethane	4.3	U	4.3	0.55	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Dichlorodifluoromethane	4.3	U	4.3	0.35	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Ethylbenzene	4.3	U	4.3	0.30	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Isopropylbenzene	4.3	U	4.3	0.64	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Methyl acetate	21	U	21	2.6	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Methyl tert-butyl ether	4.3	U	4.3	0.42	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Methylcyclohexane	4.3	U	4.3	0.65	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Methylene Chloride	4.3	U	4.3	2.0	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Styrene	4.3	U	4.3	0.21	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Tetrachloroethene	**1.6**	**J**	4.3	0.57	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Toluene	4.3	U	4.3	0.32	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
trans-1,2-Dichloroethene	4.3	U	4.3	0.44	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
trans-1,3-Dichloropropene	4.3	U	4.3	1.9	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Trichloroethene	4.3	U	4.3	0.94	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Trichlorofluoromethane	4.3	U	4.3	0.40	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Vinyl chloride	4.3	U	4.3	0.52	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1
Xylenes, Total	8.6	U	8.6	0.72	ug/Kg	☼	06/28/23 16:30	06/29/23 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*06/28/23 16:30*	*06/29/23 22:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*06/28/23 16:30*	*06/29/23 22:49*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*06/28/23 16:30*	*06/29/23 22:49*	*1*
Toluene-d8 (Surr)	*92*		*71 - 125*	*06/28/23 16:30*	*06/29/23 22:49*	*1*

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Lab Sample ID: 480-210334-4
Date Collected: 06/28/23 11:50
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 86.6

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.010	U	0.010	0.0029	mg/L			06/30/23 13:36	10
1,2-Dichloroethane	0.010	U	0.010	0.0021	mg/L			06/30/23 13:36	10
2-Butanone (MEK)	0.050	U	0.050	0.013	mg/L			06/30/23 13:36	10
Benzene	0.010	U	0.010	0.0041	mg/L			06/30/23 13:36	10
Carbon tetrachloride	0.010	U	0.010	0.0027	mg/L			06/30/23 13:36	10
Chlorobenzene	0.010	U	0.010	0.0075	mg/L			06/30/23 13:36	10
Chloroform	0.010	U	0.010	0.0034	mg/L			06/30/23 13:36	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			06/30/23 13:36	10
Trichloroethene	0.010	U	0.010	0.0046	mg/L			06/30/23 13:36	10
Vinyl chloride	0.010	U	0.010	0.0090	mg/L			06/30/23 13:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*06/30/23 13:36*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/30/23 13:36*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/30/23 13:36*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/30/23 13:36*	*10*

Client: Matrix Environmental Technologies Inc
Job ID: 480-210334-1
Project/Site: Project # 18-046 - Aquino Lancaster

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Lab Sample ID: 480-210334-4
Date Collected: 06/28/23 11:50
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	52	U	52	15	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,1,2,2-Tetrachloroethane	52	U	52	8.5	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	52	U	52	26	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,1,2-Trichloroethane	52	U	52	11	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,1-Dichloroethane	52	U	52	16	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,1-Dichloroethene	52	U	52	18	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2,4-Trichlorobenzene	52	U	52	20	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2-Dibromo-3-Chloropropane	52	U	52	26	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2-Dibromoethane	52	U	52	9.2	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2-Dichlorobenzene	52	U	52	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2-Dichloroethane	52	U	52	21	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,2-Dichloropropane	52	U	52	8.5	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,3-Dichlorobenzene	52	U	52	14	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
1,4-Dichlorobenzene	52	U	52	7.3	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
2-Butanone (MEK)	260	U	260	160	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
2-Hexanone	260	U	260	110	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
4-Methyl-2-pentanone (MIBK)	260	U	260	17	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Acetone	260	U	260	220	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Benzene	52	U	52	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Bromodichloromethane	52	U	52	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Bromoform	52	U	52	26	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Bromomethane	52	U	52	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Carbon disulfide	52	U	52	24	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Carbon tetrachloride	52	U	52	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Chlorobenzene	52	U	52	6.9	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Chloroethane	52	U	52	11	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Chloroform	52	U	52	36	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Chloromethane	52	U	52	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
cis-1,2-Dichloroethene	**16**	**J**	52	14	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
cis-1,3-Dichloropropene	52	U	52	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Cyclohexane	52	U	52	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Dibromochloromethane	52	U	52	25	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Dichlorodifluoromethane	52	U	52	23	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Ethylbenzene	52	U	52	15	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Isopropylbenzene	52	U	52	7.9	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Methyl acetate	260	U	260	25	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Methyl tert-butyl ether	52	U	52	20	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Methylcyclohexane	52	U	52	25	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Methylene Chloride	52	U	52	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Styrene	52	U	52	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Tetrachloroethene	**470**		52	7.1	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Toluene	52	U	52	14	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
trans-1,2-Dichloroethene	52	U	52	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
trans-1,3-Dichloropropene	52	U	52	5.2	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Trichloroethene	**19**	**J**	52	15	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Trichlorofluoromethane	52	U	52	25	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Vinyl chloride	52	U	52	18	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1
Xylenes, Total	100	U	100	29	ug/Kg	☼	06/29/23 10:25	06/30/23 15:29	1

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Lab Sample ID: 480-210334-4

Date Collected: 06/28/23 11:50
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 86.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*	*06/29/23 10:25*	*06/30/23 15:29*	*1*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*	*06/29/23 10:25*	*06/30/23 15:29*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*06/29/23 10:25*	*06/30/23 15:29*	*1*
Toluene-d8 (Surr)	*98*		*50 - 149*	*06/29/23 10:25*	*06/30/23 15:29*	*1*

Method: SW846 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/30/23 09:23	07/04/23 22:24	1
Barium	**0.92**	**J ^2**	1.0	0.10	mg/L		06/30/23 09:23	07/06/23 14:38	1
Cadmium	**0.0028**		0.0020	0.00050	mg/L		06/30/23 09:23	07/04/23 22:24	1
Chromium	0.020	U	0.020	0.010	mg/L		06/30/23 09:23	07/04/23 22:24	1
Lead	**0.0047**	**J**	0.020	0.0030	mg/L		06/30/23 09:23	07/06/23 14:38	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/30/23 09:23	07/04/23 22:24	1
Silver	0.0060	U	0.0060	0.0017	mg/L		06/30/23 09:23	07/04/23 22:24	1

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/30/23 10:01	06/30/23 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**98.0**		50.0	50.0	Degrees F			07/07/23 13:02	1
pH (SW846 9045D)	**8.3**	**HF**	0.1	0.1	SU			07/01/23 10:30	1
Temperature (SW846 9045D)	**18.5**	**HF**	0.001	0.001	Degrees C			07/01/23 10:30	1

Client Sample ID: LANDFILL PROFILE 2 (0'-7')
Lab Sample ID: 480-210334-5

Date Collected: 06/28/23 10:28
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 85.2

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.010	U	0.010	0.0029	mg/L			06/30/23 13:58	10
1,2-Dichloroethane	0.010	U	0.010	0.0021	mg/L			06/30/23 13:58	10
2-Butanone (MEK)	0.050	U	0.050	0.013	mg/L			06/30/23 13:58	10
Benzene	0.010	U	0.010	0.0041	mg/L			06/30/23 13:58	10
Carbon tetrachloride	0.010	U	0.010	0.0027	mg/L			06/30/23 13:58	10
Chlorobenzene	0.010	U	0.010	0.0075	mg/L			06/30/23 13:58	10
Chloroform	0.010	U	0.010	0.0034	mg/L			06/30/23 13:58	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			06/30/23 13:58	10
Trichloroethene	0.010	U	0.010	0.0046	mg/L			06/30/23 13:58	10
Vinyl chloride	0.010	U	0.010	0.0090	mg/L			06/30/23 13:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*06/30/23 13:58*	*10*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/30/23 13:58*	*10*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*06/30/23 13:58*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/30/23 13:58*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	43	U	43	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,1,2,2-Tetrachloroethane	43	U	43	7.0	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: LANDFILL PROFILE 2 (0'-7')
Date Collected: 06/28/23 10:28
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-5
Matrix: Solid
Percent Solids: 85.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	43	U	43	22	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,1,2-Trichloroethane	43	U	43	9.1	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,1-Dichloroethane	43	U	43	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,1-Dichloroethene	43	U	43	15	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2,4-Trichlorobenzene	43	U	43	16	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2-Dibromo-3-Chloropropane	43	U	43	22	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2-Dibromoethane	43	U	43	7.6	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2-Dichlorobenzene	43	U	43	11	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2-Dichloroethane	43	U	43	18	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,2-Dichloropropane	43	U	43	7.0	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,3-Dichlorobenzene	43	U	43	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
1,4-Dichlorobenzene	43	U	43	6.0	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
2-Butanone (MEK)	220	U	220	130	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
2-Hexanone	220	U	220	89	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
4-Methyl-2-pentanone (MIBK)	220	U	220	14	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Acetone	220	U	220	180	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Benzene	43	U	43	8.2	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Bromodichloromethane	43	U	43	8.6	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Bromoform	43	U	43	22	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Bromomethane	43	U	43	9.5	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Carbon disulfide	43	U	43	20	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Carbon tetrachloride	43	U	43	11	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Chlorobenzene	43	U	43	5.7	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Chloroethane	43	U	43	9.0	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Chloroform	43	U	43	30	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Chloromethane	43	U	43	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
cis-1,2-Dichloroethene	**210**		43	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
cis-1,3-Dichloropropene	43	U	43	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Cyclohexane	43	U	43	9.6	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Dibromochloromethane	43	U	43	21	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Dichlorodifluoromethane	43	U	43	19	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Ethylbenzene	43	U	43	13	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Isopropylbenzene	43	U	43	6.5	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Methyl acetate	220	U	220	21	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Methyl tert-butyl ether	43	U	43	16	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Methylcyclohexane	43	U	43	20	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Methylene Chloride	43	U	43	8.5	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Styrene	43	U	43	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Tetrachloroethene	**130**		43	5.8	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Toluene	43	U	43	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
trans-1,2-Dichloroethene	**15**	**J**	43	10	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
trans-1,3-Dichloropropene	43	U	43	4.2	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Trichloroethene	**16**	**J**	43	12	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Trichlorofluoromethane	43	U	43	20	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Vinyl chloride	43	U	43	14	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1
Xylenes, Total	86	U	86	24	ug/Kg	☼	06/29/23 10:25	06/30/23 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*53 - 146*	*06/29/23 10:25*	*06/30/23 15:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*49 - 148*	*06/29/23 10:25*	*06/30/23 15:51*	*1*

Client Sample ID: LANDFILL PROFILE 2 (0'-7')
Lab Sample ID: 480-210334-5

Date Collected: 06/28/23 10:28
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 85.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*60 - 140*	*06/29/23 10:25*	*06/30/23 15:51*	*1*
Toluene-d8 (Surr)	*98*		*50 - 149*	*06/29/23 10:25*	*06/30/23 15:51*	*1*

Method: SW846 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/30/23 09:23	07/04/23 22:51	1
Barium	**1.0**	**^2**	1.0	0.10	mg/L		06/30/23 09:23	07/06/23 14:58	1
Cadmium	**0.0013**	**J**	0.0020	0.00050	mg/L		06/30/23 09:23	07/04/23 22:51	1
Chromium	0.020	U	0.020	0.010	mg/L		06/30/23 09:23	07/04/23 22:51	1
Lead	**0.0078**	**J**	0.020	0.0030	mg/L		06/30/23 09:23	07/06/23 14:58	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/30/23 09:23	07/04/23 22:51	1
Silver	0.0060	U	0.0060	0.0017	mg/L		06/30/23 09:23	07/04/23 22:51	1

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/30/23 10:01	06/30/23 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>176**		50.0	50.0	Degrees F			07/07/23 13:02	1
pH (SW846 9045D)	**8.4**	**HF**	0.1	0.1	SU			07/01/23 10:30	1
Temperature (SW846 9045D)	**18.5**	**HF**	0.001	0.001	Degrees C			07/01/23 10:30	1

Client Sample ID: LANDFILL PROFILE 3 (0'-7')
Lab Sample ID: 480-210334-6

Date Collected: 06/28/23 11:21
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 87.9

Method: SW846 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.010	U	0.010	0.0029	mg/L			06/30/23 14:21	10
1,2-Dichloroethane	0.010	U	0.010	0.0021	mg/L			06/30/23 14:21	10
2-Butanone (MEK)	0.050	U	0.050	0.013	mg/L			06/30/23 14:21	10
Benzene	0.010	U	0.010	0.0041	mg/L			06/30/23 14:21	10
Carbon tetrachloride	0.010	U	0.010	0.0027	mg/L			06/30/23 14:21	10
Chlorobenzene	0.010	U	0.010	0.0075	mg/L			06/30/23 14:21	10
Chloroform	0.010	U	0.010	0.0034	mg/L			06/30/23 14:21	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			06/30/23 14:21	10
Trichloroethene	0.010	U	0.010	0.0046	mg/L			06/30/23 14:21	10
Vinyl chloride	0.010	U	0.010	0.0090	mg/L			06/30/23 14:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*06/30/23 14:21*	*10*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/30/23 14:21*	*10*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/30/23 14:21*	*10*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/30/23 14:21*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	45	U	45	12	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,1,2,2-Tetrachloroethane	45	U	45	7.3	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	45	U	45	22	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: LANDFILL PROFILE 3 (0'-7')
Date Collected: 06/28/23 11:21
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-6
Matrix: Solid
Percent Solids: 87.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	45	U	45	9.4	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,1-Dichloroethane	45	U	45	14	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,1-Dichloroethene	45	U	45	16	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2,4-Trichlorobenzene	45	U	45	17	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2-Dibromo-3-Chloropropane	45	U	45	22	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2-Dibromoethane	45	U	45	7.8	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2-Dichlorobenzene	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2-Dichloroethane	45	U	45	18	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,2-Dichloropropane	45	U	45	7.3	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,3-Dichlorobenzene	45	U	45	12	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
1,4-Dichlorobenzene	45	U	45	6.3	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
2-Butanone (MEK)	220	U	220	130	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
2-Hexanone	220	U	220	92	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
4-Methyl-2-pentanone (MIBK)	220	U	220	14	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Acetone	220	U	220	180	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Benzene	45	U	45	8.5	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Bromodichloromethane	45	U	45	9.0	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Bromoform	45	U	45	22	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Bromomethane	45	U	45	9.9	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Carbon disulfide	45	U	45	20	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Carbon tetrachloride	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Chlorobenzene	45	U	45	5.9	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Chloroethane	45	U	45	9.3	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Chloroform	45	U	45	31	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Chloromethane	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
cis-1,2-Dichloroethene	45	U	45	12	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
cis-1,3-Dichloropropene	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Cyclohexane	45	U	45	9.9	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Dibromochloromethane	45	U	45	22	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Dichlorodifluoromethane	45	U	45	20	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Ethylbenzene	45	U	45	13	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Isopropylbenzene	45	U	45	6.7	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Methyl acetate	220	U	220	21	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Methyl tert-butyl ether	45	U	45	17	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Methylcyclohexane	45	U	45	21	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Methylene Chloride	45	U	45	8.9	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Styrene	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Tetrachloroethene	**480**		45	6.0	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Toluene	45	U	45	12	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
trans-1,2-Dichloroethene	45	U	45	11	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
trans-1,3-Dichloropropene	45	U	45	4.4	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Trichloroethene	45	U	45	12	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Trichlorofluoromethane	45	U	45	21	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Vinyl chloride	45	U	45	15	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1
Xylenes, Total	90	U	90	25	ug/Kg	☼	06/29/23 10:25	06/30/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*53 - 146*	*06/29/23 10:25*	*06/30/23 16:14*	*1*
4-Bromofluorobenzene (Surr)	*107*		*49 - 148*	*06/29/23 10:25*	*06/30/23 16:14*	*1*
Dibromofluoromethane (Surr)	*91*		*60 - 140*	*06/29/23 10:25*	*06/30/23 16:14*	*1*

Client Sample ID: LANDFILL PROFILE 3 (0'-7')
Lab Sample ID: 480-210334-6

Date Collected: 06/28/23 11:21
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 87.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*50 - 149*	*06/29/23 10:25*	*06/30/23 16:14*	*1*

Method: SW846 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/30/23 09:23	07/04/23 22:54	1
Barium	**0.67**	**J ^2**	1.0	0.10	mg/L		06/30/23 09:23	07/06/23 15:03	1
Cadmium	**0.0015**	**J**	0.0020	0.00050	mg/L		06/30/23 09:23	07/04/23 22:54	1
Chromium	0.020	U	0.020	0.010	mg/L		06/30/23 09:23	07/04/23 22:54	1
Lead	**0.0035**	**J**	0.020	0.0030	mg/L		06/30/23 09:23	07/06/23 15:03	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/30/23 09:23	07/04/23 22:54	1
Silver	0.0060	U	0.0060	0.0017	mg/L		06/30/23 09:23	07/04/23 22:54	1

Method: SW846 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/30/23 10:01	06/30/23 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>176**		50.0	50.0	Degrees F			07/07/23 13:02	1
pH (SW846 9045D)	**8.3**	**HF**	0.1	0.1	SU			07/01/23 10:30	1
Temperature (SW846 9045D)	**18.5**	**HF**	0.001	0.001	Degrees C			07/01/23 10:30	1

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Method: 8260C - TCLP Volatiles

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-210334-4	LANDFILL PROFILE 1 (0'-7')	92	101	102	100
480-210334-5	LANDFILL PROFILE 2 (0'-7')	95	94	100	100
480-210334-6	LANDFILL PROFILE 3 (0'-7')	95	102	106	93
LB 480-674884/1-A	Method Blank	94	101	99	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-210334-1	DS 1 (0'-3')	108	103	107	92
480-210334-2	DS 2 (0'-3')	103	104	104	93
480-210334-3	DS 3 (0'-3')	105	105	105	92
LCS 480-674987/1-A	Lab Control Sample	96	104	103	95
MB 480-674987/2-A	Method Blank	97	104	102	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(60-140)	(50-149)
480-210334-4	LANDFILL PROFILE 1 (0'-7')	97	100	96	98
480-210334-5	LANDFILL PROFILE 2 (0'-7')	93	96	93	98
480-210334-6	LANDFILL PROFILE 3 (0'-7')	92	107	91	104
LCS 480-674917/1-A	Lab Control Sample	89	100	95	98
MB 480-674917/3-A	Method Blank	93	95	94	97
MB 480-675021/8	Method Blank	98	113	104	110

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-210334-1
Project/Site: Project # 18-046 - Aquino Lancaster

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	DBFM	TOL				
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)				
LCS 480-675021/6	Lab Control Sample	93	108	102	111				

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - TCLP Volatiles

Lab Sample ID: LB 480-674884/1-A
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.010	U	0.010	0.0029	mg/L			06/30/23 12:07	10
1,2-Dichloroethane	0.010	U	0.010	0.0021	mg/L			06/30/23 12:07	10
2-Butanone (MEK)	0.050	U	0.050	0.013	mg/L			06/30/23 12:07	10
Benzene	0.010	U	0.010	0.0041	mg/L			06/30/23 12:07	10
Carbon tetrachloride	0.010	U	0.010	0.0027	mg/L			06/30/23 12:07	10
Chlorobenzene	0.010	U	0.010	0.0075	mg/L			06/30/23 12:07	10
Chloroform	0.010	U	0.010	0.0034	mg/L			06/30/23 12:07	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			06/30/23 12:07	10
Trichloroethene	0.010	U	0.010	0.0046	mg/L			06/30/23 12:07	10
Vinyl chloride	0.010	U	0.010	0.0090	mg/L			06/30/23 12:07	10

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*06/30/23 12:07*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/30/23 12:07*	*10*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*06/30/23 12:07*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/30/23 12:07*	*10*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-674917/3-A
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	100	U	100	28	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,1,2,2-Tetrachloroethane	100	U	100	16	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	100	U	100	50	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,1,2-Trichloroethane	100	U	100	21	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,1-Dichloroethane	100	U	100	31	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,1-Dichloroethene	100	U	100	35	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2,4-Trichlorobenzene	100	U	100	38	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2-Dibromo-3-Chloropropane	100	U	100	50	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2-Dibromoethane	100	U	100	18	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2-Dichlorobenzene	100	U	100	26	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2-Dichloroethane	100	U	100	41	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,2-Dichloropropane	100	U	100	16	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,3-Dichlorobenzene	100	U	100	27	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
1,4-Dichlorobenzene	100	U	100	14	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
2-Butanone (MEK)	500	U	500	300	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
2-Hexanone	500	U	500	210	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
4-Methyl-2-pentanone (MIBK)	500	U	500	32	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Acetone	500	U	500	410	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Benzene	100	U	100	19	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Bromodichloromethane	100	U	100	20	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Bromoform	100	U	100	50	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Bromomethane	100	U	100	22	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Carbon disulfide	100	U	100	46	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Carbon tetrachloride	100	U	100	26	ug/Kg		06/29/23 10:25	06/30/23 11:27	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-674917/3-A
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	100	U	100	13	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Chloroethane	100	U	100	21	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Chloroform	100	U	100	69	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Chloromethane	100	U	100	24	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
cis-1,2-Dichloroethene	100	U	100	28	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
cis-1,3-Dichloropropene	100	U	100	24	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Cyclohexane	100	U	100	22	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Dibromochloromethane	100	U	100	48	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Dichlorodifluoromethane	100	U	100	44	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Ethylbenzene	100	U	100	29	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Isopropylbenzene	100	U	100	15	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Methyl acetate	500	U	500	48	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Methyl tert-butyl ether	100	U	100	38	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Methylcyclohexane	100	U	100	47	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Methylene Chloride	100	U	100	20	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Styrene	100	U	100	24	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Tetrachloroethene	100	U	100	13	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Toluene	100	U	100	27	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
trans-1,2-Dichloroethene	100	U	100	24	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
trans-1,3-Dichloropropene	100	U	100	9.8	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Trichloroethene	100	U	100	28	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Trichlorofluoromethane	100	U	100	47	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Vinyl chloride	100	U	100	34	ug/Kg		06/29/23 10:25	06/30/23 11:27	1
Xylenes, Total	200	U	200	55	ug/Kg		06/29/23 10:25	06/30/23 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*53 - 146*	*06/29/23 10:25*	*06/30/23 11:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*06/29/23 10:25*	*06/30/23 11:27*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*06/29/23 10:25*	*06/30/23 11:27*	*1*
Toluene-d8 (Surr)	*97*		*50 - 149*	*06/29/23 10:25*	*06/30/23 11:27*	*1*

Lab Sample ID: LCS 480-674917/1-A
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	2500	2340		ug/Kg		94	68 - 130
1,1,2,2-Tetrachloroethane	2500	2350		ug/Kg		94	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2050		ug/Kg		82	10 - 179
1,1,2-Trichloroethane	2500	2480		ug/Kg		99	80 - 120
1,1-Dichloroethane	2500	2550		ug/Kg		102	78 - 121
1,1-Dichloroethene	2500	2090		ug/Kg		84	48 - 133
1,2,4-Trichlorobenzene	2500	2860		ug/Kg		115	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2100		ug/Kg		84	56 - 122
1,2-Dibromoethane	2500	2440		ug/Kg		98	80 - 120
1,2-Dichlorobenzene	2500	2440		ug/Kg		97	78 - 125
1,2-Dichloroethane	2500	2300		ug/Kg		92	74 - 127
1,2-Dichloropropane	2500	2520		ug/Kg		101	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-674917/1-A
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120
1,4-Dichlorobenzene	2500	2550		ug/Kg		102	80 - 120
2-Butanone (MEK)	12500	10300		ug/Kg		82	54 - 149
2-Hexanone	12500	9880		ug/Kg		79	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	10600		ug/Kg		85	74 - 120
Acetone	12500	9840		ug/Kg		79	47 - 141
Benzene	2500	2640		ug/Kg		106	77 - 125
Bromodichloromethane	2500	2320		ug/Kg		93	71 - 121
Bromoform	2500	2180		ug/Kg		87	48 - 125
Bromomethane	2500	1860		ug/Kg		74	39 - 149
Carbon disulfide	2500	2330		ug/Kg		93	40 - 136
Carbon tetrachloride	2500	2310		ug/Kg		93	54 - 135
Chlorobenzene	2500	2490		ug/Kg		100	76 - 126
Chloroethane	2500	1900		ug/Kg		76	23 - 150
Chloroform	2500	2320		ug/Kg		93	78 - 120
Chloromethane	2500	2260		ug/Kg		90	61 - 124
cis-1,2-Dichloroethene	2500	2530		ug/Kg		101	79 - 124
cis-1,3-Dichloropropene	2500	2720		ug/Kg		109	75 - 121
Cyclohexane	2500	2470		ug/Kg		99	49 - 129
Dibromochloromethane	2500	2280		ug/Kg		91	64 - 120
Dichlorodifluoromethane	2500	2000		ug/Kg		80	10 - 150
Ethylbenzene	2500	2580		ug/Kg		103	78 - 124
Isopropylbenzene	2500	2780		ug/Kg		111	76 - 120
Methyl acetate	5000	3750		ug/Kg		75	71 - 123
Methyl tert-butyl ether	2500	2430		ug/Kg		97	67 - 137
Methylcyclohexane	2500	2590		ug/Kg		104	50 - 130
Methylene Chloride	2500	2840		ug/Kg		114	75 - 118
Styrene	2500	2540		ug/Kg		102	80 - 120
Tetrachloroethene	2500	2450		ug/Kg		98	73 - 133
Toluene	2500	2520		ug/Kg		101	75 - 124
trans-1,2-Dichloroethene	2500	2680		ug/Kg		107	74 - 129
trans-1,3-Dichloropropene	2500	2560		ug/Kg		103	73 - 120
Trichloroethene	2500	2500		ug/Kg		100	75 - 131
Trichlorofluoromethane	2500	2010		ug/Kg		80	29 - 158
Vinyl chloride	2500	2430		ug/Kg		97	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*53 - 146*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*98*		*50 - 149*

Lab Sample ID: MB 480-674987/2-A
Matrix: Solid
Analysis Batch: 674988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.36	ug/Kg		06/29/23 17:33	06/29/23 21:12	1

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-674987/2-A
Matrix: Solid
Analysis Batch: 674988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.81	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	1.1	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,1,2-Trichloroethane	5.0	U	5.0	0.65	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,1-Dichloroethane	5.0	U	5.0	0.61	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,1-Dichloroethene	5.0	U	5.0	0.61	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2,4-Trichlorobenzene	5.0	U	5.0	0.30	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	2.5	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2-Dibromoethane	5.0	U	5.0	0.64	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2-Dichlorobenzene	5.0	U	5.0	0.39	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2-Dichloroethane	5.0	U	5.0	0.25	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,2-Dichloropropane	5.0	U	5.0	2.5	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,3-Dichlorobenzene	5.0	U	5.0	0.26	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
1,4-Dichlorobenzene	5.0	U	5.0	0.70	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
2-Butanone (MEK)	25	U	25	1.8	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
2-Hexanone	25	U	25	2.5	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
4-Methyl-2-pentanone (MIBK)	25	U	25	1.6	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Acetone	25	U	25	4.2	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Benzene	5.0	U	5.0	0.25	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Bromodichloromethane	5.0	U	5.0	0.67	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Bromoform	5.0	U	5.0	2.5	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Bromomethane	5.0	U	5.0	0.45	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Carbon disulfide	5.0	U	5.0	2.5	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Carbon tetrachloride	5.0	U	5.0	0.48	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Chlorobenzene	5.0	U	5.0	0.66	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Chloroethane	5.0	U	5.0	1.1	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Chloroform	5.0	U	5.0	0.31	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Chloromethane	5.0	U	5.0	0.30	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.64	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.72	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Cyclohexane	5.0	U	5.0	0.70	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Dibromochloromethane	5.0	U	5.0	0.64	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Dichlorodifluoromethane	5.0	U	5.0	0.41	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Ethylbenzene	5.0	U	5.0	0.35	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Isopropylbenzene	5.0	U	5.0	0.75	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Methyl acetate	25	U	25	3.0	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Methyl tert-butyl ether	5.0	U	5.0	0.49	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Methylcyclohexane	5.0	U	5.0	0.76	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Methylene Chloride	5.0	U	5.0	2.3	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Styrene	5.0	U	5.0	0.25	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Tetrachloroethene	5.0	U	5.0	0.67	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Toluene	5.0	U	5.0	0.38	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.52	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
trans-1,3-Dichloropropene	5.0	U	5.0	2.2	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Trichlorofluoromethane	5.0	U	5.0	0.47	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Vinyl chloride	5.0	U	5.0	0.61	ug/Kg		06/29/23 17:33	06/29/23 21:12	1
Xylenes, Total	10	U	10	0.84	ug/Kg		06/29/23 17:33	06/29/23 21:12	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-674987/2-A
Matrix: Solid
Analysis Batch: 674988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674987

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*	*06/29/23 17:33*	*06/29/23 21:12*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*06/29/23 17:33*	*06/29/23 21:12*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*06/29/23 17:33*	*06/29/23 21:12*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*06/29/23 17:33*	*06/29/23 21:12*	*1*

Lab Sample ID: LCS 480-674987/1-A
Matrix: Solid
Analysis Batch: 674988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	50.0	53.2		ug/Kg		106	77 - 121
1,1,2,2-Tetrachloroethane	50.0	42.7		ug/Kg		85	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.8		ug/Kg		102	60 - 140
1,1,2-Trichloroethane	50.0	42.5		ug/Kg		85	78 - 122
1,1-Dichloroethane	50.0	50.0		ug/Kg		100	73 - 126
1,1-Dichloroethene	50.0	51.4		ug/Kg		103	59 - 125
1,2,4-Trichlorobenzene	50.0	41.8		ug/Kg		84	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	42.8		ug/Kg		86	63 - 124
1,2-Dibromoethane	50.0	43.4		ug/Kg		87	78 - 120
1,2-Dichlorobenzene	50.0	41.4		ug/Kg		83	75 - 120
1,2-Dichloroethane	50.0	46.1		ug/Kg		92	77 - 122
1,2-Dichloropropane	50.0	48.2		ug/Kg		96	75 - 124
1,3-Dichlorobenzene	50.0	42.4		ug/Kg		85	74 - 120
1,4-Dichlorobenzene	50.0	41.9		ug/Kg		84	73 - 120
2-Butanone (MEK)	250	253		ug/Kg		101	70 - 134
2-Hexanone	250	223		ug/Kg		89	59 - 130
4-Methyl-2-pentanone (MIBK)	250	222		ug/Kg		89	65 - 133
Acetone	250	253		ug/Kg		101	61 - 137
Benzene	50.0	51.0		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	51.1		ug/Kg		102	80 - 122
Bromoform	50.0	46.5		ug/Kg		93	68 - 126
Bromomethane	50.0	52.0		ug/Kg		104	37 - 149
Carbon disulfide	50.0	47.5		ug/Kg		95	64 - 131
Carbon tetrachloride	50.0	55.9		ug/Kg		112	75 - 135
Chlorobenzene	50.0	44.3		ug/Kg		89	76 - 124
Chloroethane	50.0	51.3		ug/Kg		103	69 - 135
Chloroform	50.0	48.8		ug/Kg		98	80 - 120
Chloromethane	50.0	47.9		ug/Kg		96	63 - 127
cis-1,2-Dichloroethene	50.0	49.8		ug/Kg		100	81 - 120
cis-1,3-Dichloropropene	50.0	51.9		ug/Kg		104	80 - 120
Cyclohexane	50.0	54.5		ug/Kg		109	65 - 120
Dibromochloromethane	50.0	46.4		ug/Kg		93	76 - 125
Dichlorodifluoromethane	50.0	53.6		ug/Kg		107	57 - 142
Ethylbenzene	50.0	45.8		ug/Kg		92	80 - 120
Isopropylbenzene	50.0	46.0		ug/Kg		92	72 - 120
Methyl acetate	100	92.8		ug/Kg		93	55 - 136
Methyl tert-butyl ether	50.0	47.5		ug/Kg		95	63 - 125
Methylcyclohexane	50.0	55.5		ug/Kg		111	60 - 140

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-674987/1-A
Matrix: Solid
Analysis Batch: 674988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	50.0	46.9		ug/Kg		94	61 - 127
Styrene	50.0	44.2		ug/Kg		88	80 - 120
Tetrachloroethene	50.0	47.6		ug/Kg		95	74 - 122
Toluene	50.0	44.9		ug/Kg		90	74 - 128
trans-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	78 - 126
trans-1,3-Dichloropropene	50.0	44.1		ug/Kg		88	73 - 123
Trichloroethene	50.0	52.3		ug/Kg		105	77 - 129
Trichlorofluoromethane	50.0	57.1		ug/Kg		114	65 - 146
Vinyl chloride	50.0	54.8		ug/Kg		110	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*95*		*71 - 125*

Lab Sample ID: MB 480-675021/8
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.35	ug/Kg			06/30/23 11:05	1
1,2-Dichloroethane	1.0	U	1.0	0.41	ug/Kg			06/30/23 11:05	1
2-Butanone (MEK)	5.0	U	5.0	3.0	ug/Kg			06/30/23 11:05	1
Benzene	1.0	U	1.0	0.19	ug/Kg			06/30/23 11:05	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/Kg			06/30/23 11:05	1
Chlorobenzene	1.0	U	1.0	0.13	ug/Kg			06/30/23 11:05	1
Chloroform	1.0	U	1.0	0.69	ug/Kg			06/30/23 11:05	1
Tetrachloroethene	1.0	U	1.0	0.13	ug/Kg			06/30/23 11:05	1
Trichloroethene	1.0	U	1.0	0.28	ug/Kg			06/30/23 11:05	1
Vinyl chloride	1.0	U	1.0	0.34	ug/Kg			06/30/23 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*		*06/30/23 11:05*	*1*
4-Bromofluorobenzene (Surr)	*113*		*49 - 148*		*06/30/23 11:05*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*06/30/23 11:05*	*1*
Toluene-d8 (Surr)	*110*		*50 - 149*		*06/30/23 11:05*	*1*

Lab Sample ID: LCS 480-675021/6
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0250	0.0269		mg/L		108	66 - 127
1,2-Dichloroethane	0.0250	0.0244		mg/L		98	75 - 120
2-Butanone (MEK)	0.125	0.110		mg/L		88	57 - 140
Benzene	0.0250	0.0270		mg/L		108	71 - 124
Carbon tetrachloride	0.0250	0.0255		mg/L		102	72 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-675021/6
Matrix: Solid
Analysis Batch: 675021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	0.0250	0.0240		mg/L		96	80 - 120
Chloroform	0.0250	0.0244		mg/L		98	73 - 127
Tetrachloroethene	0.0250	0.0267		mg/L		107	74 - 122
Trichloroethene	0.0250	0.0261		mg/L		104	74 - 123
Vinyl chloride	0.0250	0.0264		mg/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*111*		*80 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-675030/2-A
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/30/23 09:23	07/04/23 21:59	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/30/23 09:23	07/04/23 21:59	1
Chromium	0.020	U	0.020	0.010	mg/L		06/30/23 09:23	07/04/23 21:59	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/30/23 09:23	07/04/23 21:59	1
Silver	0.0060	U	0.0060	0.0017	mg/L		06/30/23 09:23	07/04/23 21:59	1

Lab Sample ID: MB 480-675030/2-A
Matrix: Solid
Analysis Batch: 675515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.0	U	1.0	0.10	mg/L		06/30/23 09:23	07/06/23 14:07	1
Lead	0.020	U	0.020	0.0030	mg/L		06/30/23 09:23	07/06/23 14:07	1

Lab Sample ID: LCS 480-675030/3-A
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	0.991		mg/L		99	80 - 120
Cadmium	1.00	0.952		mg/L		95	80 - 120
Chromium	1.00	0.825		mg/L		83	80 - 120
Selenium	1.00	0.975		mg/L		97	80 - 120
Silver	1.00	0.925		mg/L		93	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-675030/3-A
Matrix: Solid
Analysis Batch: 675515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	1.00	0.964	J	mg/L		96	80 - 120
Lead	1.00	0.991		mg/L		99	80 - 120

Lab Sample ID: LB 480-674882/1-B
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 675030

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/30/23 09:23	07/04/23 21:56	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/30/23 09:23	07/04/23 21:56	1
Chromium	0.020	U	0.020	0.010	mg/L		06/30/23 09:23	07/04/23 21:56	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/30/23 09:23	07/04/23 21:56	1
Silver	0.0060	U	0.0060	0.0017	mg/L		06/30/23 09:23	07/04/23 21:56	1

Lab Sample ID: LB 480-674882/1-B
Matrix: Solid
Analysis Batch: 675515

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 675030

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.0	U	1.0	0.10	mg/L		06/30/23 09:23	07/06/23 14:03	1
Lead	0.020	U	0.020	0.0030	mg/L		06/30/23 09:23	07/06/23 14:03	1

Lab Sample ID: 480-210334-4 MS
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.015	U	1.00	0.992		mg/L		99	75 - 125
Cadmium	0.0028		1.00	0.953		mg/L		95	75 - 125
Chromium	0.020	U	1.00	0.830		mg/L		83	75 - 125
Selenium	0.025	U	1.00	0.977		mg/L		98	75 - 125
Silver	0.0060	U	1.00	0.965		mg/L		96	75 - 125

Lab Sample ID: 480-210334-4 MS
Matrix: Solid
Analysis Batch: 675515

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.92	J ^2	1.00	1.87		mg/L		95	75 - 125
Lead	0.0047	J	1.00	0.991		mg/L		99	75 - 125

Lab Sample ID: 480-210334-4 MSD
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.015	U	1.00	1.02		mg/L		102	75 - 125	3	20
Cadmium	0.0028		1.00	0.981		mg/L		98	75 - 125	3	20
Chromium	0.020	U	1.00	0.865		mg/L		86	75 - 125	4	20
Selenium	0.025	U	1.00	1.01		mg/L		101	75 - 125	3	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-210334-4 MSD
Matrix: Solid
Analysis Batch: 675477

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	0.0060	U	1.00	1.03		mg/L		103	75 - 125	7	20

Lab Sample ID: 480-210334-4 MSD
Matrix: Solid
Analysis Batch: 675515

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.92	J ^2	1.00	1.92		mg/L		101	75 - 125	3	20
Lead	0.0047	J	1.00	1.03		mg/L		102	75 - 125	3	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-675052/2-A
Matrix: Solid
Analysis Batch: 675126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/30/23 10:01	06/30/23 16:35	1

Lab Sample ID: LCS 480-675052/3-A
Matrix: Solid
Analysis Batch: 675126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00680	0.00646		mg/L		95	80 - 120

Lab Sample ID: LB 480-674882/1-E
Matrix: Solid
Analysis Batch: 675126

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 675052

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/30/23 10:01	06/30/23 16:33	1

Lab Sample ID: 480-210334-4 MS
Matrix: Solid
Analysis Batch: 675126

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675052

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00020	U	0.00680	0.00681		mg/L		100	80 - 120

Lab Sample ID: 480-210334-4 MSD
Matrix: Solid
Analysis Batch: 675126

Client Sample ID: LANDFILL PROFILE 1 (0'-7')
Prep Type: TCLP
Prep Batch: 675052

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00020	U	0.00680	0.00671		mg/L		99	80 - 120	1	20

QC Sample Results

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 480-675600/1
Matrix: Solid
Analysis Batch: 675600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	81.0	83.00		Degrees F		102	97.5 - 102.5

Method: 9045D - pH

Lab Sample ID: LCS 480-675141/1
Matrix: Solid
Analysis Batch: 675141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

GC/MS VOA

Leach Batch: 674884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	1311	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	1311	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	1311	
LB 480-674884/1-A	Method Blank	TCLP	Solid	1311	

Prep Batch: 674917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	5035A_H	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Total/NA	Solid	5035A_H	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	5035A_H	
MB 480-674917/3-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-674917/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Prep Batch: 674987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-1	DS 1 (0'-3')	Total/NA	Solid	5035A_L	
480-210334-2	DS 2 (0'-3')	Total/NA	Solid	5035A_L	
480-210334-3	DS 3 (0'-3')	Total/NA	Solid	5035A_L	
MB 480-674987/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-674987/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 674988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-1	DS 1 (0'-3')	Total/NA	Solid	8260C	674987
480-210334-2	DS 2 (0'-3')	Total/NA	Solid	8260C	674987
480-210334-3	DS 3 (0'-3')	Total/NA	Solid	8260C	674987
MB 480-674987/2-A	Method Blank	Total/NA	Solid	8260C	674987
LCS 480-674987/1-A	Lab Control Sample	Total/NA	Solid	8260C	674987

Analysis Batch: 675021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	8260C	674884
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	8260C	674917
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	8260C	674884
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Total/NA	Solid	8260C	674917
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	8260C	674884
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	8260C	674917
LB 480-674884/1-A	Method Blank	TCLP	Solid	8260C	674884
MB 480-674917/3-A	Method Blank	Total/NA	Solid	8260C	674917
MB 480-675021/8	Method Blank	Total/NA	Solid	8260C	
LCS 480-674917/1-A	Lab Control Sample	Total/NA	Solid	8260C	674917
LCS 480-675021/6	Lab Control Sample	Total/NA	Solid	8260C	

Metals

Leach Batch: 674882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	1311	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	1311	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	1311	
LB 480-674882/1-B	Method Blank	TCLP	Solid	1311	

Metals (Continued)

Leach Batch: 674882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-674882/1-E	Method Blank	TCLP	Solid	1311	
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	1311	
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	1311	

Prep Batch: 675030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	3010A	674882
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	3010A	674882
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	3010A	674882
LB 480-674882/1-B	Method Blank	TCLP	Solid	3010A	674882
MB 480-675030/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 480-675030/3-A	Lab Control Sample	Total/NA	Solid	3010A	
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	3010A	674882
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	3010A	674882

Prep Batch: 675052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	674882
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	7470A	674882
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	7470A	674882
LB 480-674882/1-E	Method Blank	TCLP	Solid	7470A	674882
MB 480-675052/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 480-675052/3-A	Lab Control Sample	Total/NA	Solid	7470A	
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	674882
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	674882

Analysis Batch: 675126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	675052
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	7470A	675052
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	7470A	675052
LB 480-674882/1-E	Method Blank	TCLP	Solid	7470A	675052
MB 480-675052/2-A	Method Blank	Total/NA	Solid	7470A	675052
LCS 480-675052/3-A	Lab Control Sample	Total/NA	Solid	7470A	675052
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	675052
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	7470A	675052

Analysis Batch: 675477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	6010C	675030
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	6010C	675030
LB 480-674882/1-B	Method Blank	TCLP	Solid	6010C	675030
MB 480-675030/2-A	Method Blank	Total/NA	Solid	6010C	675030
LCS 480-675030/3-A	Lab Control Sample	Total/NA	Solid	6010C	675030
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030

Analysis Batch: 675515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030

Metals (Continued)

Analysis Batch: 675515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-5	LANDFILL PROFILE 2 (0'-7')	TCLP	Solid	6010C	675030
480-210334-6	LANDFILL PROFILE 3 (0'-7')	TCLP	Solid	6010C	675030
LB 480-674882/1-B	Method Blank	TCLP	Solid	6010C	675030
MB 480-675030/2-A	Method Blank	Total/NA	Solid	6010C	675030
LCS 480-675030/3-A	Lab Control Sample	Total/NA	Solid	6010C	675030
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	TCLP	Solid	6010C	675030

General Chemistry

Analysis Batch: 674816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-1	DS 1 (0'-3')	Total/NA	Solid	Moisture	
480-210334-2	DS 2 (0'-3')	Total/NA	Solid	Moisture	
480-210334-3	DS 3 (0'-3')	Total/NA	Solid	Moisture	
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	Moisture	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Total/NA	Solid	Moisture	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	Moisture	
480-210334-6 MS	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	Moisture	

Analysis Batch: 675141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	9045D	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Total/NA	Solid	9045D	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	9045D	
LCS 480-675141/1	Lab Control Sample	Total/NA	Solid	9045D	

Analysis Batch: 675600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	1010B	
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Total/NA	Solid	1010B	
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Total/NA	Solid	1010B	
LCS 480-675600/1	Lab Control Sample	Total/NA	Solid	1010B	
480-210334-4 MS	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	1010B	
480-210334-4 MSD	LANDFILL PROFILE 1 (0'-7')	Total/NA	Solid	1010B	

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: DS 1 (0'-3')
Date Collected: 06/28/23 11:36
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Client Sample ID: DS 1 (0'-3')
Date Collected: 06/28/23 11:36
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-1
Matrix: Solid
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			674987	CDC	EET BUF	06/28/23 16:30
Total/NA	Analysis	8260C		1	674988	CDC	EET BUF	06/29/23 22:00

Client Sample ID: DS 2 (0'-3')
Date Collected: 06/28/23 10:05
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Client Sample ID: DS 2 (0'-3')
Date Collected: 06/28/23 10:05
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-2
Matrix: Solid
Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			674987	CDC	EET BUF	06/28/23 16:30
Total/NA	Analysis	8260C		1	674988	CDC	EET BUF	06/29/23 22:25

Client Sample ID: DS 3 (0'-3')
Date Collected: 06/28/23 11:02
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Client Sample ID: DS 3 (0'-3')
Date Collected: 06/28/23 11:02
Date Received: 06/28/23 13:17

Lab Sample ID: 480-210334-3
Matrix: Solid
Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			674987	CDC	EET BUF	06/28/23 16:30
Total/NA	Analysis	8260C		1	674988	CDC	EET BUF	06/29/23 22:49

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: LANDFILL PROFILE 1 (0'-7')

Lab Sample ID: 480-210334-4

Date Collected: 06/28/23 11:50
Date Received: 06/28/23 13:17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			674884	SMP	EET BUF	06/29/23 09:28 - 06/30/23 09:23 [1]
TCLP	Analysis	8260C		10	675021	LCH	EET BUF	06/30/23 13:36
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675515	BMB	EET BUF	07/06/23 14:38
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675477	BMB	EET BUF	07/04/23 22:24
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	7470A			675052	VAK	EET BUF	06/30/23 10:01
TCLP	Analysis	7470A		1	675126	BMB	EET BUF	06/30/23 16:41
Total/NA	Analysis	1010B		1	675600	SF	EET BUF	07/07/23 13:02
Total/NA	Analysis	9045D		1	675141	CG	EET BUF	07/01/23 10:30
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Client Sample ID: LANDFILL PROFILE 1 (0'-7')

Lab Sample ID: 480-210334-4

Date Collected: 06/28/23 11:50
Date Received: 06/28/23 13:17

Matrix: Solid
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_H			674917	AXK	EET BUF	06/29/23 10:25
Total/NA	Analysis	8260C		1	675021	LCH	EET BUF	06/30/23 15:29

Client Sample ID: LANDFILL PROFILE 2 (0'-7')

Lab Sample ID: 480-210334-5

Date Collected: 06/28/23 10:28
Date Received: 06/28/23 13:17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			674884	SMP	EET BUF	06/29/23 09:28 - 06/30/23 09:23 [1]
TCLP	Analysis	8260C		10	675021	LCH	EET BUF	06/30/23 13:58
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675515	BMB	EET BUF	07/06/23 14:58
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675477	BMB	EET BUF	07/04/23 22:51
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	7470A			675052	VAK	EET BUF	06/30/23 10:01
TCLP	Analysis	7470A		1	675126	BMB	EET BUF	06/30/23 16:49
Total/NA	Analysis	1010B		1	675600	SF	EET BUF	07/07/23 13:02
Total/NA	Analysis	9045D		1	675141	CG	EET BUF	07/01/23 10:30
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Lab Chronicle

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Client Sample ID: LANDFILL PROFILE 2 (0'-7')

Lab Sample ID: 480-210334-5
Date Collected: 06/28/23 10:28
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_H			674917	AXK	EET BUF	06/29/23 10:25
Total/NA	Analysis	8260C		1	675021	LCH	EET BUF	06/30/23 15:51

Client Sample ID: LANDFILL PROFILE 3 (0'-7')

Lab Sample ID: 480-210334-6
Date Collected: 06/28/23 11:21
Matrix: Solid
Date Received: 06/28/23 13:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			674884	SMP	EET BUF	06/29/23 09:28 - 06/30/23 09:23 [1]
TCLP	Analysis	8260C		10	675021	LCH	EET BUF	06/30/23 14:21
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675515	BMB	EET BUF	07/06/23 15:03
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	3010A			675030	VAK	EET BUF	06/30/23 09:23
TCLP	Analysis	6010C		1	675477	BMB	EET BUF	07/04/23 22:54
TCLP	Leach	1311			674882	SMP	EET BUF	06/29/23 09:23 - 06/30/23 08:25 [1]
TCLP	Prep	7470A			675052	VAK	EET BUF	06/30/23 10:01
TCLP	Analysis	7470A		1	675126	BMB	EET BUF	06/30/23 16:50
Total/NA	Analysis	1010B		1	675600	SF	EET BUF	07/07/23 13:02
Total/NA	Analysis	9045D		1	675141	CG	EET BUF	07/01/23 10:30
Total/NA	Analysis	Moisture		1	674816	JMM	EET BUF	06/28/23 15:53

Client Sample ID: LANDFILL PROFILE 3 (0'-7')

Lab Sample ID: 480-210334-6
Date Collected: 06/28/23 11:21
Matrix: Solid
Date Received: 06/28/23 13:17
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_H			674917	AXK	EET BUF	06/29/23 10:25
Total/NA	Analysis	8260C		1	675021	LCH	EET BUF	06/30/23 16:14

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Matrix Environmental Technologies Inc
Job ID: 480-210334-1
Project/Site: Project # 18-046 - Aquino Lancaster

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

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
7470A	7470A	Solid	Mercury
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Method	Method Description	Protocol	Laboratory
8260C	TCLP Volatiles	SW846	EET BUF
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7470A	TCLP Mercury	SW846	EET BUF
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	EET BUF
9045D	pH	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
1311	TCLP Extraction	SW846	EET BUF
3010A	Preparation, Total Metals	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_H	Closed System Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF

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 BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Matrix Environmental Technologies Inc
Project/Site: Project # 18-046 - Aquino Lancaster

Job ID: 480-210334-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-210334-1	DS 1 (0'-3')	Solid	06/28/23 11:36	06/28/23 13:17
480-210334-2	DS 2 (0'-3')	Solid	06/28/23 10:05	06/28/23 13:17
480-210334-3	DS 3 (0'-3')	Solid	06/28/23 11:02	06/28/23 13:17
480-210334-4	LANDFILL PROFILE 1 (0'-7')	Solid	06/28/23 11:50	06/28/23 13:17
480-210334-5	LANDFILL PROFILE 2 (0'-7')	Solid	06/28/23 10:28	06/28/23 13:17
480-210334-6	LANDFILL PROFILE 3 (0'-7')	Solid	06/28/23 11:21	06/28/23 13:17

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Nickolas Ander	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-186512-39378.1
Client Contact: Nickolas Ander	Phone: (716) 807-1711	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Matrix Environmental Technologies Inc	PWSID:			Job #:
Address: 3730 California Road PO BOX 427	Due Date Requested:			
City: Orchard Park	TAT Requested (days): regular			
State, Zip: NY, 14127	Compliance Project: Δ Yes Δ No			
Phone: 716-807-1711(Tel)	PO #: 18-046			
Email: nander@matrixbiotech.com	WO #:			
Project Name: Project # 18-046 - Aquino Lancaster	Project #: 48026653			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	6010C, 7470A	8260C - TCLP Volatiles	1010B, 9045D	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N		
DS 1 (0'-3')	6/28/23	11:30	G	Solid			X					
DS 2 (0'-3')		10:05	G	Solid			X					
DS 3 (0'-3')		11:02	G	Solid			X					
Landfill Profile 1 (0'-7')		11:50	C	Solid			X	X	X	X		
Landfill Profile 2 (0'-7')		10:28	C	Solid			X	X	X	X		
Landfill Profile 3 (0'-7')		11:21	C	Solid			X	X	X	X		

480-210334 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 6/28/23 12:30	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6-28-23 1317	Company: TAS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.0 1.0 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Matrix Environmental Technologies Inc

Job Number: 480-210334-1

Login Number: 210334
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	MATRIX
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX D

Data Usability Summary Reports

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

18-046-Lakeside Village Apts.
Eurofins SDG#480-199197-1,2
August 12, 2022
Reissued: August 30, 2022
Sampling date: 6/20/2022

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package(reissued: August 30, 2022) for Matrix Environmental Technologies, Inc., project located at 18-046-Lakeside Village Apts., Eurofins SDG#480-199197-1,2 submitted to Vali-Data of WNY, LLC on August 9, 2022. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG), NYSDEC; 'Guidelines for Sampling and Analysis of PFAS'(6/2021) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using USEPA method Volatile Organics (8260C), Semi-Volatile Organics (8270D), Pesticides (8081B), PCB (8082A), Herbicides (8151A), Perfluorinated Hydrocarbons (537 modified), Inorganics/Mercury (6010C, 7470A, 7471B) and in accordance with wet chemistry methods.

ID	Sample ID	Laboratory ID
1	SB113 (1-5)	480-199197-1
2	SB113 (15-18)	480-199197-2
3	SB114 (0.5-2.0)	480-199197-3
4	SB114 (6.0-10.0)	480-199197-4
5	SB114 (12-16)	480-199197-5
6	SB115 (0-3)	480-199197-6
7	SB115 (6-8)	480-199197-7
8	SB116 (0.5-2.5)	480-199197-8
9	SB116 (6.0-7.5)	480-199197-9
10	SB117 (0.5-3.0)	480-199197-10
11	SB117 (8-10)	480-199197-11
12	SB205 (1.5)	480-199197-12
13	SB205 (7)	480-199197-13
14	SB206 (2)	480-199197-14
15	SB206 (6)	480-199197-15
16	SB207 (1-3)	480-199197-16
17	SB207 (6-8)	480-199197-17
18	Field Duplicate	480-199197-18
19	Equipment Blank	480-199197-19

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times

-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Internal Standard, Surrogate Spike Recoveries and Compound Quantitation.

Medium level analysis was performed due to high target analyte concentrations in DUSR ID#1, 3, 8, 10, 12-14 and 16.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met except the area of Chlorobenzene-d_5 was outside QC limits, low in DUSR ID#2 and #7. The associated target analytes, below, should be qualified as estimated in these samples.

1,1,1-Trichloroethane	Cyclohexane	Carbon tetrachloride	Benzene	Trichloroethene
Methylcyclohexane	2-Hexanone	1,2-Dichloropropane	Toluene	Tetrachloroethene
Bromodichloromethane	Chlorobenzene	4-Methyl-2-pentanone	Ethylbenzene	1,2-Dibromoethane
cis-1,3-Dichloropropene	Xylenes	1,1,2-Trichloroethane	Styrene	Dibromochloromethane
trans-1,3-Dichloropropene	Isopropylbenzene	1,1,2,2-Tetrachloroethane		

The area of 1,4-Dichlorobenzene-d_4 was outside QC limits, low in DUSR ID#2, 4, 5, 7 and 17. The associated target analytes, below, should be qualified as estimated in these samples.

Bromoform	1,3-Dichlorobenzene	1,4-Dichlorobenzene
1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene

SURROGATE SPIKE RECOVERIES

All criteria were met except the %Rec of Toluene-d_8 was outside QC limits, high in DUSR ID #2 and should be qualified as estimated. The associated target analyte, below, should be qualified as estimated high in this sample.

Associated Target Analyte
Toluene, Cyclohexane, Xylenes, Methylcyclohexane

The %Rec of 4-Bromofluorobenzene was outside QC limits, low in DUSR ID#2, 4, 5, 7 and 15 and should be qualified as estimated. The associated target analytes, below, should be qualified as estimated in these samples.

1,1,1-Trichloroethane	Cyclohexane	Carbon tetrachloride	Benzene	Trichloroethene
Methylcyclohexane	2-Hexanone	1,2-Dichloropropane	Toluene	Tetrachloroethene
Bromodichloromethane	Chlorobenzene	4-Methyl-2-pentanone	Ethylbenzene	1,2-Dibromoethane
cis-1,3-Dichloropropene	Xylenes	1,1,2-Trichloroethane	Styrene	Dibromochloromethane
trans-1,3-Dichloropropene	Isopropylbenzene	1,1,2,2-Tetrachloroethane		

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except Tetrachloroethene was detected in DUSR ID#9 but was not detected in #18.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired for this analysis.

COMPOUND QUANTITATION
All criteria were met except some target analytes were detected in a sample blank and should be qualified in the associated samples in which they were detected.

Blank ID	Target Analyte	Concentration (ug/L)	Qualifier	Associated Sample
#19	2-Butanone	1.8	U at RL	4, 17
#19	Acetone	5.0	U at RL	2, 5, 7, 15
#19	Acetone	5.0	JH	4, 17

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were performed on some target analytes, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMIVOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation

- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Surrogate Spike Recoveries, Laboratory Control Samples, Method Blank, MS/MSD, Initial Calibration and Continuing Calibration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 2-Fluorophenol was outside QC limits low in DUSR ID#19. Phenol should be qualified as estimated in this sample.

METHOD BLANK
All the criteria were met except several TICs were detected above the quantitation limit in the method blanks. These TICs should be qualified in associated samples.

Blank ID	TIC RT	Concentration(ug/L)	Qualifier	Associated Sample
MB 480-631241	3.07	295	U	19
MB 480-631241	4.97	11.8	U	19
MB 480-631241	12.18	5.15	U	19
MB 480-631241	12.59	7.5	U	19
MB 480-631241	13.04	9.69	U	19
MB 480-631241	13.51	9.68	U	19
MB 480-631241	14.02	7.71	U	19
MB 480-631241	14.54	5.04	U	19

Blank ID	TIC RT	Concentration(ug/kg)	Qualifier	Associated Sample
MB 480-631383	1.95	5300	U	1, 5, 8-10
MB 480-631383	3.40	915	U	2, 5, 7-11
MB 480-631383	13.17	215	U	1-10, 18
MB 480-631383	13.44	195	U	1-10, 18
MB 480-631383	13.71	175	U	1-8, 10, 18

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

All criteria were met except a couple of target analytes were outside QC limits in the matrix spike and matrix spikes duplicate and should be qualified as estimated.

Target Analyte	%Rec 1MS	%Rec 1MSD	RPD	Qualifier	Associated Sample
Benzo(k)fluoranthene	-	-	24	UJ	1
Fluoranthene	-	-	19	UJ	1

COMPOUND QUANTITATION

All criteria were met except a couple of TICs were detected above the qualification limit in a sample blank. These TICs are qualified as undetected due to being detected in the associated Method Blank, so no further action is required.

INITIAL CALIBRATION

All criteria were met.

Alternate forms of regression were performed on some target analytes, with acceptable results except as mentioned above.

CONTINUING CALIBRATION

All criteria were met.

Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further

action is required.

GC/MS PERFORMANCE CHECK
All criteria were met.

PESTICIDES

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Surrogate Spikes Recoveries, Laboratory Control Sample and Compound Quantitation.

Sample: DUSR ID#2 was diluted due to sample matrix.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of DCBP was outside QC limits in DUSR ID#8, 10, 18 off the confirmatory column and should be qualified as estimated.
Some surrogates were outside QC limits due to dilution, so no further action is required.

METHOD BLANK
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except beta-BHC was detected in DUSR ID#9 but was not detected in #18.

LABORATORY CONTROL SAMPLES
All criteria were met except the RPD of Endosulfan sulfate and alpha-BHC was outside QC limits between the columns in LCS 480-631723/2-A and should be qualified as estimated.
The RPD of 4,4'-DDD was outside QC limits between the columns in LCS/SD 480-631179/2-A,3-A and should be qualified as estimated.

MS/MSD
All criteria were met.
A target analyte was outside laboratory QC limits but within NFG QC limits, so no further action is required.

COMPOUND QUANTITATION
All criteria were met except the RPD of a target analyte was outside QC limits between the columns in the sample below and should be qualified as estimated.

Target Analyte	Qualifier	Associated Sample
beta-BHC	J	9

4,4'-DDD was detected above the MDL, below the reporting limit and is qualified as estimated in DUSR ID#19. This target analyte should be qualified as undetected at the reporting limit in DUSR ID#8 and 10.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on most of the target analytes and surrogates, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

PCB

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in MS/MSD and Initial Calibration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All criteria were met except the RPD of Aroclor 1016 was outside QC limits in DUSR ID#1MS/MSD and should be qualified as estimated in DUSR ID#1 and 1MS/MSD.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on all of the target analytes and surrogates, with acceptable results.

ICV ID	Target Analyte/Surrogate	Column	%D	Qualifier	Associated Sample
ICV 480-626504/30	Aroclor 1268 p4	ZB-5	-33.5	UJ	MB 480-633623, 1-11
ICV 480-626504/30	Aroclor 1268 p4	ZB-35	-31.6	UJ	MB 480-633848, 19

CONTINUING CALIBRATION
All criteria were met.
Some target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

HERBICIDES

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Precision
- Laboratory Control Samples
- MS/MSD

- Compound Quantitation
- Initial Calibration
- Continuing Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All the criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired for this analysis.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.

Alternate forms of regression were used on all of the target analytes and surrogates, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

PFAA

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS)
- Surrogate Recoveries
- Blanks
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
-

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Blanks.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE RECOVERIES
All criteria were met.

BLANKS
All the criteria were met except some target analytes were detected above the MDL, below the reporting limit and are qualified as estimated in ICB 200-179551/11. These target analytes should be qualified as undetected at the reporting limit in associated samples in which they were detected below the reporting limit. These target analytes should be qualified as estimated high in associated samples in which they were detected above the reporting limit but below 10x the blank concentration.

Target Analyte	Concentration (ng/ml)	Qualifier	Associated Sample
PFHpA	.0169	U at RL	8
PFNA	.0188	U at RL	8

Several target analytes were detected in ICB 200-1779551/11 but were not detected in the associated samples, so no further action is required.

FIELD DUPLICATE SAMPLE PRECISION
All the criteria were met.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All criteria were met.

COMPOUND QUANTITATION
All the criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes in which the %RSD >20.0%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

METALS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Blanks
-Laboratory Control Sample
-MS/MSD/Duplicate
-Field Duplicate
-Serial Dilution
-Compound Quantitation
-Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use but are qualified below in Blanks, MS/MSD and Calibration.

DUSR ID#5 was diluted due to interference by Ca.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

BLANKS
All criteria were met except a target analyte was detected in the blanks. This target analyte should be qualified as undetected at the reporting limit in associated samples in which it was detected above the MDL, and below the reporting limit. This target analyte should be qualified as estimated high in the associated samples in which it was detected above the reporting limit.

Blank ID	Target analyte	Concentration	Qualifier	Associated Sample
MB 480-631187	Mn	.000600 mg/L	U at RL	19
MB 480-631437	Mn	.0534 mg/kg	JH	1-11, 18

LABORATORY CONTROL SAMPLE
All criteria were met.

MS/MSD/DUPLICATE
All criteria were met except a couple of target analytes were outside QC limits in the matrix spike and matrix spike duplicates and should be qualified as estimated.

Target Analyte	%Rec 1MS	%Rec 1MSD	Qualifier	Associated Sample
Ba	142	142	JH	1
Pb	229	194	JH	1

FIELD DUPLICATE
All criteria were met.

SERIAL DILUTION
All criteria were met.
Some target analytes were outside laboratory QC but within NFG QC limits, so no further action is required.

COMPOUND QUANTITATION
All criteria were met.

CALIBRATION
All criteria were met except the %Rec of several target analytes was outside QC limits low in the ICVLs and CCVLs. These target analytes should be qualified as estimated in the associated samples, blanks and spikes.
The %Rec of several target analytes was outside QC limits high in the ICVLs and CCVLs. These target analytes should be qualified as estimated high in the associated blanks, samples and spikes in which they were detected.

Calibration ID	Target analyte	%D	Qualifier	Associated Sample
ICVL 480-631484/7	As	84	UJ/J	MB/LCS 480-631187, 19
ICVL 480-631484/7	Pb	89	UJ/J	MB/LCS 480-631187, 19
ICVL 480-631484/7	Ag	86	UJ/J	MB/LCS 480-631187, 19
CCVL 480-631484/20	As	86	UJ	MB 480-631187
CCVL 480-631484/20	Pb	87	UJ	MB 480-631187
CCVL 480-631484/20	Se	89	UJ	MB 480-631187
CCVL 480-631484/24	As	83	UJ/J	MB/LCS 480-631187
CCVL 480-631484/24	Pb	87	UJ/J	MB/LCS 480-631187
CCVL 480-631484/24	Se	89	UJ/J	MB/LCS 480-631187

Calibration ID	Target analyte	%D	Qualifier	Associated Sample
CCVL 480-631484/36	As	80	UJ/J	LCS 480-631187, 19
CCVL 480-631484/36	Pb	86	UJ/J	LCS 480-631187, 19
CCVL 480-631484/36	Ag	86	UJ/J	LCS 480-631187, 19
CCVL 480-631484/48	As	76	UJ	19
CCVL 480-631484/48	Ag	87	UJ	19

GENERAL CHEMISTRY

The following items/criteria were reviewed for this analytical suite:

- Cyanide
- Trivalent Chromium
- Hexavalent Chromium

The items listed above were technically in compliance with the method and SOP criteria with any exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below.

CYANIDE

All criteria were met except the %Rec of all of the Laboratory Control Samples associated with the soil samples were outside QC limits, low. Cn in the soil samples should be qualified as estimated.

The %Rec of Cn in DUSR ID#6MS and #9MS was 0%. Cn should be considered unusable in DUSR ID#6 and #9.

Reanalysis of DUSR ID#2, 6, 11, 2Dup and 2MS outside hold time. Cn should be qualified as estimated if detected in these samples or unusable if not detected.

Cn was detected in DUSR ID#19 above the MDL, below the reporting limit and is qualified as estimated. Cn should be qualified in the associated samples in which it was detected.

Blank ID	Target Analyte	Qualifier	Associated Sample
19	Cn	U at RL	2
19	Cn	JH	11

TRIVALENT CHROMIUM

All criteria were met.

HEXAVALENT CHROMIUM

All criteria were met except DUSR ID#19 was analyzed outside hold time and should be qualified as unusable for Hexavalent Chromium.

Job Narrative
480-199197-1

Revision 2
This report was revised 8/30/22 to include missing raw data for metals.

Revision 1
This report was revised 7/28/22 to include reporting of 8260 tentatively identified compounds.

Receipt
The samples were received on 6/21/2022 4:23 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 3.5º C, 3.8º C, 4.2º C, 4.6º C and 5.1º C.

GC/MS VOA
Method 8260C: The following samples were analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: SB113 (1-5) (480-199197-1), SB-114 (0.5-2.0) (480-199197-3), SB-116 (0.5-2.5) (480-199197-8), SB-117 (0.5-3.0) (480-199197-10), SB-205 (1.5) (480-199197-12) and SB-206 (2) (480-199197-14). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-205 (7) (480-199197-13) and SB-207 (1-3) (480-199197-16). Elevated reporting limits (RLs) are provided.

Method 8260C: Internal standard (ISTD) response for the following sample was outside control limits: SB-207 (6-8) (480-199197-17). The sample(s) was re-extracted and/or re-analyzed and ISTD response was outside control limits.

Method 8260C: Surrogate recovery for the following sample was outside control limits: SB-206 (6) (480-199197-15). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

Method 8260C: Internal standard and surrogate responses for the following samples were outside control limits: SB113 (15-18) (480-199197-2), SB-114 (6.0-10.0) (480-199197-4), SB-114 (12-16) (480-199197-5) and SB-115 (6-8) (480-199197-7). The sample(s) were re-extracted and/or re-analyzed and responses were outside control limits.

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

GC/MS Semi VOA
Method 8270D: The following sample was diluted due to color, appearance, and viscosity: SB113 (15-18) (480-199197-2). Elevated reporting limits (RL) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-631456 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: Equipment Blank (480-199197-19). These results have been reported and qualified.

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

GC Semi VOA
Method 8081B: The following sample was diluted due to the nature of the sample matrix : SB113 (1-5) (480-199197-1). As such, surrogate recoveries are below the calibration range, estimated, and not representative. Elevated reporting limits (RLs) are provided.

Method 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-631723 and analytical batch 480-631751 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals
Method 6010C: The serial dilution (480-199197-D-1-B SD ^5) associated with batch 480-631791, exhibited results outside the quality control limits for Total Barium, Chromium, Manganese, and Zinc. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The following sample was diluted due to the presence of Total Calcium which interferes with Copper: SB-114 (12-16) (480-199197-5). 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.

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

General Chemistry
Method 7196A: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: Equipment Blank (480-199197-19).

Methods 335.4, 9012B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-632260 and analytical batch 480-632311 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632392 and analytical batch 480-632449 was outside acceptance criteria. Re-extraction and/or re-analysis was performed with similar results; therefore, the data have been reported.

Methods 9012A, 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632161 and analytical batch 480-632202 was below acceptance criteria. Re-extraction and/or re-analysis was performed with similar results; therefore, the data have been reported.

Method 9012B: Reanalysis of the following samples were performed outside of the analytical holding time due to original batch failing laboratory control sample : SB113 (15-18) (480-199197-2), SB-115 (0-3) (480-199197-6), (480-199197-D-2-G DU) and (480-199197-D-6-G MS).

Methods 9012A, 9012B: The laboratory control sample (LCS) associated with preparation batch 480-632532 and analytical batch 480-632557 was 0.1 outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported.

Method 9012B: Reanalysis of the following sample was performed outside of the analytical holding time due to the laboratory control sample failing low : SB-117 (8-10) (480-199197-11). Both sets of data has been reported.

Method 9012B: The continuing calibration verification (CCV) and the laboratory control sample (LCS) associated with batch 480-632254 recovered above the upper control limit for Cyanide, Total. The sample associated with this CCV and LCS were detects for the affected analytes; therefore, the sample was re-prepared and re-analyzed outside of analytical hold and both sets of data have been reported.

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

Organic Prep
Method 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-631266.

Method 3550C: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SB113 (1-5) (480-199197-1) and SB-117 (0.5-3.0) (480-199197-10).

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

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1

Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**15.8**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1

Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2,2-Tetrachloroethane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2-Trichloroethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1-Dichloroethane	ND		65	20	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,1-Dichloroethene	ND		65	23	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2,4-Trichlorobenzene	ND		65	25	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dibromo-3-Chloropropane	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichlorobenzene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichloroethane	ND		65	27	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dichloropropane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,3-Dichlorobenzene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,4-Dichlorobenzene	ND		65	9.1	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
2-Butanone (MEK)	ND		330	190	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
2-Hexanone	ND		330	130	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
4-Methyl-2-pentanone (MIBK)	ND		330	21	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Acetone	ND		330	270	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Benzene	ND		65	12	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromodichloromethane	ND		65	13	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromoform	ND		65	33	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Bromomethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Carbon disulfide	ND		65	30	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Carbon tetrachloride	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chlorobenzene	ND		65	8.6	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Dibromochloromethane	ND		65	32	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloroethane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloroform	ND		65	45	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Chloromethane	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
cis-1,2-Dichloroethene	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
cis-1,3-Dichloropropene	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Cyclohexane	ND		65	14	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Dichlorodifluoromethane	ND		65	28	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Ethylbenzene	ND		65	19	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
1,2-Dibromoethane	ND		65	11	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Isopropylbenzene	ND		65	9.8	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methyl acetate	ND		330	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methyl tert-butyl ether	ND		65	25	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methylcyclohexane	ND		65	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Methylene Chloride	ND		65	13	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Styrene	ND		65	16	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Tetrachloroethene	**410**		65	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Toluene	ND		65	17	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		65	15	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
trans-1,3-Dichloropropene	ND		65	6.4	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Trichloroethene	ND		65	18	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Trichlorofluoromethane	ND		65	31	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Vinyl chloride	ND		65	22	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1
Xylenes, Total	ND		130	36	ug/Kg	☼	06/24/22 09:44	06/24/22 21:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/24/22 21:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 21:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*	*06/24/22 09:44*	*06/24/22 21:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*	*06/24/22 09:44*	*06/24/22 21:39*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*06/24/22 09:44*	*06/24/22 21:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Acenaphthylene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Anthracene	ND		210	51	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(b)fluoranthene	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(g,h,i)perylene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Benzo(k)fluoranthene	ND	F2	210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Chrysene	ND		210	46	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Dibenzofuran	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Fluoranthene	ND	F2	210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Fluorene	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
m-Cresol	ND		400	32	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Naphthalene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
o-Cresol	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
p-Cresol	ND		400	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Pentachlorophenol	ND		400	210	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Phenol	ND		210	32	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1
Pyrene	ND		210	24	ug/Kg	☼	06/23/22 15:45	06/24/22 14:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*12000*	*T J*	*ug/Kg*	☼	*1.84*		*06/23/22 15:45*	*06/24/22 14:41*	*1*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*3.24*		*06/23/22 15:45*	*06/24/22 14:41*	*1*
n-Hexadecanoic acid	*220*	*T J N*	*ug/Kg*	☼	*11.41*	*57-10-3*	*06/23/22 15:45*	*06/24/22 14:41*	*1*
Heptacosane	*280*	*T J N*	*ug/Kg*	☼	*12.85*	*593-49-7*	*06/23/22 15:45*	*06/24/22 14:41*	*1*
Tetratetracontane	*420*	*T J N*	*ug/Kg*	☼	*13.13*	*7098-22-8*	*06/23/22 15:45*	*06/24/22 14:41*	*1*
Nonacosane	*390*	*T J N*	*ug/Kg*	☼	*13.40*	*630-03-5*	*06/23/22 15:45*	*06/24/22 14:41*	*1*
Hexatriacontane	*400*	*T J N*	*ug/Kg*	☼	*13.66*	*630-06-8*	*06/23/22 15:45*	*06/24/22 14:41*	*1*

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Eicosane, 7-hexyl-	310	T J N	ug/Kg	☼	13.91	55333-99-8	06/23/22 15:45	06/24/22 14:41	1
Octacosane	270	T J N	ug/Kg	☼	14.16	630-02-4	06/23/22 15:45	06/24/22 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		54 - 120	06/23/22 15:45	06/24/22 14:41	1
2-Fluorobiphenyl	91		60 - 120	06/23/22 15:45	06/24/22 14:41	1
2-Fluorophenol	82		52 - 120	06/23/22 15:45	06/24/22 14:41	1
Nitrobenzene-d5	89		53 - 120	06/23/22 15:45	06/24/22 14:41	1
Phenol-d5	87		54 - 120	06/23/22 15:45	06/24/22 14:41	1
p-Terphenyl-d14	105		79 - 130	06/23/22 15:45	06/24/22 14:41	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
4,4'-DDE	ND		100	21	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
4,4'-DDT	ND		100	24	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Aldrin	ND		100	25	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
alpha-BHC	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
beta-BHC	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Chlordane (.alpha.)	ND		100	51	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
delta-BHC	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Dieldrin	ND		100	24	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan I	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan II	ND		100	18	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endosulfan sulfate	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Endrin	ND		100	20	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Heptachlor	ND		100	22	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50
Lindane	ND		100	19	ug/Kg	☼	06/27/22 15:42	06/28/22 11:52	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	S1-	45 - 120	06/27/22 15:42	06/28/22 11:52	50
DCB Decachlorobiphenyl	0	S1-	45 - 120	06/27/22 15:42	06/28/22 11:52	50
Tetrachloro-m-xylene	0	S1-	30 - 124	06/27/22 15:42	06/28/22 11:52	50
Tetrachloro-m-xylene	0	S1-	30 - 124	06/27/22 15:42	06/28/22 11:52	50

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		20	7.3	ug/Kg	☼	06/27/22 06:56	07/10/22 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	72		28 - 129	06/27/22 06:56	07/10/22 14:23	1
2,4-Dichlorophenylacetic acid	73		28 - 129	06/27/22 06:56	07/10/22 14:23	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.60	0.39	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoropentanoic acid (PFPeA)	ND		0.24	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorohexanoic acid (PFHxA)	ND		0.24	0.055	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoroheptanoic acid (PFHpA)	ND		0.24	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanoic acid (PFOA)	ND		0.24	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1

Client Sample ID: SB113 (1-5)
Date Collected: 06/20/22 09:50
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-1
Matrix: Solid
Percent Solids: 81.0

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorodecanoic acid (PFDA)	ND		0.24	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.24	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.4	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.4	0.099	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.4	0.068	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.4	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 01:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFHpA	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFOA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFOS	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C5 PFNA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C4 PFBA	*105*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFHxA	*100*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFDA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFUnA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFDoA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C8 FOSA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C5 PFPeA	*108*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C2 PFTeDA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
d3-NMeFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
M2-6:2 FTS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
M2-8:2 FTS	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*
13C3 PFBS	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:14*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**		2.5	0.50	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Barium	**58.8**	**F1**	0.62	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Beryllium	**0.78**		0.25	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Cadmium	**0.21**	**J**	0.25	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Copper	**28.3**		1.2	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Lead	**108**	**F1**	1.2	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Manganese	**732**	**B**	0.25	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Nickel	**24.5**		6.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1

Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		5.0	0.50	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Silver	ND		0.75	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1
Zinc	**71.8**		2.5	0.80	mg/Kg	☼	06/24/22 10:50	06/28/22 04:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.034**		0.025	0.0057	mg/Kg	☼	06/24/22 09:43	06/24/22 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.4	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 10:20	1
Cyanide, Total	ND	*-	1.1	0.51	mg/Kg	☼	07/01/22 14:08	07/02/22 13:54	1

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2

Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**8.9**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2

Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2,2-Tetrachloroethane	ND	*3	3.9	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2-Trichloroethane	ND	*3	3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.90	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2,4-Trichlorobenzene	ND	*3	3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dibromo-3-Chloropropane	ND	*3	3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichlorobenzene	ND	*3	3.9	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,3-Dichlorobenzene	ND	*3	3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,4-Dichlorobenzene	ND	*3	3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
2-Hexanone	ND	*3	20	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
4-Methyl-2-pentanone (MIBK)	ND	*3	20	1.3	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Acetone	**12**	**J**	20	3.3	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Benzene	**0.46**	**J**	3.9	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromodichloromethane	ND		3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromoform	ND	*3	3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chlorobenzene	ND	*3	3.9	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1

Client Sample ID: SB113 (15-18)
Date Collected: 06/20/22 10:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-2
Matrix: Solid
Percent Solids: 95.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND	*3	3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloroethane	ND		3.9	0.89	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
cis-1,3-Dichloropropene	ND		3.9	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Cyclohexane	**1.6**	**J**	3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Dichlorodifluoromethane	ND		3.9	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Ethylbenzene	ND	*3	3.9	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
1,2-Dibromoethane	ND	*3	3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Isopropylbenzene	ND	*3	3.9	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methylcyclohexane	**0.94**	**J**	3.9	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Styrene	ND	*3	3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Tetrachloroethene	ND	*3	3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Toluene	**1.9**	**J *3**	3.9	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
trans-1,2-Dichloroethene	ND		3.9	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
trans-1,3-Dichloropropene	ND	*3	3.9	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Trichloroethene	ND		3.9	0.87	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1
Xylenes, Total	**1.1**	**J**	7.9	0.66	ug/Kg	☼	06/21/22 18:30	06/27/22 13:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane	*4.9*	*T J N*	*ug/Kg*	☼	*2.95*	*287-92-3*	*06/21/22 18:30*	*06/27/22 13:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*133*	*S1+ *3*	*71 - 125*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
4-Bromofluorobenzene (Surr)	*56*	*S1- *3*	*72 - 126*	*06/21/22 18:30*	*06/27/22 13:13*	*1*
Dibromofluoromethane (Surr)	*119*		*60 - 140*	*06/21/22 18:30*	*06/27/22 13:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Acenaphthylene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Anthracene	ND		880	220	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(a)anthracene	ND		880	88	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(a)pyrene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(b)fluoranthene	ND		880	140	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(g,h,i)perylene	ND		880	93	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Benzo(k)fluoranthene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Chrysene	ND		880	200	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Dibenz(a,h)anthracene	ND		880	160	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Dibenzofuran	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Fluoranthene	ND		880	93	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Fluorene	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Hexachlorobenzene	ND		880	120	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5

Client Sample ID: SB113 (15-18)
Date Collected: 06/20/22 10:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-2
Matrix: Solid
Percent Solids: 95.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
m-Cresol	ND		1700	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Naphthalene	ND		880	110	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
o-Cresol	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
p-Cresol	ND		1700	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Pentachlorophenol	ND		1700	880	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Phenanthrene	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Phenol	ND		880	130	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5
Pyrene	ND		880	100	ug/Kg	☼	06/23/22 15:45	06/24/22 16:45	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*820*	*T J*	*ug/Kg*	☼	*3.37*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*890*	*T J*	*ug/Kg*	☼	*7.93*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*8.60*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Decane	*800*	*T J N*	*ug/Kg*	☼	*9.81*	*124-18-5*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Heptadecane	*950*	*T J N*	*ug/Kg*	☼	*10.33*	*629-78-7*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*850*	*T J*	*ug/Kg*	☼	*12.87*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Eicosane	*1100*	*T J N*	*ug/Kg*	☼	*13.15*	*112-95-8*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Tridecane, 1-iodo-	*1100*	*T J N*	*ug/Kg*	☼	*13.42*	*35599-77-0*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*1100*	*T J*	*ug/Kg*	☼	*13.68*		*06/23/22 15:45*	*06/24/22 16:45*	*5*
Unknown	*900*	*T J*	*ug/Kg*	☼	*13.93*		*06/23/22 15:45*	*06/24/22 16:45*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*54 - 120*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
2-Fluorobiphenyl	*86*		*60 - 120*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
2-Fluorophenol	*78*		*52 - 120*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Nitrobenzene-d5	*83*		*53 - 120*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
Phenol-d5	*81*		*54 - 120*	*06/23/22 15:45*	*06/24/22 16:45*	*5*
p-Terphenyl-d14	*96*		*79 - 130*	*06/23/22 15:45*	*06/24/22 16:45*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
4,4'-DDE	ND		1.7	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
4,4'-DDT	ND		1.7	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Aldrin	ND		1.7	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
alpha-BHC	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
beta-BHC	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Chlordane (.alpha.)	ND		1.7	0.84	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
delta-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Dieldrin	ND		1.7	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan I	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan II	ND		1.7	0.30	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Endrin	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Heptachlor	ND		1.7	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1
Lindane	ND	F1	1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*45 - 120*	*06/27/22 15:42*	*06/28/22 10:53*	*1*

Client Sample ID: SB113 (15-18)
Date Collected: 06/20/22 10:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-2
Matrix: Solid
Percent Solids: 95.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*45 - 120*	*06/27/22 15:42*	*06/28/22 10:53*	*1*
Tetrachloro-m-xylene	*86*		*30 - 124*	*06/27/22 15:42*	*06/28/22 10:53*	*1*
Tetrachloro-m-xylene	*60*		*30 - 124*	*06/27/22 15:42*	*06/28/22 10:53*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		17	6.2	ug/Kg	☼	06/27/22 06:56	07/10/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 14:42*	*1*
2,4-Dichlorophenylacetic acid	*65*		*28 - 129*	*06/27/22 06:56*	*07/10/22 14:42*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.33	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.056	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.059	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.084	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 01:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFHpA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFOA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFOS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C5 PFNA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C4 PFBA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFHxA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFDA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFUnA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFDoA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2

Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C5 PFPeA	*102*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C2 PFTeDA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
d3-NMeFOSAA	*99*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
d5-NEtFOSAA	*102*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
M2-6:2 FTS	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
M2-8:2 FTS	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*
13C3 PFBS	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		2.1	0.42	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Barium	**28.1**		0.52	0.11	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Beryllium	**0.30**		0.21	0.029	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Cadmium	**0.19**	**J**	0.21	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Copper	**14.8**		1.0	0.22	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Lead	**6.9**		1.0	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Manganese	**201**	**B**	0.21	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Nickel	**21.9**		5.2	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Selenium	**0.53**	**J**	4.2	0.42	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Silver	ND		0.62	0.21	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1
Zinc	**39.8**		2.1	0.67	mg/Kg	☼	06/24/22 10:50	06/28/22 04:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.022	0.0050	mg/Kg	☼	06/24/22 09:43	06/24/22 12:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.1	0.88	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	**0.66**	**J *-**	0.92	0.44	mg/Kg	☼	06/30/22 09:23	06/30/22 10:17	1
Cyanide, Total	**0.57**	**J H *-**	1.0	0.48	mg/Kg	☼	07/05/22 11:57	07/05/22 13:27	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**10.6**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2,2-Tetrachloroethane	ND		42	6.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2-Trichloroethane	ND		42	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		42	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,1-Dichloroethene	ND		42	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2,4-Trichlorobenzene	ND		42	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dibromo-3-Chloropropane	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichlorobenzene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichloroethane	ND		42	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichloropropane	ND		42	6.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,3-Dichlorobenzene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,4-Dichlorobenzene	ND		42	5.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
2-Butanone (MEK)	ND		210	130	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
2-Hexanone	ND		210	87	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
4-Methyl-2-pentanone (MIBK)	ND		210	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Acetone	ND		210	170	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Benzene	ND		42	8.0	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromodichloromethane	ND		42	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromoform	ND		42	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Bromomethane	ND		42	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Carbon disulfide	ND		42	19	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Carbon tetrachloride	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chlorobenzene	ND		42	5.6	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Dibromochloromethane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chloroethane	ND		42	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chloroform	ND		42	29	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Chloromethane	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
cis-1,2-Dichloroethene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
cis-1,3-Dichloropropene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Cyclohexane	ND		42	9.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Dichlorodifluoromethane	ND		42	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Ethylbenzene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
1,2-Dibromoethane	ND		42	7.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Isopropylbenzene	ND		42	6.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methyl acetate	ND		210	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methyl tert-butyl ether	ND		42	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methylcyclohexane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Methylene Chloride	ND		42	8.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Styrene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Tetrachloroethene	**140**		42	5.7	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Toluene	ND		42	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
trans-1,2-Dichloroethene	ND		42	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
trans-1,3-Dichloropropene	ND		42	4.2	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Trichloroethene	ND		42	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Trichlorofluoromethane	ND		42	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Vinyl chloride	ND		42	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1
Xylenes, Total	ND		85	23	ug/Kg	☼	06/24/22 09:44	06/24/22 22:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*4500*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:02*	*1*
Unknown	*940*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:02*	*1*

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		50 - 149	06/24/22 09:44	06/24/22 22:02	1
1,2-Dichloroethane-d4 (Surr)	103		53 - 146	06/24/22 09:44	06/24/22 22:02	1
4-Bromofluorobenzene (Surr)	103		49 - 148	06/24/22 09:44	06/24/22 22:02	1
Dibromofluoromethane (Surr)	95		60 - 140	06/24/22 09:44	06/24/22 22:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Acenaphthylene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Anthracene	ND		180	45	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(a)anthracene	**44**	**J**	180	18	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(a)pyrene	**66**	**J**	180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(b)fluoranthene	**110**	**J**	180	29	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(g,h,i)perylene	**47**	**J**	180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Benzo(k)fluoranthene	**30**	**J**	180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Chrysene	**95**	**J**	180	41	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Dibenzofuran	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Fluoranthene	**230**		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Fluorene	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Indeno(1,2,3-cd)pyrene	**40**	**J**	180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
m-Cresol	ND		350	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Naphthalene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
o-Cresol	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
p-Cresol	ND		350	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Pentachlorophenol	ND		350	180	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Phenanthrene	**110**	**J**	180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Phenol	ND		180	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1
Pyrene	**210**		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:10	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	860	T J	ug/Kg	☼	3.24		06/23/22 15:45	06/24/22 17:10	1
n-Hexadecanoic acid	310	T J N	ug/Kg	☼	11.40	57-10-3	06/23/22 15:45	06/24/22 17:10	1
Hexatriacontane	340	T J N	ug/Kg	☼	12.55	630-06-8	06/23/22 15:45	06/24/22 17:10	1
Tetradecane	650	T J N	ug/Kg	☼	12.84	629-59-4	06/23/22 15:45	06/24/22 17:10	1
Eicosane	900	T J N	ug/Kg	☼	13.12	112-95-8	06/23/22 15:45	06/24/22 17:10	1
Pentacosane	1000	T J N	ug/Kg	☼	13.39	629-99-2	06/23/22 15:45	06/24/22 17:10	1
Tricosane	950	T J N	ug/Kg	☼	13.65	638-67-5	06/23/22 15:45	06/24/22 17:10	1
Octacosane	770	T J N	ug/Kg	☼	13.91	630-02-4	06/23/22 15:45	06/24/22 17:10	1
Octadecane	550	T J N	ug/Kg	☼	14.15	593-45-3	06/23/22 15:45	06/24/22 17:10	1
Nonadecane	350	T J N	ug/Kg	☼	14.40	629-92-5	06/23/22 15:45	06/24/22 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		54 - 120	06/23/22 15:45	06/24/22 17:10	1
2-Fluorobiphenyl	92		60 - 120	06/23/22 15:45	06/24/22 17:10	1
2-Fluorophenol	87		52 - 120	06/23/22 15:45	06/24/22 17:10	1
Nitrobenzene-d5	89		53 - 120	06/23/22 15:45	06/24/22 17:10	1
Phenol-d5	91		54 - 120	06/23/22 15:45	06/24/22 17:10	1
p-Terphenyl-d14	113		79 - 130	06/23/22 15:45	06/24/22 17:10	1

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.8	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
4,4'-DDE	ND		1.8	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
4,4'-DDT	ND		1.8	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Aldrin	ND		1.8	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
alpha-BHC	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
beta-BHC	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Chlordane (.alpha.)	ND		1.8	0.88	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
delta-BHC	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan I	ND		1.8	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan II	ND		1.8	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endosulfan sulfate	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Endrin	ND		1.8	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Heptachlor	ND		1.8	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1
Lindane	ND		1.8	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:12*	*1*
DCB Decachlorobiphenyl	*94*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:12*	*1*
Tetrachloro-m-xylene	*101*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:12*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:12*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		18	6.5	ug/Kg	☼	06/27/22 06:56	07/10/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*69*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:00*	*1*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:00*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.060	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.050	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanoic acid (PFOA)	ND		0.22	0.063	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.22	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1

Client Sample ID: SB-114 (0.5-2.0)
Date Collected: 06/20/22 11:12
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-3
Matrix: Solid
Percent Solids: 91.9

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.090	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFHpA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFOA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFOS	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C5 PFNA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C4 PFBA	*95*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFHxA	*92*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFDA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFUnA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFDoA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C8 FOSA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C5 PFPeA	*98*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C2 PFTeDA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
d3-NMeFOSAA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
d5-NEtFOSAA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
M2-6:2 FTS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
M2-8:2 FTS	*71*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*
13C3 PFBS	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:30*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.0**		2.2	0.44	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Barium	**42.0**		0.55	0.12	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Beryllium	**0.34**		0.22	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Cadmium	**0.12**	**J**	0.22	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Copper	**12.4**		1.1	0.23	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Lead	**24.6**		1.1	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Manganese	**179**	**B**	0.22	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Nickel	**12.0**		5.5	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Selenium	ND		4.4	0.44	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Silver	ND		0.66	0.22	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1
Zinc	**50.1**		2.2	0.71	mg/Kg	☼	06/24/22 10:50	06/28/22 04:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.059**		0.020	0.0045	mg/Kg	☼	06/24/22 09:43	06/24/22 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.2	0.91	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	0.99	0.48	mg/Kg	☼	07/01/22 14:08	07/02/22 13:57	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4

Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**27.0**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4

Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2,2-Tetrachloroethane	ND	*3	4.5	0.72	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1-Dichloroethane	ND		4.5	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2,4-Trichlorobenzene	ND	*3	4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichlorobenzene	ND	*3	4.5	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichloroethane	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,3-Dichlorobenzene	ND	*3	4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,4-Dichlorobenzene	ND	*3	4.5	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
2-Butanone (MEK)	**4.0**	**J**	22	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Acetone	**27**		22	3.8	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Benzene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Carbon disulfide	**5.1**		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
cis-1,3-Dichloropropene	ND		4.5	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Cyclohexane	ND		4.5	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
1,2-Dibromoethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Isopropylbenzene	ND	*3	4.5	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Methylene Chloride	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Styrene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Toluene	ND		4.5	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1

Client Sample ID: SB-114 (6.0-10.0)
Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4
Matrix: Solid
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Trichloroethene	ND		4.5	0.98	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Vinyl chloride	ND		4.5	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1
Xylenes, Total	ND		8.9	0.75	ug/Kg	☼	06/21/22 18:30	06/27/22 13:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 13:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*122*		*71 - 125*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*72 - 126*	*06/21/22 18:30*	*06/27/22 13:38*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*06/21/22 18:30*	*06/27/22 13:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Acenaphthylene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Anthracene	ND		220	53	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(a)anthracene	ND		220	22	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(a)pyrene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(b)fluoranthene	ND		220	34	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(g,h,i)perylene	ND		220	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Benzo(k)fluoranthene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Chrysene	ND		220	48	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Dibenzofuran	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Fluoranthene	ND		220	23	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Fluorene	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Indeno(1,2,3-cd)pyrene	ND		220	27	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
m-Cresol	ND		420	33	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Naphthalene	ND		220	28	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
o-Cresol	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
p-Cresol	ND		420	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Phenanthrene	ND		220	32	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Phenol	ND		220	33	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1
Pyrene	ND		220	25	ug/Kg	☼	06/23/22 15:45	06/24/22 17:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*930*	*T J*	*ug/Kg*	☼	*3.26*		*06/23/22 15:45*	*06/24/22 17:35*	*1*
Unknown	*180*	*T J*	*ug/Kg*	☼	*11.46*		*06/23/22 15:45*	*06/24/22 17:35*	*1*
Docosane	*190*	*T J N*	*ug/Kg*	☼	*12.60*	*629-97-0*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Hexatriacontane	*290*	*T J N*	*ug/Kg*	☼	*12.89*	*630-06-8*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Eicosane	*430*	*T J N*	*ug/Kg*	☼	*13.17*	*112-95-8*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Heptadecane	*400*	*T J N*	*ug/Kg*	☼	*13.44*	*629-78-7*	*06/23/22 15:45*	*06/24/22 17:35*	*1*
Tricosane	*400*	*T J N*	*ug/Kg*	☼	*13.70*	*638-67-5*	*06/23/22 15:45*	*06/24/22 17:35*	*1*

Client Sample ID: SB-114 (6.0-10.0)
Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4
Matrix: Solid
Percent Solids: 78.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Octacosane	320	T J N	ug/Kg	☼	13.96	630-02-4	06/23/22 15:45	06/24/22 17:35	1
Unknown	260	T J	ug/Kg	☼	14.20		06/23/22 15:45	06/24/22 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		54 - 120	06/23/22 15:45	06/24/22 17:35	1
2-Fluorobiphenyl	91		60 - 120	06/23/22 15:45	06/24/22 17:35	1
2-Fluorophenol	75		52 - 120	06/23/22 15:45	06/24/22 17:35	1
Nitrobenzene-d5	82		53 - 120	06/23/22 15:45	06/24/22 17:35	1
Phenol-d5	80		54 - 120	06/23/22 15:45	06/24/22 17:35	1
p-Terphenyl-d14	105		79 - 130	06/23/22 15:45	06/24/22 17:35	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Aldrin	ND		2.1	0.52	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
alpha-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
beta-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Endrin	ND		2.1	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		45 - 120	06/27/22 15:42	06/28/22 12:31	1
DCB Decachlorobiphenyl	91		45 - 120	06/27/22 15:42	06/28/22 12:31	1
Tetrachloro-m-xylene	91		30 - 124	06/27/22 15:42	06/28/22 12:31	1
Tetrachloro-m-xylene	63		30 - 124	06/27/22 15:42	06/28/22 12:31	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.4	ug/Kg	☼	06/27/22 06:56	07/10/22 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	67		28 - 129	06/27/22 06:56	07/10/22 15:19	1
2,4-Dichlorophenylacetic acid	63		28 - 129	06/27/22 06:56	07/10/22 15:19	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.63	0.41	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorohexanoic acid (PFHxA)	ND		0.25	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroheptanoic acid (PFHpA)	ND		0.25	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanoic acid (PFOA)	ND		0.25	0.073	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1

Client Sample ID: SB-114 (6.0-10.0)
Date Collected: 06/20/22 11:23
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-4
Matrix: Solid
Percent Solids: 78.3

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorodecanoic acid (PFDA)	ND		0.25	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroundecanoic acid (PFUnA)	ND		0.25	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorododecanoic acid (PFDoA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorotridecanoic acid (PFTriA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.25	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.25	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.25	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.25	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.25	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.25	0.024	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.5	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.5	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.5	0.071	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.5	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 01:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*71*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C4 PFHpA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C4 PFOA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C4 PFOS	*60*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C5 PFNA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C4 PFBA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C2 PFHxA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C2 PFDA	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C2 PFUnA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C2 PFDoA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C8 FOSA	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C5 PFPeA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C2 PFTeDA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
d3-NMeFOSAA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
d5-NEtFOSAA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
M2-6:2 FTS	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
M2-8:2 FTS	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*
13C3 PFBS	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.9**		2.6	0.51	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Barium	**125**		0.64	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Beryllium	**0.93**		0.26	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Cadmium	**0.063**	**J**	0.26	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Copper	**17.2**		1.3	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Lead	**16.3**		1.3	0.31	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Manganese	**518**	**B**	0.26	0.041	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Nickel	**30.1**		6.4	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4

Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		5.1	0.51	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Silver	ND		0.77	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1
Zinc	**59.1**		2.6	0.82	mg/Kg	☼	06/24/22 10:50	06/28/22 04:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**	**J**	0.027	0.0061	mg/Kg	☼	06/24/22 09:43	06/24/22 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.1	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.2	0.60	mg/Kg	☼	07/01/22 14:08	07/02/22 13:58	1

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5

Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**6.8**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5

Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.1	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1,2,2-Tetrachloroethane	ND	*3	3.1	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1,2-Trichloroethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1-Dichloroethane	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,1-Dichloroethene	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2,4-Trichlorobenzene	ND	*3	3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dibromo-3-Chloropropane	ND	*3	3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichlorobenzene	ND	*3	3.1	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichloroethane	ND		3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dichloropropane	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,3-Dichlorobenzene	ND	*3	3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,4-Dichlorobenzene	ND	*3	3.1	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
2-Butanone (MEK)	ND		16	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
2-Hexanone	ND		16	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
4-Methyl-2-pentanone (MIBK)	ND		16	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Acetone	**6.3**	**J**	16	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Benzene	ND		3.1	0.15	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromodichloromethane	ND		3.1	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromoform	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Bromomethane	ND		3.1	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Carbon disulfide	ND		3.1	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Carbon tetrachloride	ND		3.1	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chlorobenzene	ND		3.1	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1

Client Sample ID: SB-114 (12-16)
Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5
Matrix: Solid
Percent Solids: 94.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloroethane	ND		3.1	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloroform	ND		3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Chloromethane	ND		3.1	0.19	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
cis-1,2-Dichloroethene	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
cis-1,3-Dichloropropene	ND		3.1	0.45	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Cyclohexane	ND		3.1	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Dichlorodifluoromethane	ND		3.1	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Ethylbenzene	ND		3.1	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
1,2-Dibromoethane	ND		3.1	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Isopropylbenzene	ND	*3	3.1	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methyl acetate	ND		16	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methyl tert-butyl ether	ND		3.1	0.30	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methylcyclohexane	ND		3.1	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Methylene Chloride	ND		3.1	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Styrene	ND		3.1	0.16	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Tetrachloroethene	ND		3.1	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Toluene	ND		3.1	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
trans-1,2-Dichloroethene	ND		3.1	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
trans-1,3-Dichloropropene	ND		3.1	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Trichloroethene	ND		3.1	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Trichlorofluoromethane	ND		3.1	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Vinyl chloride	ND		3.1	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1
Xylenes, Total	ND		6.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 14:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 14:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*71 - 125*	*06/21/22 18:30*	*06/27/22 14:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*06/21/22 18:30*	*06/27/22 14:02*	*1*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*72 - 126*	*06/21/22 18:30*	*06/27/22 14:02*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*06/21/22 18:30*	*06/27/22 14:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Acenaphthylene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Anthracene	ND		180	44	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(a)anthracene	ND		180	18	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(a)pyrene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(b)fluoranthene	ND		180	28	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(g,h,i)perylene	ND		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Benzo(k)fluoranthene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Chrysene	ND		180	40	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Dibenz(a,h)anthracene	ND		180	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Dibenzofuran	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Fluoranthene	ND		180	19	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Fluorene	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1

Client Sample ID: SB-114 (12-16)
Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5
Matrix: Solid
Percent Solids: 94.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	ND		180	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
m-Cresol	ND		340	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Naphthalene	ND		180	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
o-Cresol	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
p-Cresol	ND		340	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Phenanthrene	ND		180	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Phenol	ND		180	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1
Pyrene	ND		180	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6000*	*T J*	*ug/Kg*	☼	*1.95*		*06/23/22 15:45*	*06/24/22 18:00*	*1*
Unknown	*820*	*T J*	*ug/Kg*	☼	*3.39*		*06/23/22 15:45*	*06/24/22 18:00*	*1*
Tetradecanoic acid	*240*	*T J N*	*ug/Kg*	☼	*11.43*	*544-63-8*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Tridecane, 2-methyl-	*220*	*T J N*	*ug/Kg*	☼	*12.58*	*1560-96-9*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Pentacosane	*330*	*T J N*	*ug/Kg*	☼	*12.87*	*629-99-2*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Hexadecane	*450*	*T J N*	*ug/Kg*	☼	*13.15*	*544-76-3*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Heptadecane	*460*	*T J N*	*ug/Kg*	☼	*13.42*	*629-78-7*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Dotriacontane	*500*	*T J N*	*ug/Kg*	☼	*13.68*	*544-85-4*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Unknown	*370*	*T J*	*ug/Kg*	☼	*13.93*		*06/23/22 15:45*	*06/24/22 18:00*	*1*
Octacosane	*270*	*T J N*	*ug/Kg*	☼	*14.17*	*630-02-4*	*06/23/22 15:45*	*06/24/22 18:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*103*		*54 - 120*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
2-Fluorobiphenyl	*97*		*60 - 120*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
2-Fluorophenol	*88*		*52 - 120*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Nitrobenzene-d5	*90*		*53 - 120*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
Phenol-d5	*92*		*54 - 120*	*06/23/22 15:45*	*06/24/22 18:00*	*1*
p-Terphenyl-d14	*116*		*79 - 130*	*06/23/22 15:45*	*06/24/22 18:00*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
4,4'-DDE	ND		1.7	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
4,4'-DDT	ND		1.7	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Aldrin	ND		1.7	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
alpha-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
beta-BHC	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Chlordane (.alpha.)	ND		1.7	0.87	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
delta-BHC	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Dieldrin	ND		1.7	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan I	ND		1.7	0.33	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan II	ND		1.7	0.31	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endosulfan sulfate	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Endrin	ND		1.7	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Heptachlor	ND		1.7	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1
Lindane	ND		1.7	0.32	ug/Kg	☼	06/27/22 15:42	06/28/22 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:51*	*1*

Client Sample ID: SB-114 (12-16)
Date Collected: 06/20/22 11:38
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-5
Matrix: Solid
Percent Solids: 94.1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*45 - 120*	*06/27/22 15:42*	*06/28/22 12:51*	*1*
Tetrachloro-m-xylene	*103*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:51*	*1*
Tetrachloro-m-xylene	*69*		*30 - 124*	*06/27/22 15:42*	*06/28/22 12:51*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		17	6.2	ug/Kg	☼	06/27/22 06:56	07/10/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*67*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:37*	*1*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*06/27/22 06:56*	*07/10/22 15:37*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.34	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.056	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.059	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.085	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 01:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFHpA	*93*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFOA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFOS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C5 PFNA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C4 PFBA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFHxA	*100*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFDA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFUnA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*
13C2 PFDoA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 01:47*	*1*

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5
Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	80		50 - 150	06/27/22 08:23	06/28/22 01:47	1
13C5 PFPeA	105		50 - 150	06/27/22 08:23	06/28/22 01:47	1
13C2 PFTeDA	77		50 - 150	06/27/22 08:23	06/28/22 01:47	1
d3-NMeFOSAA	99		50 - 150	06/27/22 08:23	06/28/22 01:47	1
d5-NEtFOSAA	96		50 - 150	06/27/22 08:23	06/28/22 01:47	1
M2-6:2 FTS	87		50 - 150	06/27/22 08:23	06/28/22 01:47	1
M2-8:2 FTS	84		50 - 150	06/27/22 08:23	06/28/22 01:47	1
13C3 PFBS	87		50 - 150	06/27/22 08:23	06/28/22 01:47	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		2.1	0.41	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Barium	**26.7**		0.52	0.11	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Beryllium	**0.20**	**J**	0.21	0.029	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Cadmium	**0.077**	**J**	0.21	0.031	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Copper	**6.7**		2.1	0.43	mg/Kg	☼	06/24/22 10:50	06/28/22 15:09	2
Lead	**4.7**		1.0	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Manganese	**184**	**B**	0.21	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Nickel	**9.1**		5.2	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Selenium	ND		4.1	0.41	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Silver	ND		0.62	0.21	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1
Zinc	**18.1**		2.1	0.66	mg/Kg	☼	06/24/22 10:50	06/28/22 04:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.1	0.88	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	0.98	0.47	mg/Kg	☼	07/01/22 14:08	07/02/22 14:00	1

Client Sample ID: SB-115 (0-3)
Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**14.9**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-115 (0-3)
Lab Sample ID: 480-199197-6
Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,1-Dichloroethane	ND		5.3	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichloroethane	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dichloropropane	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Acetone	ND		26	4.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Benzene	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromoform	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Bromomethane	ND		5.3	0.47	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Carbon disulfide	ND		5.3	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Dibromochloromethane	ND		5.3	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
cis-1,2-Dichloroethene	ND		5.3	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Ethylbenzene	ND		5.3	0.36	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methylcyclohexane	ND		5.3	0.80	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Styrene	ND		5.3	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Toluene	ND		5.3	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
trans-1,2-Dichloroethene	ND		5.3	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Vinyl chloride	ND		5.3	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	06/21/22 18:30	06/27/22 14:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 14:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*71 - 125*	*06/21/22 18:30*	*06/27/22 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*06/21/22 18:30*	*06/27/22 14:26*	*1*

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		72 - 126	06/21/22 18:30	06/27/22 14:26	1
Dibromofluoromethane (Surr)	98		60 - 140	06/21/22 18:30	06/27/22 14:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Acenaphthylene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Anthracene	ND		200	48	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(a)anthracene	ND		200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(a)pyrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(b)fluoranthene	**43**	**J**	200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(g,h,i)perylene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Benzo(k)fluoranthene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Chrysene	ND		200	44	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Dibenzofuran	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Fluoranthene	**68**	**J**	200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Fluorene	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Hexachlorobenzene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Indeno(1,2,3-cd)pyrene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
m-Cresol	ND		380	30	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Naphthalene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
o-Cresol	ND		200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
p-Cresol	ND		380	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Phenanthrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Phenol	ND		200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1
Pyrene	**61**	**J**	200	23	ug/Kg	☼	06/23/22 15:45	06/24/22 18:24	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	930	T J	ug/Kg	☼	1.73		06/23/22 15:45	06/24/22 18:24	1
Unknown	640	T J	ug/Kg	☼	3.25		06/23/22 15:45	06/24/22 18:24	1
n-Hexadecanoic acid	260	T J N	ug/Kg	☼	11.44	57-10-3	06/23/22 15:45	06/24/22 18:24	1
Hexatriacontane	710	T J N	ug/Kg	☼	13.16	630-06-8	06/23/22 15:45	06/24/22 18:24	1
Nonacosane	400	T J N	ug/Kg	☼	13.43	630-03-5	06/23/22 15:45	06/24/22 18:24	1
Oxirane, [(dodecyloxy)methyl]-	1000	T J N	ug/Kg	☼	13.70	2461-18-9	06/23/22 15:45	06/24/22 18:24	1
Unknown	340	T J	ug/Kg	☼	13.95		06/23/22 15:45	06/24/22 18:24	1
1,15-Hexadecadiene	270	T J N	ug/Kg	☼	14.06	21964-51-2	06/23/22 15:45	06/24/22 18:24	1
1-Docosene	860	T J N	ug/Kg	☼	14.21	1599-67-3	06/23/22 15:45	06/24/22 18:24	1
Pentacosane	350	T J N	ug/Kg	☼	14.72	629-99-2	06/23/22 15:45	06/24/22 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		54 - 120	06/23/22 15:45	06/24/22 18:24	1
2-Fluorobiphenyl	89		60 - 120	06/23/22 15:45	06/24/22 18:24	1
2-Fluorophenol	74		52 - 120	06/23/22 15:45	06/24/22 18:24	1
Nitrobenzene-d5	81		53 - 120	06/23/22 15:45	06/24/22 18:24	1
Phenol-d5	82		54 - 120	06/23/22 15:45	06/24/22 18:24	1
p-Terphenyl-d14	108		79 - 130	06/23/22 15:45	06/24/22 18:24	1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
4,4'-DDE	**1.2**	**J**	1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
4,4'-DDT	**0.86**	**J**	1.9	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Aldrin	**0.89**	**J**	1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
beta-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Chlordane (.alpha.)	ND		1.9	0.94	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Dieldrin	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endosulfan sulfate	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Endrin	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Heptachlor	ND		1.9	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1
Lindane	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*45 - 120*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
DCB Decachlorobiphenyl	*95*		*45 - 120*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
Tetrachloro-m-xylene	*97*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:11*	*1*
Tetrachloro-m-xylene	*78*		*30 - 124*	*06/27/22 15:42*	*06/28/22 13:11*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	6.8	ug/Kg	☼	06/27/22 06:56	07/10/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*85*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:14*	*1*
2,4-Dichlorophenylacetic acid	*74*		*28 - 129*	*06/27/22 06:56*	*07/10/22 16:14*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.054	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanoic acid (PFOA)	**0.12**	**J**	0.23	0.068	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorononanoic acid (PFNA)	**0.043**	**J**	0.23	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanesulfonic acid (PFOS)	**0.21**	**J**	0.23	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1

Client Sample ID: SB-115 (0-3)
Date Collected: 06/20/22 14:05
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-6
Matrix: Solid
Percent Solids: 85.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.097	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 02:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFHpA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFOA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFOS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C5 PFNA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C4 PFBA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFHxA	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFDA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFUnA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFDoA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C8 FOSA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C5 PFPeA	*99*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C2 PFTeDA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
d3-NMeFOSAA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
d5-NEtFOSAA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
M2-6:2 FTS	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
M2-8:2 FTS	*96*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*
13C3 PFBS	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.8**		2.4	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Barium	**47.6**		0.60	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Beryllium	**0.56**		0.24	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Cadmium	**0.24**		0.24	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Copper	**23.6**		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Lead	**22.1**		1.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Manganese	**366**	**B**	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Nickel	**24.7**		6.0	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Selenium	ND		4.8	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Silver	ND		0.72	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1
Zinc	**70.1**		2.4	0.77	mg/Kg	☼	06/24/22 10:50	06/28/22 04:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.047**		0.022	0.0050	mg/Kg	☼	06/24/22 09:43	06/24/22 12:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.98	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.1	0.54	mg/Kg	☼	06/30/22 09:23	06/30/22 10:23	1
Cyanide, Total	ND	H *-	1.1	0.51	mg/Kg	☼	07/05/22 11:57	07/05/22 13:30	1

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7

Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**24.3**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7

Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2,2-Tetrachloroethane	ND	*3	4.7	0.76	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2-Trichloroethane	ND	*3	4.7	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,1-Dichloroethene	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2,4-Trichlorobenzene	ND	*3	4.7	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichlorobenzene	ND	*3	4.7	0.36	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichloroethane	ND		4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dichloropropane	ND		4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,3-Dichlorobenzene	ND	*3	4.7	0.24	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,4-Dichlorobenzene	ND	*3	4.7	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
2-Hexanone	ND	*3	23	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
4-Methyl-2-pentanone (MIBK)	ND	*3	23	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Acetone	**5.8**	**J**	23	3.9	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Benzene	ND		4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromodichloromethane	ND		4.7	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromoform	ND	*3	4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Bromomethane	ND		4.7	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Carbon disulfide	ND		4.7	2.3	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Carbon tetrachloride	ND		4.7	0.45	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chlorobenzene	ND	*3	4.7	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Dibromochloromethane	ND	*3	4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloroethane	ND		4.7	1.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Chloromethane	ND		4.7	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
cis-1,2-Dichloroethene	ND		4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
cis-1,3-Dichloropropene	ND		4.7	0.67	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Cyclohexane	ND		4.7	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Dichlorodifluoromethane	ND		4.7	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Ethylbenzene	ND	*3	4.7	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
1,2-Dibromoethane	ND	*3	4.7	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Isopropylbenzene	ND	*3	4.7	0.70	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methylcyclohexane	ND		4.7	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Methylene Chloride	ND		4.7	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Styrene	ND	*3	4.7	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Tetrachloroethene	ND	*3	4.7	0.62	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Toluene	ND	*3	4.7	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1

Client Sample ID: SB-115 (6-8)
Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7
Matrix: Solid
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		4.7	0.48	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
trans-1,3-Dichloropropene	ND	*3	4.7	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Trichlorofluoromethane	ND		4.7	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1
Xylenes, Total	ND		9.3	0.78	ug/Kg	☼	06/21/22 18:30	06/27/22 14:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 14:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*117*	*3*	*71 - 125*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
4-Bromofluorobenzene (Surr)	*69*	*S1- *3*	*72 - 126*	*06/21/22 18:30*	*06/27/22 14:50*	*1*
Dibromofluoromethane (Surr)	*108*		*60 - 140*	*06/21/22 18:30*	*06/27/22 14:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Acenaphthylene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Anthracene	ND		210	52	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(b)fluoranthene	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(g,h,i)perylene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Benzo(k)fluoranthene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Chrysene	ND		210	47	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Dibenzofuran	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Fluoranthene	ND		210	22	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Fluorene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
m-Cresol	ND		410	32	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Naphthalene	ND		210	27	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
o-Cresol	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
p-Cresol	ND		410	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Phenol	ND		210	32	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1
Pyrene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 18:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*970*	*T J*	*ug/Kg*	☼	*3.42*		*06/23/22 15:45*	*06/24/22 18:48*	*1*
n-Hexadecanoic acid	*230*	*T J N*	*ug/Kg*	☼	*11.45*	*57-10-3*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Tricosane	*200*	*T J N*	*ug/Kg*	☼	*12.60*	*638-67-5*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Hexatriacontane	*280*	*T J N*	*ug/Kg*	☼	*12.89*	*630-06-8*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Unknown	*450*	*T J*	*ug/Kg*	☼	*13.17*		*06/23/22 15:45*	*06/24/22 18:48*	*1*
Pentacosane	*410*	*T J N*	*ug/Kg*	☼	*13.44*	*629-99-2*	*06/23/22 15:45*	*06/24/22 18:48*	*1*
Tridecane, 2-methyl-	*420*	*T J N*	*ug/Kg*	☼	*13.70*	*1560-96-9*	*06/23/22 15:45*	*06/24/22 18:48*	*1*

Client Sample ID: SB-115 (6-8)
Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7
Matrix: Solid
Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	290	T J	ug/Kg	☼	13.95		06/23/22 15:45	06/24/22 18:48	1
Unknown	210	T J	ug/Kg	☼	14.20		06/23/22 15:45	06/24/22 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		54 - 120	06/23/22 15:45	06/24/22 18:48	1
2-Fluorobiphenyl	92		60 - 120	06/23/22 15:45	06/24/22 18:48	1
2-Fluorophenol	86		52 - 120	06/23/22 15:45	06/24/22 18:48	1
Nitrobenzene-d5	88		53 - 120	06/23/22 15:45	06/24/22 18:48	1
Phenol-d5	91		54 - 120	06/23/22 15:45	06/24/22 18:48	1
p-Terphenyl-d14	112		79 - 130	06/23/22 15:45	06/24/22 18:48	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Aldrin	ND		2.1	0.51	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
alpha-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
beta-BHC	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Endrin	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	79		45 - 120	06/27/22 15:42	06/28/22 13:30	1
DCB Decachlorobiphenyl	88		45 - 120	06/27/22 15:42	06/28/22 13:30	1
Tetrachloro-m-xylene	104		30 - 124	06/27/22 15:42	06/28/22 13:30	1
Tetrachloro-m-xylene	73		30 - 124	06/27/22 15:42	06/28/22 13:30	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.5	ug/Kg	☼	06/27/22 06:56	07/10/22 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	68		28 - 129	06/27/22 06:56	07/10/22 16:33	1
2,4-Dichlorophenylacetic acid	69		28 - 129	06/27/22 06:56	07/10/22 16:33	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.60	0.40	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoropentanoic acid (PFPeA)	ND		0.24	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorohexanoic acid (PFHxA)	ND		0.24	0.055	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroheptanoic acid (PFHpA)	ND		0.24	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanoic acid (PFOA)	ND		0.24	0.070	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1

Client Sample ID: SB-115 (6-8)
Date Collected: 06/20/22 14:13
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-7
Matrix: Solid
Percent Solids: 79.1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorodecanoic acid (PFDA)	ND		0.24	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.040	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.24	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.023	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.24	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.4	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.4	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.4	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.4	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFHpA	*84*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFOA	*79*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFOS	*64*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C5 PFNA	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C4 PFBA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFHxA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFDA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFUnA	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFDoA	*72*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C8 FOSA	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C5 PFPeA	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C2 PFTeDA	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
d5-NEtFOSAA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
M2-6:2 FTS	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
M2-8:2 FTS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*
13C3 PFBS	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14.0**		2.6	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Barium	**92.0**		0.66	0.15	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Beryllium	**0.84**		0.26	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Cadmium	**0.095**	**J**	0.26	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Copper	**23.7**		1.3	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Lead	**15.6**		1.3	0.32	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Manganese	**462**	**B**	0.26	0.042	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Nickel	**34.1**		6.6	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7
Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		5.3	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Silver	ND		0.79	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1
Zinc	**64.3**		2.6	0.84	mg/Kg	☼	06/24/22 10:50	06/28/22 04:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.1	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND	*-	1.2	0.60	mg/Kg	☼	07/01/22 14:08	07/02/22 14:02	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**15.9**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8
Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2,2-Tetrachloroethane	ND		54	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2-Trichloroethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1-Dichloroethane	ND		54	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,1-Dichloroethene	ND		54	19	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2,4-Trichlorobenzene	ND		54	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dibromo-3-Chloropropane	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichlorobenzene	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichloroethane	ND		54	22	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dichloropropane	ND		54	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,3-Dichlorobenzene	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,4-Dichlorobenzene	ND		54	7.6	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
2-Butanone (MEK)	ND		270	160	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
2-Hexanone	ND		270	110	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
4-Methyl-2-pentanone (MIBK)	ND		270	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Acetone	ND		270	220	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Benzene	ND		54	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromodichloromethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromoform	ND		54	27	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Bromomethane	ND		54	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Carbon disulfide	ND		54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Carbon tetrachloride	ND		54	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chlorobenzene	ND		54	7.1	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1

Client Sample ID: SB-116 (0.5-2.5)
Date Collected: 06/20/22 14:52
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-8
Matrix: Solid
Percent Solids: 84.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		54	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chloroethane	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chloroform	ND		54	37	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Chloromethane	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
cis-1,2-Dichloroethene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
cis-1,3-Dichloropropene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Cyclohexane	ND		54	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Dichlorodifluoromethane	ND		54	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Ethylbenzene	ND		54	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
1,2-Dibromoethane	ND		54	9.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Isopropylbenzene	ND		54	8.1	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methyl acetate	**140**	**J**	270	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methyl tert-butyl ether	ND		54	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methylcyclohexane	**27**	**J**	54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Methylene Chloride	ND		54	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Styrene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Tetrachloroethene	**140**		54	7.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Toluene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
trans-1,2-Dichloroethene	ND		54	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
trans-1,3-Dichloropropene	ND		54	5.3	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Trichloroethene	ND		54	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Trichlorofluoromethane	ND		54	25	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Vinyl chloride	ND		54	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1
Xylenes, Total	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*140*	*T J*	*ug/Kg*	☼	*1.52*		*06/24/22 09:44*	*06/24/22 22:25*	*1*
column bleed	*2100*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:25*	*1*
Unknown	*620*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*50 - 149*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*	*06/24/22 09:44*	*06/24/22 22:25*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*06/24/22 09:44*	*06/24/22 22:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Acenaphthylene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Anthracene	ND		190	48	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(a)anthracene	**30**	**J**	190	19	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(a)pyrene	**31**	**J**	190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(b)fluoranthene	**44**	**J**	190	31	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(g,h,i)perylene	ND		190	21	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Benzo(k)fluoranthene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Chrysene	ND		190	44	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Dibenz(a,h)anthracene	ND		190	34	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Dibenzofuran	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Fluoranthene	**52**	**J**	190	21	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1

Client Sample ID: SB-116 (0.5-2.5)
Date Collected: 06/20/22 14:52
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-8
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Indeno(1,2,3-cd)pyrene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
m-Cresol	ND		380	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Naphthalene	ND		190	25	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
o-Cresol	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
p-Cresol	ND		380	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Pentachlorophenol	ND		380	190	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Phenanthrene	**29**	**J**	190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Phenol	ND		190	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1
Pyrene	**49**	**J**	190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6800*	*T J*	*ug/Kg*	☼	*1.95*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Unknown	*910*	*T J*	*ug/Kg*	☼	*3.40*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Heptacosane, 1-chloro-	*690*	*T J N*	*ug/Kg*	☼	*13.15*	*62016-79-9*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Tetratetracontane	*420*	*T J N*	*ug/Kg*	☼	*13.42*	*7098-22-8*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Unknown	*1200*	*T J*	*ug/Kg*	☼	*13.69*		*06/23/22 15:45*	*06/24/22 19:13*	*1*
Hentriacontane	*330*	*T J N*	*ug/Kg*	☼	*13.94*	*630-04-6*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Oxirane, hexadecyl-	*730*	*T J N*	*ug/Kg*	☼	*14.05*	*7390-81-0*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Cyclotetracosane	*1500*	*T J N*	*ug/Kg*	☼	*14.20*	*297-03-0*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Octacosane	*440*	*T J N*	*ug/Kg*	☼	*14.70*	*630-02-4*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Eicosane	*460*	*T J N*	*ug/Kg*	☼	*15.30*	*112-95-8*	*06/23/22 15:45*	*06/24/22 19:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
2-Fluorobiphenyl	*91*		*60 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
2-Fluorophenol	*84*		*52 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Nitrobenzene-d5	*84*		*53 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
Phenol-d5	*91*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:13*	*1*
p-Terphenyl-d14	*108*		*79 - 130*	*06/23/22 15:45*	*06/24/22 19:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.63**	**J**	1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
4,4'-DDE	**1.7**	**J**	1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
4,4'-DDT	**1.6**	**J**	1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Aldrin	ND		1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Chlordane (.alpha.)	ND		1.9	0.96	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Dieldrin	ND		1.9	0.46	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan II	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Endrin	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1
Lindane	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 13:50	1

Client Sample ID: SB-116 (0.5-2.5)
Date Collected: 06/20/22 14:52
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-8
Matrix: Solid
Percent Solids: 84.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		45 - 120	06/27/22 15:42	06/28/22 13:50	1
DCB Decachlorobiphenyl	151	S1+	45 - 120	06/27/22 15:42	06/28/22 13:50	1
Tetrachloro-m-xylene	116		30 - 124	06/27/22 15:42	06/28/22 13:50	1
Tetrachloro-m-xylene	79		30 - 124	06/27/22 15:42	06/28/22 13:50	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	7.0	ug/Kg	☼	06/27/22 06:56	07/10/22 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	72		28 - 129	06/27/22 06:56	07/10/22 16:51	1
2,4-Dichlorophenylacetic acid	72		28 - 129	06/27/22 06:56	07/10/22 16:51	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.56	0.37	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoropentanoic acid (PFPeA)	**0.090**	**J**	0.23	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.052	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroheptanoic acid (PFHpA)	**0.045**	**J**	0.23	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.23	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorononanoic acid (PFNA)	**0.056**	**J**	0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroundecanoic acid (PFUnA)	**0.034**	**J**	0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanesulfonic acid (PFOS)	**0.52**		0.23	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.094	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 02:36	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C4 PFHpA	97		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C4 PFOA	96		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C4 PFOS	80		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C5 PFNA	87		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C4 PFBA	110		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C2 PFHxA	100		50 - 150	06/27/22 08:23	06/28/22 02:36	1
13C2 PFDA	91		50 - 150	06/27/22 08:23	06/28/22 02:36	1

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8

Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFUnA	*92*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C2 PFDoA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C8 FOSA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C5 PFPeA	*107*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C2 PFTeDA	*93*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
d3-NMeFOSAA	*106*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
d5-NEtFOSAA	*114*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
M2-6:2 FTS	*106*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
M2-8:2 FTS	*108*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*
13C3 PFBS	*92*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.5**		2.4	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Barium	**446**		0.60	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Beryllium	**0.58**		0.24	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Cadmium	**1.3**		0.24	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Copper	**15.8**		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Lead	**43.5**		1.2	0.29	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Manganese	**3440**	**B**	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Nickel	**24.2**		6.0	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Selenium	ND		4.8	0.48	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Silver	ND		0.72	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1
Zinc	**113**		2.4	0.77	mg/Kg	☼	06/24/22 10:50	06/28/22 04:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.081**		0.024	0.0055	mg/Kg	☼	06/24/22 09:43	06/24/22 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.99	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.54	mg/Kg	☼	07/01/22 14:37	07/02/22 17:06	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9

Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**20.6**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9

Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1,2,2-Tetrachloroethane	ND		3.9	0.64	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1,2-Trichloroethane	ND		3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1

Client Sample ID: SB-116 (6.0-7.5)
Date Collected: 06/20/22 15:10
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-9
Matrix: Solid
Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.90	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2,4-Trichlorobenzene	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dibromo-3-Chloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Acetone	ND		20	3.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Benzene	ND		3.9	0.19	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromodichloromethane	ND		3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromoform	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Dibromochloromethane	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloroethane	ND		3.9	0.89	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
cis-1,3-Dichloropropene	ND		3.9	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Cyclohexane	ND		3.9	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Dichlorodifluoromethane	ND		3.9	0.33	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
1,2-Dibromoethane	ND		3.9	0.51	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Isopropylbenzene	ND		3.9	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methylcyclohexane	ND		3.9	0.60	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Styrene	ND		3.9	0.20	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Tetrachloroethene	**0.54**	**J**	3.9	0.53	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Toluene	ND		3.9	0.30	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
trans-1,2-Dichloroethene	ND		3.9	0.41	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
trans-1,3-Dichloropropene	ND		3.9	1.7	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Trichloroethene	ND		3.9	0.87	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1
Xylenes, Total	ND		7.9	0.66	ug/Kg	☼	06/21/22 18:30	06/24/22 15:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/24/22 15:17*	*1*

Client Sample ID: SB-116 (6.0-7.5)
Date Collected: 06/20/22 15:10
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-9
Matrix: Solid
Percent Solids: 88.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*71 - 125*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*	*06/21/22 18:30*	*06/24/22 15:17*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*	*06/21/22 18:30*	*06/24/22 15:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Acenaphthylene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Anthracene	ND		190	47	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(a)anthracene	ND		190	19	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(a)pyrene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(b)fluoranthene	ND		190	30	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(g,h,i)perylene	ND		190	20	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Benzo(k)fluoranthene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Chrysene	ND		190	42	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Dibenzofuran	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Fluoranthene	ND		190	20	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Fluorene	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Indeno(1,2,3-cd)pyrene	ND		190	23	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
m-Cresol	ND		370	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Naphthalene	ND		190	24	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
o-Cresol	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
p-Cresol	ND		370	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Phenanthrene	ND		190	28	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Phenol	ND		190	29	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1
Pyrene	ND		190	22	ug/Kg	☼	06/23/22 15:45	06/24/22 19:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	*7100*	*T J*	*ug/Kg*	☼	*1.96*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*850*	*T J*	*ug/Kg*	☼	*3.41*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
n-Hexadecanoic acid	*390*	*T J N*	*ug/Kg*	☼	*11.45*	*57-10-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*12.16*		*06/23/22 15:45*	*06/24/22 19:37*	*1*
Heptadecane	*210*	*T J N*	*ug/Kg*	☼	*12.89*	*629-78-7*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Nonadecane	*340*	*T J N*	*ug/Kg*	☼	*13.16*	*629-92-5*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Hexacosane	*330*	*T J N*	*ug/Kg*	☼	*13.43*	*630-01-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Octadecane	*250*	*T J N*	*ug/Kg*	☼	*13.95*	*593-45-3*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Unknown	*210*	*T J*	*ug/Kg*	☼	*14.19*		*06/23/22 15:45*	*06/24/22 19:37*	*1*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*87*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
2-Fluorobiphenyl	*83*		*60 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
2-Fluorophenol	*77*		*52 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Nitrobenzene-d5	*76*		*53 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
Phenol-d5	*80*		*54 - 120*	*06/23/22 15:45*	*06/24/22 19:37*	*1*
p-Terphenyl-d14	*107*		*79 - 130*	*06/23/22 15:45*	*06/24/22 19:37*	*1*

Client Sample ID: SB-116 (6.0-7.5)
Date Collected: 06/20/22 15:10
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-9
Matrix: Solid
Percent Solids: 88.9

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
4,4'-DDE	ND		1.9	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
4,4'-DDT	ND		1.9	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Aldrin	ND		1.9	0.46	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
beta-BHC	**0.67**	**J**	1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Chlordane (.alpha.)	ND		1.9	0.93	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Dieldrin	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endosulfan sulfate	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Endrin	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Heptachlor	ND		1.9	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1
Lindane	ND		1.9	0.34	ug/Kg	☼	06/27/22 15:42	06/28/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
DCB Decachlorobiphenyl	*93*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
Tetrachloro-m-xylene	*107*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:10*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:10*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		18	6.6	ug/Kg	☼	06/27/22 06:56	07/10/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:10*	*1*
2,4-Dichlorophenylacetic acid	*79*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:10*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.55	0.36	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.061	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanoic acid (PFOA)	ND		0.22	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.22	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1

Client Sample ID: SB-116 (6.0-7.5)
Date Collected: 06/20/22 15:10
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-9
Matrix: Solid
Percent Solids: 88.9

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.091	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.063	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 02:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C4 PFHpA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C4 PFOA	*71*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C4 PFOS	*56*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C5 PFNA	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C4 PFBA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C2 PFHxA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C2 PFDA	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C2 PFUnA	*64*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C2 PFDoA	*59*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C8 FOSA	*58*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C5 PFPeA	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C2 PFTeDA	*61*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
d3-NMeFOSAA	*71*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
d5-NEtFOSAA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
M2-6:2 FTS	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
M2-8:2 FTS	*65*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*
13C3 PFBS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.5**		2.3	0.45	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Barium	**75.6**		0.57	0.12	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Beryllium	**0.74**		0.23	0.032	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Cadmium	**0.085**	**J**	0.23	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Copper	**22.4**		1.1	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Lead	**14.1**		1.1	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Manganese	**305**	**B**	0.23	0.036	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Nickel	**27.7**		5.7	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Selenium	ND		4.5	0.45	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Silver	ND		0.68	0.23	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1
Zinc	**69.0**		2.3	0.72	mg/Kg	☼	06/24/22 10:50	06/28/22 05:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.021	0.0048	mg/Kg	☼	06/24/22 09:43	06/24/22 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.2	0.92	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.51	mg/Kg	☼	07/01/22 14:37	07/02/22 17:09	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**14.5**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1,2,2-Tetrachloroethane	ND		63	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1,2-Trichloroethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1-Dichloroethane	ND		63	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,1-Dichloroethene	ND		63	22	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2,4-Trichlorobenzene	ND		63	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dibromo-3-Chloropropane	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichlorobenzene	ND		63	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichloroethane	ND		63	26	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dichloropropane	ND		63	10	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,3-Dichlorobenzene	ND		63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,4-Dichlorobenzene	ND		63	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
2-Butanone (MEK)	ND		320	190	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
2-Hexanone	ND		320	130	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
4-Methyl-2-pentanone (MIBK)	ND		320	20	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Acetone	ND		320	260	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Benzene	ND		63	12	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromodichloromethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromoform	ND		63	32	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Bromomethane	ND		63	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Carbon disulfide	ND		63	29	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Carbon tetrachloride	ND		63	16	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chlorobenzene	ND		63	8.4	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Dibromochloromethane	ND		63	31	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloroethane	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloroform	ND		63	43	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Chloromethane	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
cis-1,2-Dichloroethene	ND		63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
cis-1,3-Dichloropropene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Cyclohexane	**51**	**J**	63	14	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Dichlorodifluoromethane	ND		63	28	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Ethylbenzene	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
1,2-Dibromoethane	ND		63	11	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Isopropylbenzene	ND		63	9.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methyl acetate	**130**	**J**	320	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methyl tert-butyl ether	ND		63	24	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methylcyclohexane	**150**		63	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Methylene Chloride	ND		63	13	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Styrene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Tetrachloroethene	**92**		63	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Toluene	**31**	**J**	63	17	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1

Client Sample ID: SB-117 (0.5-3.0)
Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10
Matrix: Solid
Percent Solids: 83.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		63	15	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
trans-1,3-Dichloropropene	ND		63	6.2	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Trichloroethene	ND		63	18	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Trichlorofluoromethane	ND		63	30	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Vinyl chloride	ND		63	21	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1
Xylenes, Total	ND		130	35	ug/Kg	☼	06/24/22 09:44	06/24/22 22:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
unknown	*190*	*T J*	*ug/Kg*	☼	*1.52*		*06/24/22 09:44*	*06/24/22 22:49*	*1*
column bleed	*2200*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 22:49*	*1*
Unknown	*440*	*T J*	*ug/Kg*	☼	*11.07*		*06/24/22 09:44*	*06/24/22 22:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 22:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*	*06/24/22 09:44*	*06/24/22 22:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*	*06/24/22 09:44*	*06/24/22 22:49*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*	*06/24/22 09:44*	*06/24/22 22:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Anthracene	ND		200	50	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(a)anthracene	**150**	**J**	200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(a)pyrene	**180**	**J**	200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(b)fluoranthene	**550**		200	32	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(g,h,i)perylene	**580**		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Benzo(k)fluoranthene	**140**	**J**	200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Chrysene	**190**	**J**	200	45	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Dibenz(a,h)anthracene	**130**	**J**	200	36	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Fluoranthene	**120**	**J**	200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Fluorene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Indeno(1,2,3-cd)pyrene	**500**		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
m-Cresol	ND		390	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Naphthalene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
o-Cresol	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
p-Cresol	ND		390	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Phenanthrene	**87**	**J**	200	30	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Phenol	ND		200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1
Pyrene	**100**	**J**	200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*8300*	*T J*	*ug/Kg*	☼	*1.94*		*06/23/22 15:45*	*06/24/22 20:02*	*1*
Unknown	*980*	*T J*	*ug/Kg*	☼	*3.38*		*06/23/22 15:45*	*06/24/22 20:02*	*1*
n-Hexadecanoic acid	*640*	*T J N*	*ug/Kg*	☼	*11.43*	*57-10-3*	*06/23/22 15:45*	*06/24/22 20:02*	*1*
Hexatriacontane	*490*	*T J N*	*ug/Kg*	☼	*12.58*	*630-06-8*	*06/23/22 15:45*	*06/24/22 20:02*	*1*
Tetracosane	*760*	*T J N*	*ug/Kg*	☼	*12.87*	*646-31-1*	*06/23/22 15:45*	*06/24/22 20:02*	*1*

Client Sample ID: SB-117 (0.5-3.0)
Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10
Matrix: Solid
Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tricosane, 2-methyl-	1100	T J N	ug/Kg	☼	13.15	1928-30-9	06/23/22 15:45	06/24/22 20:02	1
Hexacosane	1200	T J N	ug/Kg	☼	13.41	630-01-3	06/23/22 15:45	06/24/22 20:02	1
Pentadecane, 8-heptyl-	1200	T J N	ug/Kg	☼	13.68	71005-15-7	06/23/22 15:45	06/24/22 20:02	1
1-Iodoundecane	960	T J N	ug/Kg	☼	13.93	4282-44-4	06/23/22 15:45	06/24/22 20:02	1
Eicosane	850	T J N	ug/Kg	☼	14.17	112-95-8	06/23/22 15:45	06/24/22 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		54 - 120	06/23/22 15:45	06/24/22 20:02	1
2-Fluorobiphenyl	92		60 - 120	06/23/22 15:45	06/24/22 20:02	1
2-Fluorophenol	81		52 - 120	06/23/22 15:45	06/24/22 20:02	1
Nitrobenzene-d5	87		53 - 120	06/23/22 15:45	06/24/22 20:02	1
Phenol-d5	89		54 - 120	06/23/22 15:45	06/24/22 20:02	1
p-Terphenyl-d14	110		79 - 130	06/23/22 15:45	06/24/22 20:02	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.64**	**J**	2.0	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
4,4'-DDE	**0.74**	**J**	2.0	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
4,4'-DDT	**1.1**	**J**	2.0	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Aldrin	ND		2.0	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
alpha-BHC	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
beta-BHC	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Chlordane (.alpha.)	ND		2.0	0.99	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
delta-BHC	ND		2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Dieldrin	ND		2.0	0.48	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan I	ND		2.0	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan II	ND		2.0	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Endrin	ND		2.0	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Heptachlor	ND		2.0	0.43	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1
Lindane	**0.55**	**J**	2.0	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		45 - 120	06/27/22 15:42	06/28/22 14:29	1
DCB Decachlorobiphenyl	252	S1+	45 - 120	06/27/22 15:42	06/28/22 14:29	1
Tetrachloro-m-xylene	97		30 - 124	06/27/22 15:42	06/28/22 14:29	1
Tetrachloro-m-xylene	74		30 - 124	06/27/22 15:42	06/28/22 14:29	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		20	7.1	ug/Kg	☼	06/27/22 06:56	07/10/22 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	65		28 - 129	06/27/22 06:56	07/10/22 17:28	1
2,4-Dichlorophenylacetic acid	66		28 - 129	06/27/22 06:56	07/10/22 17:28	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.57	0.37	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoropentanoic acid (PFPeA)	**0.068**	**J**	0.23	0.062	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1

Client Sample ID: SB-117 (0.5-3.0)
Date Collected: 06/20/22 15:33
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-10
Matrix: Solid
Percent Solids: 83.2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.052	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.044	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanoic acid (PFOA)	**0.12**	**J**	0.23	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorononanoic acid (PFNA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.028	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.037	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.047	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.026	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.12	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.094	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.065	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.042	ug/Kg	☼	06/27/22 08:23	06/28/22 02:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFHpA	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFOA	*88*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFOS	*75*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C5 PFNA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C4 PFBA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFHxA	*94*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFDA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFUnA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFDoA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C8 FOSA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C5 PFPeA	*101*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C2 PFTeDA	*85*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
d3-NMeFOSAA	*97*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
d5-NEtFOSAA	*98*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
M2-6:2 FTS	*91*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
M2-8:2 FTS	*95*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*
13C3 PFBS	*90*		*50 - 150*	*06/27/22 08:23*	*06/28/22 02:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**18.2**		2.5	0.49	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Barium	**168**		0.62	0.14	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Beryllium	**1.3**		0.25	0.034	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Cadmium	**0.22**	**J**	0.25	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Copper	**36.6**		1.2	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10
Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**92.4**		1.2	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Manganese	**209**	**B**	0.25	0.039	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Nickel	**31.6**		6.2	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Selenium	**0.50**	**J**	4.9	0.49	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Silver	ND		0.74	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1
Zinc	**63.6**		2.5	0.79	mg/Kg	☼	06/24/22 10:50	06/28/22 05:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**		0.024	0.0056	mg/Kg	☼	06/24/22 09:43	06/24/22 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.3	0.99	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.1	0.51	mg/Kg	☼	07/01/22 14:37	07/02/22 17:12	1

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**16.7**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11
Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.34	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.1	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Acetone	ND		23	3.9	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Benzene	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Bromomethane	ND		4.6	0.42	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloroform	ND		4.6	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
cis-1,3-Dichloropropene	ND		4.6	0.67	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Cyclohexane	ND		4.6	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Isopropylbenzene	ND		4.6	0.70	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Styrene	ND		4.6	0.23	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Toluene	ND		4.6	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
trans-1,2-Dichloroethene	ND		4.6	0.48	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Trichlorofluoromethane	ND		4.6	0.44	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1
Xylenes, Total	ND		9.2	0.78	ug/Kg	☼	06/21/22 18:30	06/24/22 15:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/24/22 15:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*71 - 125*	*06/21/22 18:30*	*06/24/22 15:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*06/21/22 18:30*	*06/24/22 15:41*	*1*
4-Bromofluorobenzene (Surr)	*79*		*72 - 126*	*06/21/22 18:30*	*06/24/22 15:41*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*	*06/21/22 18:30*	*06/24/22 15:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Acenaphthylene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Anthracene	ND		210	53	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(a)anthracene	ND		210	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(a)pyrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(b)fluoranthene	ND		210	34	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(g,h,i)perylene	ND		210	23	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Benzo(k)fluoranthene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Chrysene	ND		210	48	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Dibenz(a,h)anthracene	ND		210	38	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Dibenzofuran	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		210	23	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Fluorene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Hexachlorobenzene	ND		210	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Indeno(1,2,3-cd)pyrene	ND		210	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
m-Cresol	ND		410	33	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Naphthalene	ND		210	28	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
o-Cresol	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
p-Cresol	ND		410	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Phenanthrene	ND		210	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Phenol	ND		210	33	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1
Pyrene	ND		210	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*880*	*T J*	*ug/Kg*	☼	*3.33*		*06/23/22 15:45*	*06/24/22 20:28*	*1*
Unknown	*200*	*T J*	*ug/Kg*	☼	*11.21*		*06/23/22 15:45*	*06/24/22 20:28*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*11.42*		*06/23/22 15:45*	*06/24/22 20:28*	*1*
Unknown	*230*	*T J*	*ug/Kg*	☼	*12.54*		*06/23/22 15:45*	*06/24/22 20:28*	*1*
Unknown	*250*	*T J*	*ug/Kg*	☼	*12.82*		*06/23/22 15:45*	*06/24/22 20:28*	*1*
Pentadecane, 2,6,10-trimethyl-	*350*	*T J N*	*ug/Kg*	☼	*13.10*	*3892-00-0*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Docosane, 11-butyl-	*300*	*T J N*	*ug/Kg*	☼	*13.37*	*13475-76-8*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Eicosane, 2-methyl-	*330*	*T J N*	*ug/Kg*	☼	*13.63*	*1560-84-5*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Octacosane	*200*	*T J N*	*ug/Kg*	☼	*13.89*	*630-02-4*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Unknown	*180*	*T J*	*ug/Kg*	☼	*15.61*		*06/23/22 15:45*	*06/24/22 20:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
2-Fluorobiphenyl	*89*		*60 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
2-Fluorophenol	*80*		*52 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Nitrobenzene-d5	*81*		*53 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
Phenol-d5	*85*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:28*	*1*
p-Terphenyl-d14	*105*		*79 - 130*	*06/23/22 15:45*	*06/24/22 20:28*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
4,4'-DDE	ND		2.1	0.44	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
4,4'-DDT	ND		2.1	0.49	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Aldrin	ND		2.1	0.51	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
alpha-BHC	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
beta-BHC	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Chlordane (.alpha.)	ND		2.1	1.0	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Dieldrin	ND		2.1	0.50	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan II	ND		2.1	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Endrin	ND		2.1	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Heptachlor	ND		2.1	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1
Lindane	ND		2.1	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 14:49	1

Client Sample ID: SB-117 (8-10)
Date Collected: 06/20/22 15:39
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-11
Matrix: Solid
Percent Solids: 78.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*115*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
DCB Decachlorobiphenyl	*97*		*45 - 120*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
Tetrachloro-m-xylene	*105*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:49*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*06/27/22 15:42*	*06/28/22 14:49*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		21	7.6	ug/Kg	☼	06/27/22 06:56	07/10/22 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*73*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:46*	*1*
2,4-Dichlorophenylacetic acid	*63*		*28 - 129*	*06/27/22 06:56*	*07/10/22 17:46*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.63	0.41	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.069	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorohexanoic acid (PFHxA)	ND		0.25	0.058	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoroheptanoic acid (PFHpA)	ND		0.25	0.049	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanoic acid (PFOA)	ND		0.25	0.073	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorononanoic acid (PFNA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorodecanoic acid (PFDA)	ND		0.25	0.035	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoroundecanoic acid (PFUnA)	ND		0.25	0.034	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorododecanoic acid (PFDoA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorotridecanoic acid (PFTriA)	ND		0.25	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.25	0.033	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.25	0.041	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.25	0.051	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.25	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.25	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.25	0.024	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.25	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.5	0.14	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.5	0.10	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.5	0.071	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.5	0.046	ug/Kg	☼	06/27/22 08:23	06/28/22 03:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*64*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFHpA	*78*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFOA	*77*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFOS	*59*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C5 PFNA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C4 PFBA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFHxA	*82*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFDA	*73*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFUnA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFDoA	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11

Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 FOSA	*61*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C5 PFPeA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C2 PFTeDA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
d3-NMeFOSAA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
d5-NEtFOSAA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
M2-6:2 FTS	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
M2-8:2 FTS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*
13C3 PFBS	*70*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.6**		2.6	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Barium	**73.2**		0.66	0.15	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Beryllium	**0.60**		0.26	0.037	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Cadmium	**0.12**	**J**	0.26	0.040	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Copper	**19.8**		1.3	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Lead	**12.7**		1.3	0.32	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Manganese	**484**	**B**	0.26	0.042	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Nickel	**26.0**		6.6	0.30	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Selenium	ND		5.3	0.53	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Silver	ND		0.79	0.26	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1
Zinc	**48.9**		2.6	0.85	mg/Kg	☼	06/24/22 10:50	06/28/22 05:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.022	0.0052	mg/Kg	☼	06/24/22 09:43	06/24/22 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.5	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	**1.3**		1.1	0.54	mg/Kg	☼	06/30/22 12:04	06/30/22 13:40	1
Cyanide, Total	ND	H	1.2	0.59	mg/Kg	☼	07/07/22 12:37	07/07/22 15:51	1

Client Sample ID: SB-205 (1.5)
Lab Sample ID: 480-199197-12

Date Collected: 06/20/22 17:02
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2,2-Tetrachloroethane	ND		78	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2-Trichloroethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1-Dichloroethane	ND		78	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,1-Dichloroethene	ND		78	27	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2,4-Trichlorobenzene	ND		78	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dibromo-3-Chloropropane	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichlorobenzene	ND		78	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichloroethane	ND		78	32	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dichloropropane	ND		78	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,3-Dichlorobenzene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1

Client Sample ID: SB-205 (1.5)
Date Collected: 06/20/22 17:02
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-12
Matrix: Solid
Percent Solids: 77.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		78	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
2-Butanone (MEK)	ND		390	230	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
2-Hexanone	ND		390	160	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
4-Methyl-2-pentanone (MIBK)	ND		390	25	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Acetone	ND		390	320	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Benzene	ND		78	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromodichloromethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromoform	ND		78	39	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Bromomethane	ND		78	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Carbon disulfide	ND		78	35	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Carbon tetrachloride	ND		78	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chlorobenzene	ND		78	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Dibromochloromethane	ND		78	38	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloroethane	ND		78	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloroform	ND		78	53	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Chloromethane	ND		78	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
cis-1,2-Dichloroethene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
cis-1,3-Dichloropropene	ND		78	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Cyclohexane	ND		78	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Dichlorodifluoromethane	ND		78	34	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Ethylbenzene	ND		78	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
1,2-Dibromoethane	ND		78	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Isopropylbenzene	ND		78	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methyl acetate	ND		390	37	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methyl tert-butyl ether	ND		78	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methylcyclohexane	ND		78	36	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Methylene Chloride	ND		78	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Styrene	ND		78	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Tetrachloroethene	**490**		78	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Toluene	ND		78	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
trans-1,2-Dichloroethene	ND		78	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
trans-1,3-Dichloropropene	ND		78	7.6	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Trichloroethene	ND		78	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Trichlorofluoromethane	ND		78	36	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Vinyl chloride	ND		78	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1
Xylenes, Total	ND		160	43	ug/Kg	☼	06/24/22 09:44	06/24/22 23:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*1400*	*T J*	*ug/Kg*	☼	*9.25*		*06/24/22 09:44*	*06/24/22 23:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
4-Bromofluorobenzene (Surr)	*102*		*49 - 148*	*06/24/22 09:44*	*06/24/22 23:12*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*06/24/22 09:44*	*06/24/22 23:12*	*1*

Client Sample ID: SB-205 (7)
Date Collected: 06/20/22 17:09
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-13
Matrix: Solid
Percent Solids: 82.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2,2-Tetrachloroethane	ND		110	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2-Trichloroethane	ND		110	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1-Dichloroethane	ND		110	34	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,1-Dichloroethene	ND		110	38	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2,4-Trichlorobenzene	ND		110	42	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dibromo-3-Chloropropane	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichlorobenzene	ND		110	28	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichloroethane	ND		110	45	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichloropropane	ND		110	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,3-Dichlorobenzene	ND		110	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,4-Dichlorobenzene	ND		110	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
2-Butanone (MEK)	ND		550	330	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
2-Hexanone	ND		550	220	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
4-Methyl-2-pentanone (MIBK)	ND		550	35	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Acetone	ND		550	450	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Benzene	ND		110	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromodichloromethane	ND		110	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromoform	ND		110	55	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Bromomethane	ND		110	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Carbon disulfide	ND		110	50	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Carbon tetrachloride	ND		110	28	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chlorobenzene	ND		110	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Dibromochloromethane	ND		110	53	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chloroethane	ND		110	23	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chloroform	ND		110	75	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Chloromethane	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
cis-1,2-Dichloroethene	ND		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
cis-1,3-Dichloropropene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Cyclohexane	ND		110	24	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Dichlorodifluoromethane	ND		110	48	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Ethylbenzene	ND		110	32	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
1,2-Dibromoethane	ND		110	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Isopropylbenzene	ND		110	16	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methyl acetate	ND		550	52	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methyl tert-butyl ether	ND		110	41	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methylcyclohexane	ND		110	51	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Methylene Chloride	ND		110	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Styrene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Tetrachloroethene	**8100**		110	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Toluene	ND		110	29	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
trans-1,2-Dichloroethene	ND		110	26	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
trans-1,3-Dichloropropene	ND		110	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Trichloroethene	**160**		110	30	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Trichlorofluoromethane	ND		110	51	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Vinyl chloride	ND		110	37	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2
Xylenes, Total	ND		220	61	ug/Kg	☼	06/24/22 09:44	06/24/22 23:35	2

Client Sample ID: SB-205 (7)

Lab Sample ID: 480-199197-13
Date Collected: 06/20/22 17:09
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 82.1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/Kg	☼			06/24/22 09:44	06/24/22 23:35	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		50 - 149	06/24/22 09:44	06/24/22 23:35	2
1,2-Dichloroethane-d4 (Surr)	101		53 - 146	06/24/22 09:44	06/24/22 23:35	2
4-Bromofluorobenzene (Surr)	102		49 - 148	06/24/22 09:44	06/24/22 23:35	2
Dibromofluoromethane (Surr)	94		60 - 140	06/24/22 09:44	06/24/22 23:35	2

Client Sample ID: SB-206 (2)

Lab Sample ID: 480-199197-14
Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2,2-Tetrachloroethane	ND		44	7.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2-Trichloroethane	ND		44	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1-Dichloroethane	ND		44	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,1-Dichloroethene	ND		44	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2,4-Trichlorobenzene	ND		44	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dibromo-3-Chloropropane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichlorobenzene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichloroethane	ND		44	18	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dichloropropane	ND		44	7.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,3-Dichlorobenzene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,4-Dichlorobenzene	ND		44	6.2	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
2-Butanone (MEK)	ND		220	130	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
2-Hexanone	ND		220	91	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
4-Methyl-2-pentanone (MIBK)	ND		220	14	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Acetone	ND		220	180	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Benzene	ND		44	8.5	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromodichloromethane	ND		44	8.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromoform	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Bromomethane	ND		44	9.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Carbon disulfide	ND		44	20	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Carbon tetrachloride	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chlorobenzene	ND		44	5.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Dibromochloromethane	ND		44	22	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloroethane	ND		44	9.3	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloroform	ND		44	31	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Chloromethane	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
cis-1,2-Dichloroethene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
cis-1,3-Dichloropropene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Cyclohexane	ND		44	9.9	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Dichlorodifluoromethane	ND		44	19	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Ethylbenzene	ND		44	13	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
1,2-Dibromoethane	ND		44	7.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Isopropylbenzene	ND		44	6.7	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methyl acetate	ND		220	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methyl tert-butyl ether	ND		44	17	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1

Client Sample ID: SB-206 (2)
Lab Sample ID: 480-199197-14

Date Collected: 06/20/22 10:45
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		44	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Methylene Chloride	ND		44	8.8	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Styrene	ND		44	11	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Tetrachloroethene	**670**		44	6.0	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Toluene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
trans-1,2-Dichloroethene	ND		44	10	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
trans-1,3-Dichloropropene	ND		44	4.4	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Trichloroethene	ND		44	12	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Trichlorofluoromethane	ND		44	21	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Vinyl chloride	ND		44	15	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1
Xylenes, Total	ND		89	25	ug/Kg	☼	06/24/22 09:44	06/24/22 23:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/24/22 23:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*50 - 149*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*49 - 148*	*06/24/22 09:44*	*06/24/22 23:58*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*06/24/22 09:44*	*06/24/22 23:58*	*1*

Client Sample ID: SB-206 (6)
Lab Sample ID: 480-199197-15

Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2,4-Trichlorobenzene	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dibromo-3-Chloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Acetone	**5.3**	**J**	22	3.8	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Benzene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1

Client Sample ID: SB-206 (6)
Lab Sample ID: 480-199197-15
Date Collected: 06/20/22 10:53
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 77.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
1,2-Dibromoethane	ND		4.5	0.58	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Isopropylbenzene	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Styrene	ND		4.5	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Toluene	ND		4.5	0.34	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	06/21/22 18:30	06/27/22 15:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/27/22 15:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*119*		*71 - 125*	*06/21/22 18:30*	*06/27/22 15:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*06/21/22 18:30*	*06/27/22 15:14*	*1*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*72 - 126*	*06/21/22 18:30*	*06/27/22 15:14*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*06/21/22 18:30*	*06/27/22 15:14*	*1*

Client Sample ID: SB-207 (1-3)
Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2,2-Tetrachloroethane	ND		92	15	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2-Trichloroethane	ND		92	19	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1-Dichloroethane	ND		92	29	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,1-Dichloroethene	ND		92	32	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2,4-Trichlorobenzene	ND		92	35	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dibromo-3-Chloropropane	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dichlorobenzene	ND		92	24	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2

Client Sample ID: SB-207 (1-3)
Lab Sample ID: 480-199197-16
Date Collected: 06/20/22 16:11
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		92	38	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dichloropropane	ND		92	15	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,3-Dichlorobenzene	ND		92	25	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,4-Dichlorobenzene	ND		92	13	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
2-Butanone (MEK)	ND		460	270	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
2-Hexanone	ND		460	190	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
4-Methyl-2-pentanone (MIBK)	ND		460	30	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Acetone	ND		460	380	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Benzene	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromodichloromethane	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromoform	ND		92	46	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Bromomethane	ND		92	20	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Carbon disulfide	ND		92	42	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Carbon tetrachloride	ND		92	24	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chlorobenzene	ND		92	12	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Dibromochloromethane	ND		92	45	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloroethane	ND		92	19	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloroform	ND		92	63	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Chloromethane	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
cis-1,2-Dichloroethene	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
cis-1,3-Dichloropropene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Cyclohexane	ND		92	21	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Dichlorodifluoromethane	ND		92	40	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Ethylbenzene	ND		92	27	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
1,2-Dibromoethane	ND		92	16	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Isopropylbenzene	ND		92	14	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methyl acetate	ND		460	44	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methyl tert-butyl ether	ND		92	35	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methylcyclohexane	ND		92	43	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Methylene Chloride	ND		92	18	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Styrene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Tetrachloroethene	**3400**		92	12	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Toluene	ND		92	25	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
trans-1,2-Dichloroethene	ND		92	22	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
trans-1,3-Dichloropropene	ND		92	9.1	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Trichloroethene	ND		92	26	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Trichlorofluoromethane	ND		92	43	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Vinyl chloride	ND		92	31	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2
Xylenes, Total	ND		180	51	ug/Kg	☼	06/24/22 09:44	06/25/22 00:21	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/24/22 09:44*	*06/25/22 00:21*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*50 - 149*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
1,2-Dichloroethane-d4 (Surr)	*104*		*53 - 146*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
4-Bromofluorobenzene (Surr)	*101*		*49 - 148*	*06/24/22 09:44*	*06/25/22 00:21*	*2*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*06/24/22 09:44*	*06/25/22 00:21*	*2*

Client Sample ID: SB-207 (6-8)
Date Collected: 06/20/22 16:15
Date Received: 06/21/22 16:23

Lab Sample ID: 480-199197-17
Matrix: Solid
Percent Solids: 80.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2,2-Tetrachloroethane	ND	*3	4.2	0.69	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2,4-Trichlorobenzene	ND	*3	4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichlorobenzene	ND	*3	4.2	0.33	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,3-Dichlorobenzene	ND	*3	4.2	0.22	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,4-Dichlorobenzene	ND	*3	4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
2-Butanone (MEK)	**4.0**	**J**	21	1.5	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Acetone	**24**		21	3.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Benzene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromodichloromethane	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Chloromethane	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
cis-1,2-Dichloroethene	**6.1**		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Isopropylbenzene	ND	*3	4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methyl acetate	**9.0**	**J**	21	2.6	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Styrene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Toluene	ND		4.2	0.32	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
trans-1,2-Dichloroethene	ND		4.2	0.44	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	06/21/22 18:30	06/27/22 15:39	1

Client Sample ID: SB-207 (6-8)
Lab Sample ID: 480-199197-17
Date Collected: 06/20/22 16:15
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 80.7

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
column bleed	*5.8*	*T J*	*ug/Kg*	☼	*9.59*		*06/21/22 18:30*	*06/27/22 15:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*71 - 125*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*06/21/22 18:30*	*06/27/22 15:39*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*06/21/22 18:30*	*06/27/22 15:39*	*1*

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent	**23.0**		1.5	0.63	mg/Kg			07/02/22 12:17	1

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.69	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.97	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2,4-Trichlorobenzene	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Acetone	ND		21	3.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Benzene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromodichloromethane	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloroethane	ND		4.2	0.96	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Chloromethane	ND		4.2	0.26	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid

Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
1,2-Dibromoethane	ND		4.2	0.55	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Isopropylbenzene	ND		4.2	0.64	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methylcyclohexane	ND		4.2	0.65	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Methylene Chloride	ND		4.2	2.0	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Styrene	ND		4.2	0.21	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Toluene	ND		4.2	0.32	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
trans-1,2-Dichloroethene	ND		4.2	0.44	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	06/21/22 18:30	06/24/22 16:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*06/21/22 18:30*	*06/24/22 16:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*71 - 125*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
4-Bromofluorobenzene (Surr)	*80*		*72 - 126*	*06/21/22 18:30*	*06/24/22 16:54*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*06/21/22 18:30*	*06/24/22 16:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Acenaphthylene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Anthracene	ND		200	49	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(a)anthracene	ND		200	20	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(a)pyrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(b)fluoranthene	ND		200	32	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(g,h,i)perylene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Benzo(k)fluoranthene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Chrysene	ND		200	45	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Fluoranthene	ND		200	21	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Fluorene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Indeno(1,2,3-cd)pyrene	ND		200	25	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
m-Cresol	ND		390	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Naphthalene	ND		200	26	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
o-Cresol	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
p-Cresol	ND		390	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid

Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		390	200	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Phenanthrene	ND		200	29	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Phenol	ND		200	31	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1
Pyrene	ND		200	24	ug/Kg	☼	06/23/22 15:45	06/24/22 20:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*770*	*T J*	*ug/Kg*	☼	*3.32*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*310*	*T J*	*ug/Kg*	☼	*11.41*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Eicosane	*290*	*T J N*	*ug/Kg*	☼	*12.84*	*112-95-8*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Octacosane	*490*	*T J N*	*ug/Kg*	☼	*13.12*	*630-02-4*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heneicosane	*520*	*T J N*	*ug/Kg*	☼	*13.39*	*629-94-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Pentadecane, 8-heptyl-	*490*	*T J N*	*ug/Kg*	☼	*13.65*	*71005-15-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heptacosane	*410*	*T J N*	*ug/Kg*	☼	*13.91*	*593-49-7*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Heptadecane, 9-octyl-	*290*	*T J N*	*ug/Kg*	☼	*14.15*	*7225-64-1*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*14.40*		*06/23/22 15:45*	*06/24/22 20:53*	*1*
Unknown	*190*	*T J*	*ug/Kg*	☼	*15.61*		*06/23/22 15:45*	*06/24/22 20:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
2-Fluorobiphenyl	*78*		*60 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
2-Fluorophenol	*71*		*52 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Nitrobenzene-d5	*74*		*53 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
Phenol-d5	*78*		*54 - 120*	*06/23/22 15:45*	*06/24/22 20:53*	*1*
p-Terphenyl-d14	*99*		*79 - 130*	*06/23/22 15:45*	*06/24/22 20:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
4,4'-DDE	ND		1.9	0.41	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
4,4'-DDT	ND		1.9	0.45	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Aldrin	ND		1.9	0.48	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
alpha-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
beta-BHC	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Chlordane (.alpha.)	ND		1.9	0.97	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
delta-BHC	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Dieldrin	ND		1.9	0.47	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan I	ND		1.9	0.37	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan II	ND		1.9	0.35	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Endrin	ND		1.9	0.38	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Heptachlor	ND		1.9	0.42	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1
Lindane	ND		1.9	0.36	ug/Kg	☼	06/27/22 15:42	06/28/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*45 - 120*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
DCB Decachlorobiphenyl	*216*	*S1+*	*45 - 120*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
Tetrachloro-m-xylene	*101*		*30 - 124*	*06/27/22 15:42*	*06/28/22 15:08*	*1*
Tetrachloro-m-xylene	*79*		*30 - 124*	*06/27/22 15:42*	*06/28/22 15:08*	*1*

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18

Date Collected: 06/20/22 15:21
Matrix: Solid

Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		19	7.0	ug/Kg	☼	06/27/22 06:56	07/10/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*54*		*28 - 129*	*06/27/22 06:56*	*07/10/22 18:05*	*1*
2,4-Dichlorophenylacetic acid	*53*		*28 - 129*	*06/27/22 06:56*	*07/10/22 18:05*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.053	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanoic acid (PFOA)	ND		0.23	0.067	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorononanoic acid (PFNA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.032	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.039	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.096	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	06/27/22 08:23	06/28/22 03:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFHpA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFOA	*76*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFOS	*63*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C5 PFNA	*74*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C4 PFBA	*86*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFHxA	*87*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFDA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFUnA	*68*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFDoA	*66*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C8 FOSA	*61*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C5 PFPeA	*89*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
13C2 PFTeDA	*69*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
d3-NMeFOSAA	*81*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
d5-NEtFOSAA	*80*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*
M2-6:2 FTS	*67*		*50 - 150*	*06/27/22 08:23*	*06/28/22 03:08*	*1*

Client Sample ID: Field Duplicate
Lab Sample ID: 480-199197-18
Date Collected: 06/20/22 15:21
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.5

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-8:2 FTS	66		50 - 150	06/27/22 08:23	06/28/22 03:08	1
13C3 PFBS	72		50 - 150	06/27/22 08:23	06/28/22 03:08	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**		2.4	0.47	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Barium	**84.8**		0.59	0.13	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Beryllium	**0.76**		0.24	0.033	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Cadmium	**0.064**	**J**	0.24	0.035	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Copper	**18.1**		1.2	0.25	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Lead	**11.6**		1.2	0.28	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Manganese	**296**	**B**	0.24	0.038	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Nickel	**26.9**		5.9	0.27	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Selenium	ND		4.7	0.47	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Silver	ND		0.71	0.24	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1
Zinc	**61.6**		2.4	0.76	mg/Kg	☼	06/24/22 10:50	06/28/22 05:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.022	0.0051	mg/Kg	☼	06/24/22 09:43	06/24/22 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.4	1.0	mg/Kg	☼	06/29/22 09:40	06/30/22 11:30	1
Cyanide, Total	ND		1.0	0.49	mg/Kg	☼	07/01/22 14:37	07/02/22 17:13	1

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/24/22 07:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/24/22 07:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/24/22 07:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/24/22 07:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/24/22 07:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/24/22 07:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/24/22 07:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/24/22 07:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/24/22 07:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/24/22 07:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/24/22 07:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/24/22 07:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/24/22 07:40	1
2-Butanone (MEK)	**1.8**	**J**	10	1.3	ug/L			06/24/22 07:40	1
2-Hexanone	ND		5.0	1.2	ug/L			06/24/22 07:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/24/22 07:40	1
Acetone	**5.0**	**J**	10	3.0	ug/L			06/24/22 07:40	1
Benzene	ND		1.0	0.41	ug/L			06/24/22 07:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/24/22 07:40	1

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			06/24/22 07:40	1
Bromomethane	ND		1.0	0.69	ug/L			06/24/22 07:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/24/22 07:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/24/22 07:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/24/22 07:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/24/22 07:40	1
Chloroethane	ND		1.0	0.32	ug/L			06/24/22 07:40	1
Chloroform	ND		1.0	0.34	ug/L			06/24/22 07:40	1
Chloromethane	ND		1.0	0.35	ug/L			06/24/22 07:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/24/22 07:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/24/22 07:40	1
Cyclohexane	ND		1.0	0.18	ug/L			06/24/22 07:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/24/22 07:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/24/22 07:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/24/22 07:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/24/22 07:40	1
Methyl acetate	ND		2.5	1.3	ug/L			06/24/22 07:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/24/22 07:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/24/22 07:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/24/22 07:40	1
Styrene	ND		1.0	0.73	ug/L			06/24/22 07:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/24/22 07:40	1
Toluene	ND		1.0	0.51	ug/L			06/24/22 07:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/24/22 07:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/24/22 07:40	1
Trichloroethene	ND		1.0	0.46	ug/L			06/24/22 07:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/24/22 07:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/24/22 07:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/24/22 07:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/24/22 07:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/24/22 07:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*77 - 120*		*06/24/22 07:40*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/24/22 07:40*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*06/24/22 07:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		06/23/22 08:12	06/24/22 20:21	1
Acenaphthylene	ND		5.0	0.38	ug/L		06/23/22 08:12	06/24/22 20:21	1
Anthracene	ND		5.0	0.28	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		06/23/22 08:12	06/24/22 20:21	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		06/23/22 08:12	06/24/22 20:21	1
Chrysene	ND		5.0	0.33	ug/L		06/23/22 08:12	06/24/22 20:21	1

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		06/23/22 08:12	06/24/22 20:21	1
Dibenzofuran	ND		10	0.51	ug/L		06/23/22 08:12	06/24/22 20:21	1
Fluoranthene	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
Fluorene	ND		5.0	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		06/23/22 08:12	06/24/22 20:21	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		06/23/22 08:12	06/24/22 20:21	1
m-Cresol	ND		10	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
Naphthalene	ND		5.0	0.76	ug/L		06/23/22 08:12	06/24/22 20:21	1
o-Cresol	ND		5.0	0.40	ug/L		06/23/22 08:12	06/24/22 20:21	1
p-Cresol	ND		10	0.36	ug/L		06/23/22 08:12	06/24/22 20:21	1
Pentachlorophenol	ND		10	2.2	ug/L		06/23/22 08:12	06/24/22 20:21	1
Phenanthrene	ND		5.0	0.44	ug/L		06/23/22 08:12	06/24/22 20:21	1
Phenol	ND		5.0	0.39	ug/L		06/23/22 08:12	06/24/22 20:21	1
Pyrene	ND		5.0	0.34	ug/L		06/23/22 08:12	06/24/22 20:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*220*	*T J*	*ug/L*		*3.04*		*06/23/22 08:12*	*06/24/22 20:21*	*1*
Unknown	*9.7*	*T J*	*ug/L*		*4.98*		*06/23/22 08:12*	*06/24/22 20:21*	*1*
Column Bleed	*1.9*	*T J*	*ug/L*		*7.01*		*06/23/22 08:12*	*06/24/22 20:21*	*1*
Unknown	*4.9*	*T J*	*ug/L*		*7.89*		*06/23/22 08:12*	*06/24/22 20:21*	*1*
Eicosane	*3.8*	*T J N*	*ug/L*		*12.18*	*112-95-8*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Pentacosane	*5.2*	*T J N*	*ug/L*		*12.60*	*629-99-2*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Hexacosane	*6.3*	*T J N*	*ug/L*		*13.04*	*630-01-3*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Heptacosane	*6.6*	*T J N*	*ug/L*		*13.51*	*593-49-7*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Heptadecane	*5.2*	*T J N*	*ug/L*		*14.02*	*629-78-7*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Tetratetracontane	*2.8*	*T J N*	*ug/L*		*14.54*	*7098-22-8*	*06/23/22 08:12*	*06/24/22 20:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*48 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
2-Fluorophenol	*32*	*S1-*	*35 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Nitrobenzene-d5	*57*		*46 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
Phenol-d5	*23*		*22 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
p-Terphenyl-d14	*88*		*60 - 148*	*06/23/22 08:12*	*06/24/22 20:21*	*1*
2,4,6-Tribromophenol	*75*		*41 - 120*	*06/23/22 08:12*	*06/24/22 20:21*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0096**	**J**	0.050	0.0092	ug/L		06/22/22 15:06	06/24/22 10:17	1
4,4'-DDE	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 10:17	1
4,4'-DDT	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 10:17	1
Aldrin	ND		0.050	0.0081	ug/L		06/22/22 15:06	06/24/22 10:17	1
alpha-BHC	ND		0.050	0.0077	ug/L		06/22/22 15:06	06/24/22 10:17	1
Chlordane (.alpha.)	ND		0.050	0.015	ug/L		06/22/22 15:06	06/24/22 10:17	1
beta-BHC	ND		0.050	0.025	ug/L		06/22/22 15:06	06/24/22 10:17	1
delta-BHC	ND		0.050	0.010	ug/L		06/22/22 15:06	06/24/22 10:17	1
Dieldrin	ND		0.050	0.0098	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan I	ND		0.050	0.011	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan II	ND		0.050	0.012	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		06/22/22 15:06	06/24/22 10:17	1
Endrin	ND		0.050	0.014	ug/L		06/22/22 15:06	06/24/22 10:17	1

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lindane	ND		0.050	0.0080	ug/L		06/22/22 15:06	06/24/22 10:17	1
Heptachlor	ND		0.050	0.0085	ug/L		06/22/22 15:06	06/24/22 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*33*		*20 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
DCB Decachlorobiphenyl	*58*		*20 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
Tetrachloro-m-xylene	*70*		*44 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*
Tetrachloro-m-xylene	*67*		*44 - 120*	*06/22/22 15:06*	*06/24/22 10:17*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	ND		0.48	0.048	ug/L		06/23/22 09:32	06/24/22 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*89*		*48 - 132*	*06/23/22 09:32*	*06/24/22 17:06*	*1*
2,4-Dichlorophenylacetic acid	*82*		*48 - 132*	*06/23/22 09:32*	*06/24/22 17:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.42	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.59	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.38	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.48	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.43	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.66	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorobutanoic acid (PFBA)	ND		3.9	0.93	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.53	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.51	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.36	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.38	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.37	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.50	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.72	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.31	ng/L		06/27/22 11:32	06/28/22 00:00	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.32	ng/L		06/27/22 11:32	06/28/22 00:00	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.9	1.5	ng/L		06/27/22 11:32	06/28/22 00:00	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.9	1.2	ng/L		06/27/22 11:32	06/28/22 00:00	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		3.9	1.0	ng/L		06/27/22 11:32	06/28/22 00:00	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.6	0.60	ng/L		06/27/22 11:32	06/28/22 00:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*94*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFHpA	*106*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFOA	*103*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C4 PFOS	*91*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C5 PFNA	*95*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*111*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFHxA	*111*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFDA	*104*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFUnA	*99*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFDoA	*90*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C8 FOSA	*87*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C5 PFPeA	*113*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C2 PFTeDA	*89*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
d3-NMeFOSAA	*115*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
d5-NEtFOSAA	*116*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
M2-8:2 FTS	*109*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*
13C3 PFBS	*103*		*50 - 150*	*06/27/22 11:32*	*06/28/22 00:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		06/23/22 08:47	06/24/22 01:38	1
Barium	ND		0.0020	0.00070	mg/L		06/23/22 08:47	06/24/22 01:38	1
Beryllium	ND		0.0020	0.00030	mg/L		06/23/22 08:47	06/24/22 01:38	1
Cadmium	ND		0.0020	0.00050	mg/L		06/23/22 08:47	06/24/22 01:38	1
Copper	ND		0.010	0.0016	mg/L		06/23/22 08:47	06/24/22 01:38	1
Lead	ND		0.010	0.0030	mg/L		06/23/22 08:47	06/24/22 01:38	1
Manganese	**0.0011**	**J B**	0.0030	0.00040	mg/L		06/23/22 08:47	06/24/22 01:38	1
Nickel	ND		0.010	0.0013	mg/L		06/23/22 08:47	06/24/22 01:38	1
Selenium	ND		0.025	0.0087	mg/L		06/23/22 08:47	06/24/22 01:38	1
Silver	ND		0.0060	0.0017	mg/L		06/23/22 08:47	06/24/22 01:38	1
Zinc	**0.030**		0.010	0.0015	mg/L		06/23/22 08:47	06/24/22 01:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/24/22 10:57	06/24/22 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND	H	0.010	0.0050	mg/L			06/22/22 11:00	1
Cyanide, Total	**0.0070**	**J**	0.010	0.0050	mg/L		06/30/22 14:24	06/30/22 18:26	1

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB113 (15-18)	480-199197-2	119	120	133 S1+ *3	56 S1- *3
SB-114 (6.0-10.0)	480-199197-4	99	102	122	66 S1-
SB-114 (12-16)	480-199197-5	104	104	108	69 S1-
SB-115 (0-3)	480-199197-6	98	101	106	77
SB-115 (6-8)	480-199197-7	108	111	117 *3	69 S1- *3
SB-116 (6.0-7.5)	480-199197-9	92	94	98	85
SB-117 (8-10)	480-199197-11	100	101	105	79
SB-206 (6)	480-199197-15	103	104	119	66 S1-
SB-207 (6-8)	480-199197-17	103	102	110	73
Field Duplicate	480-199197-18	101	100	95	80
	MB 480-631414/2-A	99	99	92	92
	MB 480-631627/2-A	98	98	95	96
	LCS 480-631414/1-A	96	98	95	85
	LCS 480-631627/1-A	97	97	94	85

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Sample No.: CCVIS 480-631682/4 Date Analyzed: 06/27/2022 11:03

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M04394.D Heated Purge: (Y/N) Y

Calibration ID: 43305

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		110259	5.23	212978	8.22	223290	10.62
UPPER LIMIT		220518	5.73	425956	8.72	446580	11.12
LOWER LIMIT		55130	4.73	106489	7.72	111645	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-631627/1-A		110398	5.23	222190	8.22	227090	10.62
MB 480-631627/2-A		104667	5.23	206656	8.22	232192	10.62
480-199197-2	SB113 (15-18)	61379	5.23	60873*3	8.22	25281*3	10.62
480-199197-4	SB-114 (6.0-10.0)	85802	5.23	117876	8.22	64825*3	10.62
480-199197-5	SB-114 (12-16)	83035	5.23	131697	8.22	83401*3	10.62
480-199197-6	SB-115 (0-3)	93181	5.23	158520	8.22	112499	10.62
480-199197-7	SB-115 (6-8)	68798	5.23	92917*3	8.22	51464*3	10.62
480-199197-15	SB-206 (6)	154258	5.23	210899	8.22	128014	10.62
480-199197-17	SB-207 (6-8)	85232	5.23	131564	8.22	82483*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
Equipment Blank	480-199197-19	32 S1-	23	57	69	75	88
	MB 480-631241/1-A	55	41	76	93	68	98
	LCS 480-631241/2-A	62	47	77	95	110	100
	LCSD 480-631241/3-A	61	47	76	98	112	104

	QC LIMITS
2FP = 2-Fluorophenol	35-120
PHL = Phenol-d5	22-120
NBZ = Nitrobenzene-d5	46-120
FBP = 2-Fluorobiphenyl	48-120
TBP = 2,4,6-Tribromophenol	41-120
TPHd14 = p-Terphenyl-d14	60-148

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X214827665.d

Lab ID: 480-199197-1 MSD Client ID: SB113 (1-5) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	2010	1550	77	10	35	60-120	
Acenaphthylene	2010	1560	78	9	18	58-121	
Anthracene	2010	1720	85	13	15	62-120	
Benzo(a)anthracene	2010	1770	88	12	15	65-120	
Benzo(a)pyrene	2010	1750	87	13	15	64-120	
Benzo(b)fluoranthene	2010	1830	91	12	15	10-150	
Benzo(g,h,i)perylene	2010	1490	74	14	15	45-145	
Benzo(k)fluoranthene	2010	1710	85	24	22	23-150	F2
Chrysene	2010	1760	87	9	15	64-120	
Dibenz(a,h)anthracene	2010	1560	77	14	15	54-132	
Dibenzofuran	2010	1560	78	8	15	62-120	
Fluoranthene	2010	1670	83	19	15	62-120	F2
Fluorene	2010	1610	80	6	15	63-120	
Hexachlorobenzene	2010	1810	90	12	15	60-120	
Indeno(1,2,3-cd)pyrene	2010	1580	78	10	15	56-134	
Naphthalene	2010	1340	67	2	29	46-120	
o-Cresol	2010	1440	72	1	27	48-120	
p-Cresol	2010	1530	76	3	24	50-120	
Pentachlorophenol	4030	3480	86	18	35	25-136	
Phenanthrene	2010	1740	86	11	15	60-122	
Phenol	2010	1390	69	2	35	50-120	
Pyrene	2010	1960	97	14	35	61-133	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Buffalo | Job No.: 480-199197-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-631241/1-A

Matrix: Water | Lab File ID: Y02830784.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/23/2022 08:12

Sample wt/vol: 250(mL) | Date Analyzed: 06/24/2022 17:35

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 631456 | Units: ug/L

Number TICs Found: 10 | TIC Result Total: 356.51

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.07	295	T J	
	Unknown	4.97	11.8	T J	
	Column Bleed	7.01	2.26	T J	
629-94-7	Heneicosane	12.18	5.15	T J N	98%
629-99-2	Pentacosane	12.59	7.50	T J N	99%
630-06-8	Hexatriacontane	13.04	9.69	T J N	93%
593-49-7	Heptacosane	13.51	9.68	T J N	99%
630-02-4	Octacosane	14.02	7.71	T J N	99%
629-78-7	Heptadecane	14.54	5.04	T J N	95%
638-68-6	Triacontane	15.08	2.68	T J N	98%

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Buffalo | Job No.: 480-199197-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-631383/1-A

Matrix: Solid | Lab File ID: X214827662.d

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 06/23/2022 15:45

Sample wt/vol: 30.47(g) | Date Analyzed: 06/24/2022 13:03

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 631452 | Units: ug/Kg

Number TICs Found: 7 | TIC Result Total: 7078

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	1.95	5300	T J	
	Unknown	3.40	915	T J	
630-02-4	Octacosane	12.89	139	T J N	91%
630-01-3	Hexacosane	13.17	216	T J N	86%
629-78-7	Heptadecane	13.44	195	T J N	94%
630-06-8	Hexatriacontane	13.71	175	T J N	86%
	Unknown	13.98	138	T J	

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCBP1 #	DCBP2 #
SB113 (1-5)	480-199197-1	0 S1-	0 S1-	0 S1-	0 S1-
SB113 (15-18)	480-199197-2	86	60	77	84
SB-114 (0.5-2.0)	480-199197-3	101	72	83	94
SB-114 (6.0-10.0)	480-199197-4	91	63	76	91
SB-114 (12-16)	480-199197-5	103	69	77	85
SB-115 (0-3)	480-199197-6	97	78	84	95
SB-115 (6-8)	480-199197-7	104	73	79	88
SB-116 (0.5-2.5)	480-199197-8	116	79	105	151 S1+
SB-116 (6.0-7.5)	480-199197-9	107	79	83	93
SB-117 (0.5-3.0)	480-199197-10	97	74	84	252 S1+
SB-117 (8-10)	480-199197-11	105	72	115	97
Field Duplicate	480-199197-18	101	79	85	216 S1+
	MB 480-631723/1-A	100	75	80	102
	LCS 480-631723/2-A	95	73	89	103
SB113 (15-18) MS	480-199197-2 MS	87	62	79	91
SB113 (15-18) MSD	480-199197-2 MSD	84	55	78	83

	QC LIMITS
TCX = Tetrachloro-m-xylene	30-124
DCBP = DCB Decachlorobiphenyl	45-120

Column to be used to flag recovery values

FORM II 8081B

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Client Sample ID: SB-116 (6.0-7.5) Lab Sample ID: 480-199197-9

Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25

Date Analyzed (1): 06/28/2022 14:10 Date Analyzed (2): 06/28/2022 14:10

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
beta-BHC	1		3.16	3.11	3.17	0.67		35.6
	2		3.80	3.76	3.82	0.46		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Client Sample ID: SB-117 (0.5-3.0) Lab Sample ID: 480-199197-10

Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25

Date Analyzed (1): 06/28/2022 14:29 Date Analyzed (2): 06/28/2022 14:29

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Lindane	1		3.06	3.04	3.10	0.55		5.3
	2		3.70	3.69	3.75	0.58		
4,4'-DDE	1		4.65	4.63	4.69	0.74		2.9
	2		5.64	5.61	5.67	0.72		
4,4'-DDD	1		5.28	5.23	5.29	0.64		25.2
	2		6.24	6.21	6.27	0.50		
4,4'-DDT	1		5.54	5.52	5.58	1.1		0.4
	2		6.57	6.53	6.59	1.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-631179/2-A

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 06/24/2022 09:39 Date Analyzed (2): 06/24/2022 09:39

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		2.48	2.45	2.51	0.286		8.8
	2		3.27	3.23	3.29	0.313		
Lindane	1		2.71	2.68	2.74	0.303		10.3
	2		3.60	3.57	3.63	0.337		
beta-BHC	1		2.77	2.74	2.80	0.385		0.9
	2		3.67	3.64	3.70	0.381		
delta-BHC	1		2.91	2.88	2.94	0.359		12.1
	2		3.97	3.94	4.00	0.405		
Heptachlor	1		3.07	3.04	3.10	0.338		2.5
	2		4.05	4.02	4.08	0.346		
Aldrin	1		3.32	3.29	3.35	0.233		13.3
	2		4.40	4.37	4.43	0.266		
Chlordane (.alpha.)	1		4.11	4.08	4.14	0.363		11.8
	2		5.35	5.32	5.38	0.409		
4,4'-DDE	1		4.20	4.17	4.23	0.342		12.4
	2		5.52	5.49	5.55	0.388		
Endosulfan I	1		4.23	4.21	4.27	0.377		6.5
	2		5.41	5.38	5.44	0.402		
Dieldrin	1		4.48	4.45	4.51	0.380		10.5
	2		5.70	5.67	5.73	0.422		
Endrin	1		4.70	4.68	4.74	0.402		0.5
	2		6.02	5.98	6.04	0.400		
4,4'-DDD	1		4.80	4.77	4.83	0.365		26.3
	2		6.12	6.09	6.15	0.475		
Endosulfan II	1		4.93	4.90	4.96	0.366		16.4
	2		6.23	6.20	6.26	0.432		
4,4'-DDT	1		5.09	5.06	5.12	0.410		17.2
	2		6.44	6.41	6.47	0.487		
Endosulfan sulfate	1		5.79	5.77	5.83	0.418		12.3
	2		6.86	6.83	6.89	0.473		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 480-631179/3-A

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 06/24/2022 09:58 Date Analyzed (2): 06/24/2022 09:58

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		2.48	2.45	2.51	0.340		8.1
	2		3.27	3.23	3.29	0.368		
Lindane	1		2.71	2.68	2.74	0.350		11.4
	2		3.60	3.57	3.63	0.393		
beta-BHC	1		2.77	2.74	2.80	0.419		6.7
	2		3.67	3.64	3.70	0.448		
delta-BHC	1		2.91	2.88	2.94	0.398		12.8
	2		3.97	3.94	4.00	0.452		
Heptachlor	1		3.07	3.04	3.10	0.399		8.0
	2		4.05	4.02	4.08	0.432		
Aldrin	1		3.31	3.29	3.35	0.286		14.5
	2		4.40	4.37	4.43	0.331		
Chlordane (.alpha.)	1		4.11	4.08	4.14	0.408		12.4
	2		5.35	5.32	5.38	0.462		
4,4'-DDE	1		4.20	4.17	4.23	0.379		13.2
	2		5.52	5.49	5.55	0.433		
Endosulfan I	1		4.23	4.21	4.27	0.424		9.6
	2		5.41	5.38	5.44	0.466		
Dieldrin	1		4.48	4.45	4.51	0.420		12.0
	2		5.70	5.67	5.73	0.473		
Endrin	1		4.70	4.68	4.74	0.447		1.2
	2		6.02	5.98	6.04	0.452		
4,4'-DDD	1		4.80	4.77	4.83	0.403		25.3
	2		6.12	6.09	6.15	0.520		
Endosulfan II	1		4.93	4.90	4.96	0.397		16.7
	2		6.23	6.20	6.26	0.470		
4,4'-DDT	1		5.09	5.06	5.12	0.453		14.8
	2		6.45	6.41	6.47	0.526		
Endosulfan sulfate	1		5.79	5.77	5.83	0.429		16.9
	2		6.86	6.83	6.89	0.508		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-631723/2-A

Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25

Date Analyzed (1): 06/28/2022 09:54 Date Analyzed (2): 06/28/2022 09:54

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		2.83	2.80	2.86	9.29		34.1
	2		3.38	3.35	3.41	13.1		
Lindane	1		3.07	3.04	3.10	11.1		21.2
	2		3.72	3.69	3.75	13.7		
beta-BHC	1		3.14	3.11	3.17	13.3		4.0
	2		3.79	3.76	3.82	13.8		
delta-BHC	1		3.29	3.26	3.32	11.9		6.8
	2		4.09	4.06	4.12	12.7		
Heptachlor	1		3.47	3.44	3.50	15.1		0.3
	2		4.18	4.15	4.21	15.1		
Aldrin	1		3.73	3.71	3.77	11.8		17.6
	2		4.52	4.50	4.56	14.1		
Chlordane (.alpha.)	1		4.57	4.54	4.60	13.0		11.7
	2		5.47	5.44	5.50	14.7		
4,4'-DDE	1		4.65	4.63	4.69	14.1		4.1
	2		5.63	5.61	5.67	14.7		
Endosulfan I	1		4.70	4.68	4.74	15.1		1.7
	2		5.54	5.51	5.57	15.3		
Dieldrin	1		4.95	4.92	4.98	16.1		6.8
	2		5.82	5.80	5.86	15.1		
Endrin	1		5.18	5.15	5.21	18.4		14.6
	2		6.14	6.11	6.17	15.9		
4,4'-DDD	1		5.26	5.23	5.29	17.1		6.8
	2		6.23	6.21	6.27	16.0		
Endosulfan II	1		5.41	5.38	5.44	15.5		4.2
	2		6.36	6.33	6.39	14.8		
4,4'-DDT	1		5.54	5.52	5.58	17.3		3.9
	2		6.56	6.53	6.59	16.6		
Endosulfan sulfate	1		6.27	6.25	6.31	16.2		39.9
	2		6.98	6.95	7.01	10.8		

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 480-199197-1

SDG No.:

Client Sample ID: Lab Sample ID: ICB 200-179551/11

Matrix: Water Lab File ID: PA220505ICAL11.d

Analysis Method: 537 (modified) Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/05/2022 16:02

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 179551 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.0169	J	0.050	0.014
335-67-1	Perfluorooctanoic acid (PFOA)	ND		0.050	0.019
375-95-1	Perfluorononanoic acid (PFNA)	0.0188	J	0.050	0.012
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		0.050	0.016
375-22-4	Perfluorobutanoic acid (PFBA)	ND		0.13	0.030
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.0173	J	0.050	0.014
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		0.050	0.017
307-24-4	Perfluorohexanoic acid (PFHxA)	0.0161	J	0.050	0.016
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		0.050	0.021
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		0.050	0.014
335-76-2	Perfluorodecanoic acid (PFDA)	0.0163	J	0.050	0.012
307-55-1	Perfluorododecanoic acid (PFDoA)	0.0172	J	0.050	0.012
72629-94-8	Perfluorotridecanoic acid (PFTriA)	0.0172	J	0.050	0.012
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.0220	J	0.050	0.016
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		0.050	0.023
335-77-3	Perfluorodecanesulfonic acid (PFDS)	0.0130	J	0.050	0.010
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	0.0147	J	0.050	0.010
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.13	0.048
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.0461	J	0.13	0.040
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		0.13	0.032
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		0.050	0.020

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

ICV Source: MEI_10_CCVL_00451 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00451

Analyte	ICVL 480-631484/7 06/23/2022 12:25				CCVL 480-631484/20 06/23/2022 23:59				CCVL 480-631484/24 06/24/2022 00:45			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.0127	J	0.0150	84	0.0129	J	0.0150	86	0.0124	J	0.0150	83
Barium	0.00209		0.00200	105	0.00208		0.00200	104	0.00207		0.00200	104
Beryllium	0.00204		0.00200	102	0.00201		0.00200	101	0.00202		0.00200	101
Cadmium	0.00209		0.00200	105	0.00208		0.00200	104	0.00195	J	0.00200	98
Copper	0.0108		0.0100	108	0.0103		0.0100	103	0.0104		0.0100	104
Lead	0.00892	J	0.0100	89	0.00871	J	0.0100	87	0.00869	J	0.0100	87
Manganese	0.00326		0.00300	109	0.00309		0.00300	103	0.00309		0.00300	103
Nickel	0.00939	J	0.0100	94	0.00898	J	0.0100	90	0.00904	J	0.0100	90
Selenium	0.0236	J	0.0250	94	0.0221	J	0.0250	89	0.0222	J	0.0250	89
Silver	0.00514	J	0.00600	86	0.00543	J	0.00600	91	0.00547	J	0.00600	91
Zinc	0.00935	J	0.0100	94	0.00907	J	0.0100	91	0.00949	J	0.0100	95
Chromium	0.00382	J	0.00400	96	0.00364	J	0.00400	91	0.00409		0.00400	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

ICV Source: MEI_10_CCVL_00451 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00451

Analyte	CCVL 480-631484/36 06/24/2022 01:30				CCVL 480-631484/48 06/24/2022 02:17							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.0119	J	0.0150	80	0.0114	J	0.0150	76				
Barium	0.00206		0.00200	103	0.00205		0.00200	103				
Beryllium	0.00204		0.00200	102	0.00202		0.00200	101				
Cadmium	0.00193	J	0.00200	97	0.00187	J	0.00200	94				
Copper	0.0103		0.0100	103	0.0102		0.0100	102				
Lead	0.00859	J	0.0100	86	0.00977	J	0.0100	98				
Manganese	0.00312		0.00300	104	0.00312		0.00300	104				
Nickel	0.00921	J	0.0100	92	0.00912	J	0.0100	91				
Selenium	0.0257		0.0250	103	0.0237	J	0.0250	95				
Silver	0.00513	J	0.00600	86	0.00519	J	0.00600	87				
Zinc	0.00896	J	0.0100	90	0.00921	J	0.0100	92				
Chromium	0.00396	J	0.00400	99	0.00392	J	0.00400	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-631187/1-A

Instrument Code: ICAP1 Batch No.: 631484

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-50-8	Copper	ND			6010C
7439-92-1	Lead	ND			6010C
7439-96-5	Manganese	0.000600	J		6010C
7440-02-0	Nickel	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-631437/1-A

Instrument Code: ICAP1 Batch No.: 631791

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-50-8	Copper	ND			6010C
7439-92-1	Lead	ND			6010C
7439-96-5	Manganese	0.0534	J		6010C
7440-02-0	Nickel	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-66-6	Zinc	ND			6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB113 (1-5) MS
Lab ID: 480-199197-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-199197-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 81.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	52.59		7.2		50.3	90	75-125		6010C
Barium	130.1		58.8		50.3	142	75-125	F1	6010C
Beryllium	46.22		0.78		50.3	90	75-125		6010C
Cadmium	45.46		0.21	J	50.3	90	75-125		6010C
Copper	73.02		28.3		50.3	89	75-125		6010C
Lead	223.8		108		50.3	229	75-125	F1	6010C
Manganese	601.4		732		50.3	-259	75-125	4	6010C
Nickel	69.66		24.5		50.3	90	75-125		6010C
Selenium	44.95		ND		50.3	89	75-125		6010C
Silver	11.57		ND		12.6	92	75-125		6010C
Zinc	112.8		71.8		50.3	81	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB113 (1-5) MSD
Lab ID: 480-199197-1 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-199197-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 81.0

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	50.01		48.4	88	75-125	5	20		6010C
Barium	127.5		48.4	142	75-125	2	20	F1	6010C
Beryllium	44.22		48.4	90	75-125	4	20		6010C
Cadmium	43.34		48.4	89	75-125	5	20		6010C
Copper	70.70		48.4	88	75-125	3	20		6010C
Lead	202.1		48.4	194	75-125	10	20	F1	6010C
Manganese	634.9		48.4	-200	75-125	5	20	4	6010C
Nickel	67.23		48.4	88	75-125	4	20		6010C
Selenium	43.27		48.4	89	75-125	4	20		6010C
Silver	10.96		12.1	91	75-125	5	20		6010C
Zinc	117.6		48.4	94	75-125	4	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 632445	Date: 07/02/2022 17:10		Prep Batch: 632404		Date: 07/01/2022 14:37						
9012B	480-199197-9	Cyanide, Total	ND		mg/Kg						
9012B	480-199197-9 MS	Cyanide, Total	ND		mg/Kg	0.0634	NC	85-115			
Batch ID: 632557	Date: 07/05/2022 13:31		Prep Batch: 632532		Date: 07/05/2022 11:57						
9012B	480-199197-6	Cyanide, Total	ND		mg/Kg						H *-
9012B	480-199197-6 MS	Cyanide, Total	ND		mg/Kg	0.0698	NC	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-199197-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 632202	Date: 06/30/2022 09:56		Prep Batch: 632161			Date: 06/30/2022 09:23					
						LCS Source: 10ppm CN MS_00238					
9012B	LCSSRM 480-632161/2-A	Cyanide, Total	4.59		mg/Kg	250	2	29-122			*-
Batch ID: 632449	Date: 07/02/2022 13:34		Prep Batch: 632392			Date: 07/01/2022 14:08					
						LCS Source: WC_CNsoil_ERA_00029					
9012B	LCSSRM 480-632392/2-A	Cyanide, Total	21.37		mg/Kg	70.2	30.4	40.0-15	9.5		*-
Batch ID: 632445	Date: 07/02/2022 17:04		Prep Batch: 632404			Date: 07/01/2022 14:37					
						LCS Source: WC_CNsoil_ERA_00029					
9012B	LCSSRM 480-632404/2-A	Cyanide, Total	29.82		mg/Kg	70.2	42.5	40.0-15	9.5		
Batch ID: 632557	Date: 07/05/2022 13:26		Prep Batch: 632532			Date: 07/05/2022 11:57					
						LCS Source: WC_CNsoil_ERA_00029					
9012B	LCSSRM 480-632532/2-A ^10X	Cyanide, Total	28.01		mg/Kg	70.2	39.9	40.0-15	9.5		*-
Batch ID: 632862	Date: 07/07/2022 15:49		Prep Batch: 632821			Date: 07/07/2022 12:37					
						LCS Source: WC_CNsoil_ERA_00029					
9012B	LCSSRM 480-632821/2-A ^10X	Cyanide, Total	30.22		mg/Kg	70.2	43.0	40.0-15	9.5		

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

Job Narrative
480-199197-2

Comments
No additional comments.

Receipt
The samples were received on 6/21/2022 4:23 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 3.5º C, 3.8º C, 4.2º C, 4.6º C and 5.1º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Client Sample ID: SB113 (1-5)
Lab Sample ID: 480-199197-1

Date Collected: 06/20/22 09:50
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 81.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1221	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1232	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1242	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1248	ND		0.29	0.056	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1254	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1260	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1262	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1
PCB-1268	ND		0.29	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
Tetrachloro-m-xylene	*118*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:03*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:03*	*1*

Client Sample ID: SB113 (15-18)
Lab Sample ID: 480-199197-2

Date Collected: 06/20/22 10:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 95.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1254	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1260	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1262	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1
PCB-1268	ND		0.20	0.096	mg/Kg	☼	07/14/22 15:44	07/17/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
Tetrachloro-m-xylene	*111*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:16*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:16*	*1*

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1221	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1232	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1242	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1248	ND		0.20	0.039	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1254	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1260	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1

Client Sample ID: SB-114 (0.5-2.0)
Lab Sample ID: 480-199197-3

Date Collected: 06/20/22 11:12
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 91.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1
PCB-1268	ND		0.20	0.094	mg/Kg	☼	07/14/22 15:44	07/17/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
Tetrachloro-m-xylene	*114*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:30*	*1*
DCB Decachlorobiphenyl	*107*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:30*	*1*

Client Sample ID: SB-114 (6.0-10.0)
Lab Sample ID: 480-199197-4

Date Collected: 06/20/22 11:23
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1221	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1232	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1242	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1248	ND		0.28	0.055	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1262	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1
PCB-1268	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/17/22 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
Tetrachloro-m-xylene	*113*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:43*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:43*	*1*

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5

Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1221	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1232	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1242	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1248	ND		0.19	0.037	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1254	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1260	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1262	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1
PCB-1268	ND		0.19	0.088	mg/Kg	☼	07/14/22 15:44	07/17/22 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:57*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*07/14/22 15:44*	*07/17/22 23:57*	*1*
DCB Decachlorobiphenyl	*97*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:57*	*1*

Client Sample ID: SB-114 (12-16)
Lab Sample ID: 480-199197-5

Date Collected: 06/20/22 11:38
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/17/22 23:57*	*1*

Client Sample ID: SB-115 (0-3)
Lab Sample ID: 480-199197-6

Date Collected: 06/20/22 14:05
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 85.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1221	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1232	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1242	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1248	ND		0.20	0.040	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1254	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1260	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1262	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1
PCB-1268	ND		0.20	0.095	mg/Kg	☼	07/14/22 15:44	07/18/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
Tetrachloro-m-xylene	*116*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
DCB Decachlorobiphenyl	*95*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:10*	*1*
DCB Decachlorobiphenyl	*107*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:10*	*1*

Client Sample ID: SB-115 (6-8)
Lab Sample ID: 480-199197-7

Date Collected: 06/20/22 14:13
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 79.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1221	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1232	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1242	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1248	ND		0.27	0.052	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1262	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1
PCB-1268	ND		0.27	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
DCB Decachlorobiphenyl	*95*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:24*	*1*
DCB Decachlorobiphenyl	*106*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:24*	*1*

Client Sample ID: SB-116 (0.5-2.5)
Lab Sample ID: 480-199197-8

Date Collected: 06/20/22 14:52
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 84.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1221	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1232	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1242	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1248	ND		0.22	0.044	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1262	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1
PCB-1268	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
Tetrachloro-m-xylene	*114*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
DCB Decachlorobiphenyl	*99*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:37*	*1*
DCB Decachlorobiphenyl	*111*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:37*	*1*

Client Sample ID: SB-116 (6.0-7.5)
Lab Sample ID: 480-199197-9

Date Collected: 06/20/22 15:10
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 88.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1262	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1
PCB-1268	ND		0.22	0.10	mg/Kg	☼	07/14/22 15:44	07/18/22 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
Tetrachloro-m-xylene	*117*		*60 - 154*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
DCB Decachlorobiphenyl	*96*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:50*	*1*
DCB Decachlorobiphenyl	*108*		*65 - 174*	*07/14/22 15:44*	*07/18/22 00:50*	*1*

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10

Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1221	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1232	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1242	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1248	ND		0.26	0.050	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1254	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1260	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1

Client Sample ID: SB-117 (0.5-3.0)
Lab Sample ID: 480-199197-10

Date Collected: 06/20/22 15:33
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 83.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1
PCB-1268	ND		0.26	0.12	mg/Kg	☼	07/14/22 15:44	07/18/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
Tetrachloro-m-xylene	*112*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:04*	*1*
DCB Decachlorobiphenyl	*105*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:04*	*1*

Client Sample ID: SB-117 (8-10)
Lab Sample ID: 480-199197-11

Date Collected: 06/20/22 15:39
Matrix: Solid
Date Received: 06/21/22 16:23
Percent Solids: 78.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1221	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1232	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1242	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1248	ND		0.28	0.054	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1262	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1
PCB-1268	ND		0.28	0.13	mg/Kg	☼	07/14/22 15:44	07/18/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
Tetrachloro-m-xylene	*110*		*60 - 154*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:17*	*1*
DCB Decachlorobiphenyl	*105*		*65 - 174*	*07/14/22 15:44*	*07/18/22 01:17*	*1*

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19

Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1221	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1232	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1242	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1248	ND		0.50	0.18	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1254	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1260	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1262	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1
PCB-1268	ND		0.50	0.25	ug/L		07/18/22 08:37	07/19/22 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*39 - 121*	*07/18/22 08:37*	*07/19/22 17:24*	*1*
Tetrachloro-m-xylene	*66*		*39 - 121*	*07/18/22 08:37*	*07/19/22 17:24*	*1*
DCB Decachlorobiphenyl	*39*		*19 - 120*	*07/18/22 08:37*	*07/19/22 17:24*	*1*

Client: Matrix Environmental Technologies Inc
Job ID: 480-199197-2
Project/Site: Project # 18-046 - Lakeside Village Apts

Client Sample ID: Equipment Blank
Lab Sample ID: 480-199197-19
Date Collected: 06/20/22 17:33
Matrix: Water
Date Received: 06/21/22 16:23

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43		19 - 120	07/18/22 08:37	07/19/22 17:24	1

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-199197-2

SDG No.:

Matrix: Solid Level: Low Lab File ID: 7_123-204.D

Lab ID: 480-199197-1 MSD Client ID: SB113 (1-5) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
PCB-1016	2.52	2.76	109	20	50	50-177	
PCB-1260	2.52	2.83	112	20	50	33-200	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-199197-2

SDG No.:

Lab Sample ID: ICV 480-626504/30 Calibration Date: 05/18/2022 02:04

Instrument ID: HP6890-7 Calib Start Date: 05/18/2022 01:24

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 05/18/2022 01:50

Lab File ID: 7_120-074.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin2		0.0167		0.478	0.500	-4.4	20.0
PCB-1242 Peak 2	Lin2		0.0198		0.466	0.500	-6.9	20.0
PCB-1242 Peak 3	Lin2		0.0504		0.472	0.500	-5.6	20.0
PCB-1242 Peak 4	Lin2		0.0280		0.462	0.500	-7.5	20.0
PCB-1242 Peak 5	Lin2		0.0214		0.480	0.500	-4.1	20.0
PCB-1268 Peak 1	Lin2		0.1471		0.493	0.502	-1.7	20.0
PCB-1268 Peak 2	Lin2		0.1306		0.484	0.502	-3.5	20.0
PCB-1268 Peak 3	Lin2		0.1227		0.531	0.502	5.7	20.0
PCB-1268 Peak 4	Lin2		0.0350		0.334	0.502	-33.5*	20.0
PCB-1268 Peak 5	Lin2		0.3156		0.448	0.502	-10.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-199197-2

SDG No.:

Lab Sample ID: ICV 480-626504/30 Calibration Date: 05/18/2022 02:04

Instrument ID: HP6890-7 Calib Start Date: 05/18/2022 01:24

GC Column: ZB-35 ID: 0.53(mm) Calib End Date: 05/18/2022 01:50

Lab File ID: 7_120-074.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin2		0.0147		0.483	0.500	-3.4	20.0
PCB-1242 Peak 2	Lin2		0.0321		0.476	0.500	-4.8	20.0
PCB-1242 Peak 3	Lin2		0.0385		0.459	0.500	-8.1	20.0
PCB-1242 Peak 4	Lin2		0.0243		0.468	0.500	-6.4	20.0
PCB-1242 Peak 5	Lin2		0.0229		0.471	0.500	-5.8	20.0
PCB-1268 Peak 1	Lin2		0.1208		0.499	0.502	-0.5	20.0
PCB-1268 Peak 2	Lin2		0.1110		0.491	0.502	-2.1	20.0
PCB-1268 Peak 3	Lin2		0.1035		0.541	0.502	7.8	20.0
PCB-1268 Peak 4	Lin2		0.0295		0.344	0.502	-31.6*	20.0
PCB-1268 Peak 5	Lin2		0.2813		0.445	0.502	-11.3	20.0

APPENDIX E

Health and Safety Plan

HEALTH AND SAFETY PLAN

for

BROWNFIELD CLEANUP PROGRAM

REVISED: January 20, 2023

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
Site #C915344

Prepared For:
65 Lake Avenue LLC

Prepared By:

MATRIX
ENVIRONMENTAL TECHNOLOGIES INC.

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1.0 INTRODUCTION

This Health & Safety Plan (HASP) has been developed for the remedial work to be completed by Matrix Environmental Technologies Inc. (METI) on behalf of 65 Lake Avenue LLC as part of the Brownfield Cleanup Program (BCP). The proposed work will include remedial excavation, SVE well and system installation, injection of permanganate for *in situ* chemical oxidation (ISCO), soil and groundwater sampling, and report preparation. Such activities mandate the performance of tasks with a potential to expose remediation workers to various environmental contaminants previously identified on-site, primarily involving chlorinated volatile organic compounds (VOCs). Limited exposure potential may be related to commercial substances used for equipment decontamination as well oxidant (potassium permanganate). A general listing of the work tasks to be completed is as follows:

1. Remedial excavation of 680 cubic yards (1,090 tons) of soil to a maximum depth of 7 feet below grade;
2. Soil sample collection and analysis;
3. Installation of horizontal SVE wells and SVE system;
4. ISCO injection; and
5. Groundwater sampling using disposable bailers.

The intent of this HASP is to identify and present appropriate safety procedures to be followed by Site workers involved with project activities. Such procedures are designed to reduce the risk of remediation worker exposure to the primary substances of concern.

The procedures also address several other physical hazards that may be encountered during remedial activities. Recommended safety procedures presented herein may be modified as the work proceeds based upon conditions encountered at the Site with the mutual agreement of METI, the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), and the property owner. A copy of this HASP (including any modifications) will be maintained on-site throughout field work to be used as a reference by METI and their subcontractors. An initial safety meeting will be conducted at the Site prior to the initiation of the remedial activities to inform all affected remediation workers of potential exposures and hazards.

2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Description

The site is addressed as 65-67 Lake Avenue in the Town of Lancaster, Erie County, New York and consists of two parcels totaling approximately 1.18 acres of land. Onsite structures include a one-story apartment building constructed in 1903 on the 67 Lake Avenue parcel and three (3) two-story townhomes constructed in 2006 on the 65 Lake Avenue parcel. The Site is bordered by undeveloped land to the south, residences to the north and west, and Lake Avenue to the east. Cayuga Creek is located approximately 200 feet to the southwest. A Site location map showing the BCP Site boundaries is included as **Figure 1**.

2.2 Site History

Historically, the eastern portion of the Site was utilized as a dry cleaner from at least 1949 through 1980. The former dry-cleaning building was located on the eastern portion of 65 Lake Avenue and the northern portion of 67 Lake Avenue and was removed or demolished by at least 1995. The current Site buildings were constructed in 1903 (67 Lake Avenue) and 2006 (65 Lake Avenue).

Multiple subsurface investigations have been completed at the Site prior to and following the Site's acceptance into the BCP. Chlorinated solvents were identified in soil and groundwater samples associated with past on-site dry cleaning operations. Due to the detections of chlorinated solvents, vapor intrusion studies were completed in February and April 2019 within the four (4) residential buildings. Vapor intrusion testing results identified chlorinated solvents, specifically tetrachloroethene (PCE) and trichloroethene (TCE), within both sub-slab and indoor air samples. Based on guidance from the New York State Department of Health (NYSDOH), the concentrations of these solvents required mitigation in Building A on 65 Lake Avenue and Building 1 on 67 Lake Avenue. Mitigation was not required in Building B or Building C. As a result, sub-slab depressurization systems (SSDS) were installed within Building A and Building 1 in November and December 2019 to mitigate vapor intrusion.

3.0 ASSIGNED RESPONSIBILITIES

Specific safety responsibilities have been established for the remedial work as indicated below:

3.1 Environmental Health & Safety Manager

The Environmental Health & Safety Manager (EHSM) has the authority to commit any resources necessary to implement an effective safety program, thereby protecting the health of affected site workers. The EHSM will delegate responsibilities, as necessary, to the Project Manager (PM) in order to facilitate various aspects of this HASP. The resolution of any on-site safety issues encountered during remedial work will be coordinated by the EHSM.

3.2 Project Manager

The Project Manager (PM) will be responsible for the overall project including implementation of the HASP. The PM will coordinate with the Site Safety Officer (SSO) to ensure that project goals of the project are met in a manner consistent with the HASP requirements.

3.3 Site Safety Officer

The Site Safety Officer (SSO) will be responsible for ensuring that the recommended safety procedures are followed during sampling activities. The SSO will supervise METI employees and subcontractors during field work. The SSO is knowledgeable of general construction safety practices and remediation worker protection techniques. Responsibilities will include:

- Ensuring day to day compliance with HASP safety procedures;
- Requiring any person entering the work site to read, sign and fully understand the contents of the HASP;

- Maintaining adequate PPE supplies;
- Calibration and maintenance of monitoring instruments;
- Authority to stop work activities any time unsafe work conditions are identified;
- Implementing personnel decontamination procedures;
- Initiating emergency response procedures;
- Maintaining a diary of activities with safety relevance; and
- Establishing and assuring adequate records of all:
  - Occupational injuries and illnesses;
  - Accident investigations;
  - Reports to insurance carrier or state compensation agencies;
  - Records and reports required by local, state and/or federal agencies; and
  - Property or equipment damage.

Visitors to the site such as regulators and those performing non-intrusive tasks will be required to review the HASP only and will not be required to complete waste site training and medical surveillance. Refer to **Appendix C** for visitor policy.

3.4 Site Workers

Affected Site workers will include METI employees and subcontractor employees. Site workers must comply with aspects of the HASP and its safety procedures. Personnel entering the Site will have completed training requirements for hazardous waste site operations in accordance with OSHA 29CFR 1910.120 (c); 29CRF 1910.146 (d) and 29CFR 1910.147 (c). Site workers and SSO must have completed appropriate medical surveillance as required by OSHA 29CRF 1910.120(f).

3.5 Subcontractors

Subcontractors are responsible for development of their own HASP that is at least as stringent. A copy of this HASP will be provided to the subcontractors for information purposes. Subcontractors will be informed of potential health and safety hazards as well as environmental monitoring data collected during field activities.

4.0 TRAINING and SAFTETY MEETINGS

4.1 Training

Personnel assigned to the Site will be in compliance with the training requirements of 29 CFR 1910 and 1926 as listed below. Site personnel will have met one of the following requirements prior to the start of on-site activities.

- A 40 hour minimum hazardous materials safety and health course, as stipulated in 29 CFR 1926.65 e(3); and
- An 8-hour minimum refresher course per year after the 40-hour minimum training has occurred (29 CFR 1926.65.e[8]).

On-site managers and supervisors must be in compliance with the additional supervisory training requirements of 29 CFR 1926.65.e(4). Emergency responders must be in compliance with the additional training requirements of 29 CFR 1926.65.e(7). Appropriate certificates of participating in training programs will be maintained by METI.

4.2 Safety Meetings

Site workers and subcontractors will be familiar with the Site layout and have an understanding of known and potential hazards as detailed within this HASP. On-site safety meetings will occur daily or as needed to assist Site workers and subcontractors in conducting activities safely. Attending personnel must sign the attendance sheet included as **Appendix A**. Site workers must attend a safety meeting prior to being allowed to work on-site.

5.0 PERSONAL PROTECTIVE EQUIPMENT

An important aspect for Site worker safety is correct selection of personal protective equipment (PPE). The levels of protection listed below are based on 29 CFR 1910.120. The majority of Site activities will be conducted in Level D protection. This level of protection was selected based on the types and measured concentrations of the hazardous substances in the samples previously collected and their associated hazards and/or toxicity; and on potential or measured exposure to substances in air, splashes of liquids or others indirect contact with material due to the task being performed.

- Level D will generally consist of the following:
  - Coveralls; or long pants and long sleeve shirt to provide protection from dermal contact with soil
  - High visibility safety vest
  - Steel toe work boots
  - Safety glasses
  - Hard hat
  - Chemical-resistant gloves

  Additional equipment can be donned at SSO requirements, including disposable boots, hearing protection, safety vest, or disposable outer chemical coveralls (Tyvek suits).

- Level C will generally consist of the following:
  - Full or half face air purifying respirator (APR) equipped with appropriate organic vapor canisters and/or other chemical cartridges.
  - Chemical resistant clothing, such as Tyvek suit. Suits will be one piece with booties, hood, and elastic wristbands.
  - High visibility safety vest (disposable)
  - Outer chemical-resistant gloves (i.e. nitrile or neoprene) and inner latex gloves
  - Steel toe work boots
  - Hard hat

- Level B will generally consist of the following:

- Self-contained breathing apparatus (SCBA) in a pressure demand mode or supplied air with escape SCBA.
- Chemical resistant closing, such as Tyvek suit. Suits will be one piece with booties, hood, and elastic wristbands.
- High visibility safety vest (disposable)
- Outer chemical-resistant gloves (i.e. nitrile or neoprene) and inner latex gloves
- Chemical resistant tape over PPE as needed (i.e. at glove/Tyvek location)
- Steel toe work boots
- Hard hat

6.0 HAZARD ANALYSIS

Many hazards are associated with environmental work on a Site. The hazards listed below deal specifically with those associated with the management of potentially contaminated soil, air, and groundwater; physical hazards; and environmental hazards.

6.1 Chemical Hazards

The primary contaminants of concern in soil and groundwater are chlorinated VOCs including PCE, TCE, cis-1,2-dichloroethene (cis-DCE), vinyl chloride, and acetone. A summary of hazards associated with these chemicals is include in **Table 1**. The list has been developed based on planned activities and potential Site conditions.

Chemical hazards are also associated with the mixing and application of oxidant (potassium permanganate) on site. An MSDS for potassium permanganate is included in **Appendix G**, and a detailed Job Safety Analysis (JSA) is included in **Appendix B.**

The most likely routes of chemical exposure during Site work include absorption through the skin and inhalation of airborne particles. The information was used to develop the levels of personal protective equipment (PPE) to be used for the duration of remedial work.

6.2 Physical/General Hazards

Based on the proposed scope of work, the following potential physical hazards have been identified:

- Slip/Trip/Fall – Good housekeeping practices, such as cleaning up garbage and stored materials from the work area, are essential to reduce the occurrence of trips and falls.

- Vehicle and machinery in motion hazards – A drill rig will be utilized for soil sample collection. To minimize potential hazards, the drilling subcontractor will be responsible for health and safety of its personnel, equipment, and operations. Utilities must be called in via Dig Safely New York. Cones and flags will be set up around each work area as necessary. Workers must be aware of pinch points when setting the rig and lowering mast/pull rods. PPE must be worn to prevent eye injury. All body parts, clothing, and manual tools must be kept 3-5 feet from moving equipment when possible. Gloves and

PPE must be worn when working with rods and cleaning equipment. Monitoring of the breathing zone will be conducted as necessary to ensure vapors are below action levels. Each worker must have an awareness of muscle strain. All sampling liners must be opened in a motion away from body and hands. The rig cannot be moved with the mast in a raised position.

- Electrical – Heavy equipment (e.g., excavator, backhoe, drill rig) shall not be operated within 10 feet of high voltage lines. Working near wet areas should also be taken into consideration when working with electrical equipment; surge protectors and ground fault protectors must be used in such conditions.

- Noise – Heavy machinery creates excessive and loud noise levels. Overexposure can result in hearing damage or loss. Proper hearing protection shall be worn during exposure to noise from heavy equipment.

- Underground utilities– The proper utility clearance will be obtained before conducting any digging or drilling operations.

- Soil sampling through use of heavy equipment – Personal protective equipment (PPE), including steel-toed boots, safety glasses, hard hats, and high-visibility clothing, must be worn. Personnel should not walk directly in back of, or to the side of, heavy equipment without the operator's knowledge. Engineering controls can be implemented such as water for particulate control.

- Cold Stress –Frostbite and hypothermia can occur quickly and the signs and symptoms of such should be known. Signs of hypothermia include slurred speech, confusion, and an overall warm sensation. Frostbite can be identified by red/frozen skin, numbness, and lack of sensation on the skin. In each case, the victim should be moved to a warm place. With frostbite, the affected area should be placed in warm water and wrapped with a warm towel. Medical attention is necessary after initial treatment. Heat and cold stress are discussed in further detail in **Appendix I**.

- Heat stress - Heat stress is a severe hazard that can result in heat fatigue or even heat stroke. Signs and symptoms of heat stroke include red, dry, and hot skin as well as confusion, a rapid pulse, and nausea. Adequate shade and drinking liquids should be provided to personnel working in hot weather conditions. If a person is suspected to be suffering from heat fatigue or stroke, transport to a cool place and place cold compresses on the neck and armpits; call 911 immediately. Heat and cold stress are discussed in further detail in **Appendix I.**

- Weather (i.e. lightning storms) – On-site personnel shall cease operation at the first sign of a thunderstorm or lightning strike. Workers should seek shelter within a permanent building and stay away from tall structures trees, telephone poles, and drill rigs/equipment.

6.3 Biological Hazards

Biological hazards can be caused by contact with land animals, birds, insects, and plants. Irritation, illness, and, in extreme cases, permanent disability or death, can occur. The Site is

located in a suburban area within the Town of Lancaster and field work will occur in spring through late fall. Contact with rodents, more specifically rats, shall be avoided. If bitten or scratched by any type of rodent or fur-bearing animal, medical treatment should be sought immediately. Insect bites and stings are not considered a serious threat due to time of year. Insect bites and stings can cause irritation and transmit disease. If stung by an insect, apply cold water and soap and immediately apply a cold compress to the area to limit swelling. If the victim is allergic to such bite or sting, immediate medical care may be necessary.

7.0 SITE MONITORING

Air monitoring will be performed on-site in order to track contamination levels. By knowing these levels, safety is insured for personnel working on-site. A photoionization detector (PID) equipped with an 11.7 eV lamp will be utilized during field monitoring.

7.1 Excavation, Soil Borings, Test Pits and Monitoring Wells

On-site monitoring will be completed by the SSO or Site worker assigned to oversee remedial excavation, drilling operations, soil sampling, and/or monitoring well installation/sampling. The PID will be utilized to monitor the breathing zone, the borehole, and subsurface samples for the presence of VOCs. Auger spoils will also be monitored. Fluids produced from monitoring well development and sampling will also be monitored with the PID.

7.2 Action Levels

Work area ambient air monitoring for VOCs will be completed periodically within the breathing zone. Action levels will be based on the PID readings. The action level assumes that background level of organics is close to non-detect. Background VOC readings will be recorded daily. Action levels are listed below.

Sustained PID Reading	Action	Minimum Respiratory Protection
0 to 10 ppm	None	None – Level D
10 to 25 ppm	Monitor for 15 minutes; if concentration does not decrease to under 10 ppm, upgrade PPE; consider venting area	Full-face Air-purifying respirator with organic vapor cartridges – Level C
>25 ppm	Monitor for 15 minutes; Consider venting area, upgrade PPE	Suspend work or supplied-air full face respirator – Level B

7.3 Particulate Monitoring

Monitoring for particulates will be completed periodically in the Site worker breathing zone. The decision to upgrade levels of PPE will be made in conjunction with consideration for weather conditions, wind conditions, and anticipated duration of field activity. Background particulate concentrations will be measured and recorded on a daily basis.

8.0 COMMUNITY AIR MONITORING PLAN

A Community Air Monitoring Program (CAMP) requires monitoring of VOCs and particulates at downwind locations and is intended to provide a level of protection for neighboring residences and businesses. Generic (periodic) CAMP monitoring will be performed during non-intrusive actions, such as the collection of surface soil samples or groundwater from existing wells, and during intrusive activities not taking place within 20 feet of a potentially exposed individual or structure. Special requirements CAMP monitoring will be conducted during ground intrusive activities taking place within 20 feet of a potentially exposed individual or structure. Refer to the CAMP (METI, March 2020) for detailed monitoring requirements and action levels.

9.0 SITE ACTIVITY AREAS AND ACCESS CONTROL

Prior to the initiation of remedial work, three work zones will be established to facilitate the implementation of the HASP. Prior to commencement of field work, a further definition of where these zones will be set up will be established. Guidelines for establishing work areas follows.

- Exclusion Zone (EZ) – Primary exclusion zones will be established around each intrusive field activity, such as soil boring or excavation area. Locations will be identified by the placement of orange cones. Site workers in these areas must wear appropriate PPE. Upon leaving Work Zone, if PPE becomes contaminated, site workers must remove and dispose of gloves and any other disposable PPE. After removing the PPE, site workers should thoroughly wash their hands. Access to the EZ will be limited to Site workers only for both safety and data integrity purposes.

- Contamination Reduction Zone (CRZ) – A CRZ will be established between the EZ and property limit. The CRZ provides an area for decontamination of Site equipment. The specific location of this pad will be determined in the field. It will be located out of the way of Site activities and sampling activities. An Alconox solution will be available to decontaminate equipment used in the sampling locations. The SSO will monitor equipment cleaning procedures to ensure their effectiveness. Equipment will be adequately cleaned and Site workers will remove contaminated PPE prior to either entering the Support Zone or leaving the site for the day once sampling activities have been completed. A fire extinguisher and first aid kit will be located in this area.

- Support Zone (SZ) – The SZ is considered to be clean, and PPE are not required. The SZ will be an area on-site adjacent to the CRZ in which supplies or equipment are stored and maintained. PPE is donned in the SZ prior to entering the CRZ.

10.0 DECONTAMINATION PROCEDURES

Decontamination procedures for personal and equipment will be implemented when exiting the work area. Decontamination involves physically removing contaminants and in general include removal of any contamination, avoiding spreading contamination from the work zone, and avoiding exposure of unprotected personnel outside the work zone to contaminants.

10.1 Prevention of Contamination

The first step in decontamination is to establish standard operating procedures that minimize contact with hazardous substances and thereby the potential for contamination. Site workers should be aware of the importance of minimizing contact with hazardous substances and the use of appropriate practices and procedures for Site operations. METI utilizes this approach by ensuring site workers:

- Stress work practices that minimize contact with hazardous substances (e.g., do not walk through areas of obvious contamination, do not directly touch potentially hazardous substances, etc.);

- Protect sampling instruments from gross contamination by bagging and making openings in the bag for sample ports and sensors that contact site materials;

- Wear disposable outer garments and use disposable equipment where appropriate.

10.2 Personal Decontamination

The degree of contamination exposure is a function of both a particular task and the physical environment in which it takes place. The following decontamination procedures will remain flexible, thereby allowing the decontamination crew to respond appropriately to changing conditions at the Site. It is expected that Site workers will be exposed to soil or fill material that is potentially contaminated with chlorinated solvents, and to chemical oxidant during mixing and application. On-site sampling activities will be carried out in such a manner as to avoid gross contamination of Site workers, personal protective equipment, machinery, and equipment.

Between sampling locations (or sometimes between samples at one sampling location), and upon the completion of the daily field activities, site workers will proceed to the CRZ. Equipment (e.g., sampling tubes, shovels, tools, etc.) will be decontaminated in this area. Prior to leaving the site for breaks, at the end of the work shift, or when PPE has been grossly contaminated, disposable boot covers, gloves, and suits will be removed and placed in a drum designated for the disposal of these materials.

10.3 Decontamination during Medical Emergencies

In the event of a minor, non-life-threatening injury or medical problem, Site workers should follow the decontamination procedures as defined above and then administer first aid. If prompt, lifesaving first aid is required, decontamination procedures should be omitted and immediate first aid should be administered, unless the environmental conditions are considered immediately dangerous to Life or Health (IDLH). In this case, the victim should be moved to a clean area and lifesaving care should be instituted immediately without considering decontamination.

Outside garments can be removed (depending on the weather) if they do not cause delays, interfere with treatment or aggravate the problem. Respirators and backpacks must always be removed. Chemical-resistant clothing can be cut away. If the outer contaminated garments cannot be safely removed, the individual should be wrapped in plastic, rubber or blankets to help prevent

contaminating the insides of ambulances and medical personnel. Outside garments will then be removed at the medical facility. No attempt should be made to wash or rinse the victim at the site. One exception would be if it is known that the individual has been contaminated with an extremely toxic or corrosive material which could also cause severe injury or loss of life.

10.4 Decontamination of Equipment

Decontamination efforts will be conducted in the CRZ. Gross contamination will first be removed with plastic scrapers or other appropriate tools. The equipment will be decontaminated at a temporary equipment decontamination pad in the CRZ via hand washing or pressure washing, as needed. Alconox and water will then be used to wash the equipment with a cleaning brush. The equipment will then be rinsed with deionized water. The equipment will then be allowed to air dry for a sufficient time prior to reuse or removal from the site. Downhole tools and augers can be hand washed or pressure washed.

The decontamination of the drilling rig will be undertaken if necessary when all on-site activities have been completed. Initially, scraping of the equipment will remove heavily caked materials prior to washing. Washing will then be accomplished using Alconox and water or pressure washing. Water generated during decontamination activities will be collected, stored, and profiled for future off-site disposal.

10.5 Disposal of the Contaminated Materials

Potentially contaminated materials (gloves, clothing, sample sleeves, etc.) will be bagged and segregated for proper disposal. Investigation-derived waste will be managed in accordance with NYSDEC guidance regulations. Any drill cuttings that are generated will be containerized for off-site disposal. All fluids collected during groundwater sampling will be containerized and managed appropriately subsequent to field activities.

11.0 EMERGENCY RESPONSE

In the event of an emergency, the SSO will coordinate on-site emergency response activities. Appropriate authorities will be immediately notified of the nature and extent of the emergency. Emergency contact list is included in **Table 2**. The route and directions to the hospital are included as **Figure 2**.

11.1 Response Procedures

In the event of an emergency or acute exposure symptom, workers will signal distress to the SSO. The SSO will be responsible for the response to emergencies and must:

- Have available a summary of the associated risk potential of the project so that it can be provided to any authorities or response personnel in the event of an emergency;
- Maintain an Emergency Contact List (**Table 2**) and post in a visible location a map with directions to the nearest hospital (**Figure 2**); and
- Ensure appropriate safety equipment is available at the Site.

11.2 Communications

Cell phones will be the primary means of communicating with emergency support services/facilities.

11.3 Evacuation

In the event of an emergency situation, such as fire, explosion, etc., all personnel will evacuate and assemble in a designated assembly area. The SSO will contact outside services (i.e. police, fire, etc.) as required. Under no circumstances will personnel be allowed to re-enter the area once the emergency signal has been given. The SSO must see that emergency equipment is available and emergency personnel notified.

11.4 Fire or Explosion

Immediately evaluate the Site. The Lancaster Fire Department will be immediately advised of the situation and the identification of any hazardous materials involved.

11.5 Personal Injury

Only basic emergency first aid will be applied on-site as deemed necessary. The SSO will supply available chemical specific information to appropriate medical personnel, as requested. First Aid kits supplied by METI and its subcontractors will conform to Red Cross and other applicable good health standards and will consist of a weatherproof container with individually sealed packages for each type of item. First Aid kits will be fully equipped before being sent to the Site.

11.6 Adverse Weather Conditions

In the event of adverse weather conditions, the SSO will determine if work can continue without sacrificing the safety of Site workers. Some of the factors to be considered prior to determining if work should continue are the potential for heat stress, inclement weather-related working conditions, and the operation of field instruments.

11.7 Traffic, Heavy Equipment & Machinery

Site workers must remain aware of the heavy equipment and machinery being used during RI activities. Site workers will be required to wear a high visibility safety vest during on-site work activities.

11.8 Utilities

Prior to the beginning site activities, all available drawings of the facility will be examined to determine the presence of underground or utilities.

11.9 Emergency Contingency Plan

In the case of a spill emergency (e.g., tank/drum release, spill, fire, etc.), this section will describe the procedures to be followed during the event.

11.9.1 Contamination Emergency

It is unlikely that a contamination emergency will occur; however, if such an emergency does occur, the specific work area shall be shut down and immediately secured. The area in which the contamination occurred shall not be entered until the arrival of trained personnel who are properly equipped with the appropriate PPE and monitoring instrumentation.

11.9.2 Spill/Air Release

In the event of a spill or air release of hazardous materials on-site, the specific area of the spill or release shall be shut down and immediately secured. The area in which the spill or release occurred shall not be entered until the cause can be determined and Site safety can be evaluated. The NYSDEC Spill Response unit shall be notified immediately. The spilled material shall be immediately contained.

11.9.3 Unknown Drums or USTs

In the event that unidentified containerized substances, including USTs, are discovered during soil sampling or soil excavation, work will be ceased immediately until hazards are addressed. The SSO will then visually assess the situation and identify any leaks or releases from the container. If leaking is identified, the spilled material shall be immediately contained. Upon visual assessment of releases and safety, properly trained personnel will then sample and remove or dispose of the waste and/or container.

11.10 Additional Safety Practices

The following are important safety precautions and practices that will be enforced during the field activities.

- Eating, drinking, smoking, chewing gum or tobacco, or any activity that increases the probability of hand-to mouth transfer and ingestion of hazardous substances is prohibited during the RI activities.
- Remediation worker hands and face must be thoroughly washed before leaving the CRZ or before eating, drinking or other activity.
- Contact with potentially contaminated surfaces should be avoided whenever possible.
- The number of remediation workers and the amount of equipment should be minimized.
- Alcoholic beverages will not be consumed during work hours by site personnel; Personnel using prescription drugs may be limited in performing specific task (i.e. operating heavy equipment) without written authorization from physician.

12.0 RECORDS AND REPORTING

The SSO will be responsible for establishing and maintaining adequate records of activities which take place at the site. The records will pertain to site workers involved in the project, regardless of their employer, as well as any agency personnel. A basic list of the information to be maintained is as follows:

- Occupational injuries or illnesses.
- Accident investigations.
- Reports to insurance carrier or State Compensation agencies.
- Records and reports required by local, state and federal agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Related correspondence.
- Safety training level.

An Accident/Incident Report Form is included in **Appendix F**.

TABLES

Table 1
Hazard Characteristics of Potential Contaminants of Concern

Contaminant	Potentially Impacted Media	Carcinogenicity/Symptoms of Acute Exposure	Occupational Exposure Values* ACGIH TLV OSHA PEL NIOSH IDLH
Benzene	Soil, Groundwater	Confirmed human carcinogen. Symptoms include irritation to eyes, skin, nose, respiratory system; headache; nausea; giddiness, fatigue.	PEL - 10 ppm; IDLH - 500 ppm; TLV - 0.5 ppm; STEL - 2.5 ppm
Chlorinated Organic Compounds	Soil, Groundwater, Soil vapor	Exposure to the vapors of many chlorinated organic compounds such as vinyl chloride, tetrachloroethylene, 1,1,1-trichloroethane, trichloroethylene and 1,2-dichloroethylene and other chlorinated hydrocarbons may result in various symptoms including irritation of the eyes, nose and throat, drowsiness, dizziness, headache, blurred vision, uncoordination, mental confusion, flushed skin, tremors, nausea, vomiting, fatigue and cardiac arrhythmia. The liquid if splashed in the eyes, may cause burning irritation and damage. Repeated or prolonged skin contact with the liquid may cause dermatitis. Some of these compounds are considered to be potential human car-cinogens.	Refer to 29 CFR 1910.1017 for exposure values
Toluene	Soil, Groundwater	Insufficient data from carcinogenic studies to classify substance as a potential carcinogen. Symptoms include irritation to eyes, nose; fatigue; weakness; euphoria; headache; lacrimation.	PEL - 10 ppm; IDLH - 500 ppm; TLV - 20 ppm; STEL - 150 ppm
Ethyl Benzene	Soil, Groundwater	Confirmed animal carcinogen with unknown relevance to humans. Symptoms include irritation to eyes, skin, mucous membranes; headache; narcosis.	PEL - 5 ppm; IDLH - 800 ppm; TLV - 20 ppm; STEL - 30 ppm
o-, m-, and p-Xylenes	Soil, Groundwater	Insufficient data from carcinogenic studies to classify substance as a potential carcinogen. Symptoms include irritation to eyes, nose, throat; dizziness; excitement; drowsiness; nausea; vomiting.	PEL - 100 ppm; IDLH - 900 ppm; TLV - 100 ppm; STEL - 150 ppm
Polynuclear Aromatic Hydrocarbons (PAH's)	Soil, Groundwater	Many PAH's found in fuel oil and coal tar pitch volatiles (creosote) are confirmed human carcinogens. Symptoms include dermatitis and bronchitis.	Some PAH's have no established exposure values. Others considered coal tar pitch volatiles have an ACGIH TLV and OSHA PEL value of 0.2 mg/m^3.
Cadmium	Soil	Suspected human carcinogen. Symptoms include pulmonary edema; difficulty breathing; cough; tightness in chest; substernal pain; headache; chills; nausea; vomiting; diarrhea; asnosmia.	PEL - 0.2 mg/m3; IDLH - 50 mg/m3; TLV - 0.01 mg/m3 (these limits are expressed for Cd dust)
Chromium	Soil	Hexavalent chromium compounds are confirmed human carcinogens. Symptoms include irritation to the respiratory system; nasal septum perforation; sensitization dermatitis (hexavalents). Irritation to the eyes; sensitization dermatitis (trivalents).	PEL - 0.5 mg/m3; IDLH - 250 mg/m3; TLV - mg/m3 (insoluable)
Lead	Soil	Confirmed animal carcinogen with unknown relevance to humans. Symptoms include weakness; tremor; irritation to eye; constipation; abdominal pain.	PEL - 0.05 mg/m3; IDLH - 100 mg/m3; TLV - 0.5 mg/m3
Mercury	Soil	Insufficient data from carcinogenic studies to classify substance as a potential carcinogen. Symptoms include irritation to eyes, skin; cough; chest pain; difficulty breathing; irritability; indecision; headache; fatigue; weakness; salivation.	PEL - 0.025 mg/m3 (acceptable ceiling concentration); IDLH - 2 mg/m3; TLV - 0.025 mg/m3 (elemental/inorganic)
Polychlorinated Biphenyl (PCBs)	Soil	Confirmed human carcinogen. Symptoms include dermal and ocular lesions, irregular menstrual cycles and a lowered immune response. Other symptoms included fatigue, headache, cough, and unusual skin sores	PEL - 1 mg/m3; IDLH - 5 mg/m3; TLV - 1 mg/m3

ACGIH TLV – American Conference of Governmental Industrial Hygienists Threshold Limit Value; Concentrations in ppm of mg/m3 based on an 8-hour TWA

OSHA PEL – Occupational Safety and Health Admiration Permissible Exposure Limits; Concentrations are shown in parts per million (ppm) or milligrams per cubic meter (mg/m3) based on an 8-hour time weighted average (TWA)

NIOSH IDLH – National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health; Concentrations in ppm or mg/m3

OSHA STEL - Short Term Exposure Limit

Table 2
Emergency Contacts

Agency	Contact	Phone Number
Lancaster Police	Emergency	911
Lancaster Fire/First Aid	Emergency	911
Ambulance	Emergency	911
Poison Control Center	Emergency	911
Hospital	Sisters of Charity Hospital, St. Joseph Campus 2605 Harlem Road Cheektowaga, NY 14225	(716) 891-2400
NYSDOH	Sara Bogardus Empire State Plaza, Corning Tower Room 1787 Albany, NY 12237	(518) 402-7860
NYSDEC	Benjamin McPherson 270 Michigan Ave. Buffalo, NY 14203	(716) 851-7220
NYSDEC	SPILL Hotline	(800) 457-7362
Matrix Environmental Technologies, Inc.	3730 California Road PO Box 427 Orchard Park, NY 14127	(716) 662-0946
65 Lake Avenue, LLC (Owner)	Mark Aquino 32 Central Avenue Lancaster, NY 14086	(716) 681-1450

FIGURES

Notes:

1. Base maps adapted from Erie County Department of Environment Planning Office of GIS
2. Site boundaries correspond with tax boundaries for SBL #115.27-1-22.21 at 65 Lake Ave. and #115.27-1-23.11 at 67 Lake Ave.

25 years dedicated to a CLEANER ENVIRONMENT 1991-2016

PREPARED BY:

MATRIX
ENVIRONMENTAL TECHNOLOGIES INC.
3730 California Road
P.O. Box 427
Orchard Park, NY 14127
p:716.662.0745
www.matrixbiotech.com

PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	1/23/20

SCALE IN FEET: NOT TO SCALE

0

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

BCP Site Limits

DATE: NA

PROJECT NO.: 18-046

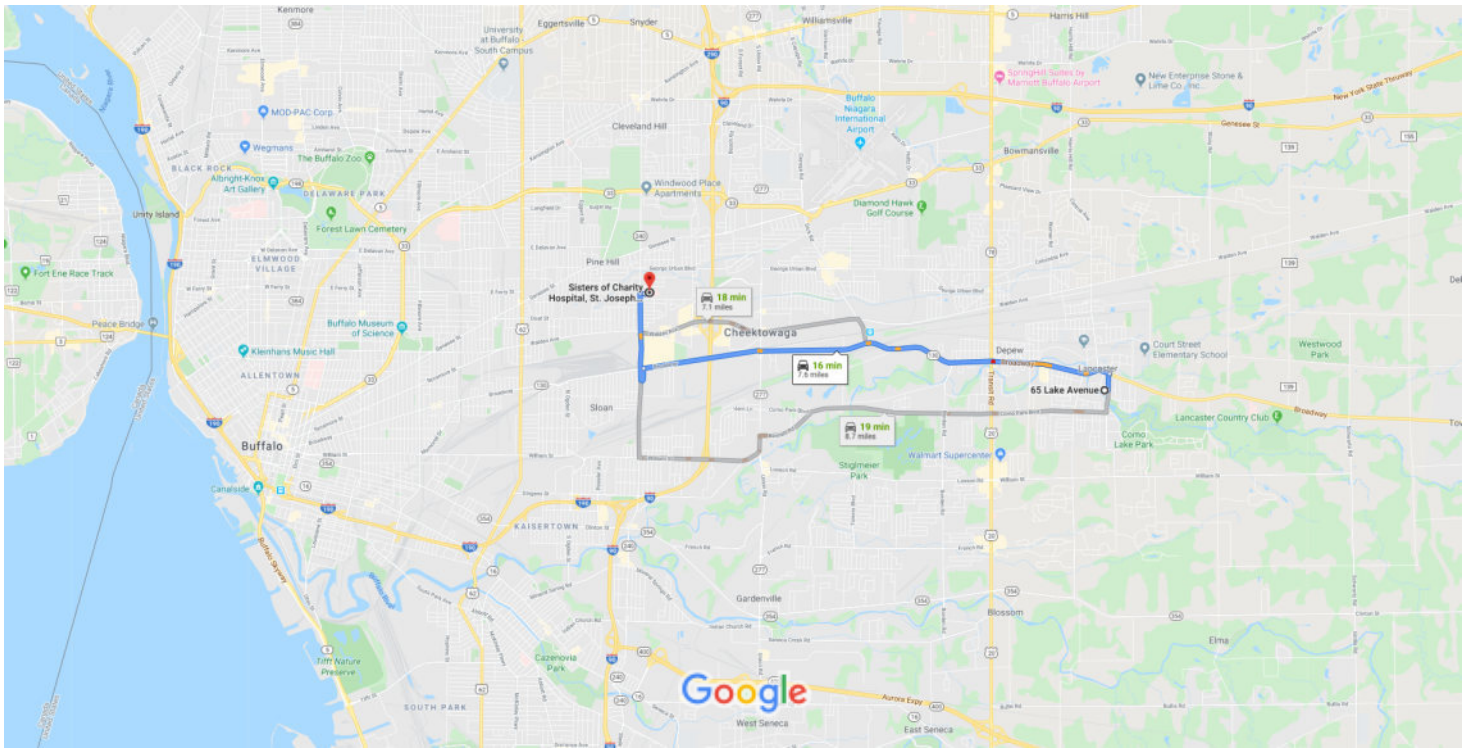
FIGURE: 1

Figure 2: Map/Directions to Hospital

Google Maps

65 Lake Avenue, Lancaster, NY to Sisters of Charity Hospital, St. Joseph Campus

Drive 7.6 miles, 16 min



Map data ©2020 Google 1 mi

65 Lake Ave

Lancaster, NY 14086

1. Head east toward Lake Ave
   223 ft
2. Turn left onto Lake Ave
   0.2 mi
3. Turn left onto Broadway
   Pass by Dairy Queen (on the right in 1.1 mi)
   6.0 mi
4. Turn left to merge onto Harlem Rd
   1.3 mi
5. Turn right
   285 ft
6. Turn right
   Destination will be on the left
   52 ft

Sisters of Charity Hospital, St. Joseph Campus

2605 Harlem Rd, Cheektowaga, NY 14225

APPENDIX A

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

- **I HAVE READ AND FULLY UNDERSTAND THE SITE HEALTH AND SAFETY PLAN, AND MY ASSOCIATED RESPONSIBILITIES AS A PARTICIPANT IN ACTIVITIES ON THIS SITE AND,**
- **I AGREE TO ABIDE BY THE PROVISIONS OF THE SITE HEALTH AND SAFETY PLAN.**

NAME	**SIGNATURE**
COMPANY	**DATE**

NAME	**SIGNATURE**
COMPANY	**DATE**

NAME	**SIGNATURE**
COMPANY	**DATE**

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COMPANY	**DATE**

NAME	**SIGNATURE**
COMPANY	**DATE**

NAME	**SIGNATURE**
COMPANY	**DATE**

APPENDIX B

JOB SAFETY ANALYSIS (JSA)

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	X NEW / ___ REVISED
Matrix Environmental Technologies Inc. 65-67 Lake Ave., Lancaster, NY		12/5/2014	
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)** *Hydraulic Lock-out Tag-out*	**JSA#**
DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Steven Marchetti	Sr. Project Manager		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

x SAFETY VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	x GLOVES
x HARD HAT	___ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	x HEARING PROTECTION	___ PPE CLOTHING	
x SAFETY GLASSES	x SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Lock-out Tag-out Kit applicable for hydraulic equipment that is being worked on	**2. Cones or caution tape to mark work zone**		

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Set-up work area.	1a. Traffic, struck by.	1a. Wear safety vest, define work zone with cones or caution tape or both.
	1b. Slip, trip, fall	1b. Look for un-even ground and trip hazards when traversing site, use alternate route to circumvent trip
2. Identify Hydraulic valving/equipment to be Locked/Tagged Out. Identify personnel that must be notified of lock-out/tag-out.	2a. Splashed/flooding of, damage to equipment.	2b. Before locking/tagging out, confirm the lock-out/tag-out kit is applicable. If not, get appropriate materials to fit. Determine location of all shut-down, valves and other devices, confirm that these devices work. Notify all workers that will use the equipment that it will be locked/tagged out (including for what duration), the color of the tag and type of locking device that will be used.
3. Turn off any associated equipment and deenergize the power source to nearby equipment that could be splashed by hydraulic fluids. Apply lock and tag with date and time. *Note: only qualified personnel that have been provided a lock-out/tag-out kit are allowed to perform this task.*	3a. Struck by, pinch points	3a. Inpsect the power source and equipment. Be aware of pinch points, moving parts, loose wires or potential hazards prior to shutting down. Close any valves, switches or breakers that are required before shutting down power.
	3b. Electrocution, contact by	3b. Use insulated tools and equipment (if required) when shutting down equpiment and power source. Keep any wet clothing, tools or materials away from electrical components.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
4.Turn valving back on and activate equipment	4a. Splash by, Flooding of area, Drowning	4a. Verify no personel is located downstream of piping in confined space areas connected to valving that is locked out. Turn valving on slowley and verify there are no leaks or spraying of hydraulic's.

Work Activity (Description) - Hydraulic Lock-out Tag-out

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION	DATE		
Matrix Environmental Technologies 65-67 Lake Ave., Lancaster, NY	2012, Rev 10/28/13	__x__ NEW ___ REVISED	
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)**	**JSA#**
		Proper lifting techniques	13008

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Pat Bliek	Sr. Technician	C. Zink	Sr. Project Manager
M. Wittman	Sr. Project Manager		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ LIFE VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	__x__ GLOVES
___ HARD HAT	___ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	___ HEARING PROTECTION	___ PPE CLOTHING	
___ SAFETY GLASSES	__x__ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

	2	3	4
PPE: Steel toe shoes and gloves.			

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Determine Weight of Load	1a. Injury to Back	1a. Plan ahead and get help if load is heavy. Personal Protective Equipment: Steel toe shoes and gloves
2. Bending Down	2a. Injury to Back	2a. Bend with your knees not your Back. DO NOT bend over with legs straight or twist while lifting.
3. Lifting Load	3a. Injury to Back	3a. Lift with your legs and hold objects only chest high. Avoid trying to lift above shoulder level.
4. Stand on a solid level surface	4a. Slip or Fall	4a. ALWAYS be sure of footing
5. Moving the load	5a. Injury to Back	5a. Never twist your body to move a load. Turn your feet.

Work Activity (Description) - Proper Lifting Techniques #13008

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	
Matrix Environmental Technologies Inc. 65-67 Lake Ave., Lancaster, NY		2012, rev 10/28/13	__x__ NEW ___ REVISED
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)**	**JSA#**
		Traffic Control	13009

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Pat Bliek	Sr. Technician	C. Zink	Sr. Project Manager
M. Wittman	Sr. Project Manager		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ LIFE VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	___ GLOVES
___ HARD HAT	___ FACE SHIELD	___ SUPPLIED RESPIRATOR	__X__ OTHER _Safety Vest
___ LIFELINE / BODY HARNESS	___ HEARING PROTECTION	___ PPE CLOTHING	
___ SAFETY GLASSES	__X__ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1	2	3	4

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Get request for Traffic Control for Customers	1a. Getting inaccurate information from Customers	1a. Make a site visit and sketch out drawing for a traffic control plan
2. Create a traffic control plan drawing	2a. Traffic control plan need to be accurate to job site	2a. Make sure to have all the right equipment to do the job safety.
3. Loading of trucks	3a. Lifting, falling, tripping.	3a. Wear proper safety gear.
4. Travel time: from yard to job site	4a. Highway traffic, unsafe loads, tire blow out, road hazards	4b. Pre trip trucks, make sure load are secure, make sure to Driving statues.
5. Removing or set up work zone for nighttime used.	5a. Potential of getting hit, lifting while removing of traffic control and set up barricades for over night.	4b. Removal of work zone in accordance to Proper lifting; good communication between operationak crews and traffic control crew..
6. Travel time back to yard from job suite	6a. Traffic, unsafe loads, tire blow outs, Road hazards	6a. Make sure load are secure, and obey state statues.

Work Activity (Description) - Traffic Control #13009

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION	DATE	X NEW / __ REVISED
Matrix Environmental Technologies,Inc. 65-67 Lake Ave., Lancaster, NY	12/3/2007/ Rev. 10/28/13	

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (Description)	JSA#
All Work Locations	Assessment and Remediation	General Site Activities - Health & Safety Contingency Plan	001

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Jeffrey S. Hall	Environmental Engineer	Steven Marchetti	Vice President
Sarah Weeks	Executive Assistant	C. Zink	Sr.Project Manager

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PROTECTIVE EQUIPMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

__ AIR PURIFYING RESPIRATOR	__ HARD HAT	_X_ SAFETY GLASSES	___ SUPPLIED RESPIRATOR
__ FACE SHIELD	___ LIFELINE / HARNESS	_X_ SAFETY SHOES steel-toed	_&_ HEARING PROTECTION
_X_ GLOVES leather; nitrile	_X_ PPE CLOTHING o	___ GOGGLES	__ OTHER

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Insect repellent with DEET (recommended)	2. Sunscreen (recommended)	3. Wheel chocks	

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
A. Travel to and Arrive Onsite		
1. Complete JSA/HASP/ safety checklist/ tailgate meeting	1a. Parking vehicles, Traffic flow/control, access difficulties	1a. Park in a secure area where vehicle is out of traffic pattern so that tailgate safety meeting can be performed safely. **ALL personnel electronic devices (i.e., cell phones) are not to be used where the potential for an explosive environment exists or where cell phone use can distract from surrounding hazards.**
2. Establish/set up site control (traffic control)	2a. Contact with vehicles 2b. Pedestrian contact	2a. Wear highly visible clothing. • Utilize cones/barricades/safety fence to establish work zones. 2b. Establish assess points in the work zone to keep pedestrians and unintentional traffic out. • Inform facility personnel of work (restricted) area and do not permit unauthorized individuals (i.e., those not properly trained or wearing appropriate PPE) access to the exclusion zone.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
	2c. Backing, moving vehicles	2c. A spotter must be utilized when vehicles. • Prior to moving any vehicle, all racks, doors, and toolboxes must be closed to prevent contact with objects and to prevent items from falling out in transport. • If there is no spotter, the driver must go out and walk around the vehicle prior to backing. • Look up to ensure the overhead wires or structures can be safely cleared. • Look down to identify unusual depressions, holes, or debris that may interfere with backing. • Observe fixed objects or parked, unoccupied vehicles. • Back slowly using rear view mirrors frequently. • If backing vision is obscured, stop the vehicle every few feet to exit and recheck the backing route. • Remain constantly alert at all times while backing a vehicle for the potential for other vehicles or pedestrians to appear unexpectedly in the path of travel. • Vehicle tailgate must be in up/closed position when vehicle is in motion. • When parked and unhooked from a vehicle, trailers must have a wheel chock placed behind each wheel. • Wheel chocks must also be used for drill rigs or other larger vehicles when parked or positioned on uneven surfaces (terrain).
3. Remove/load equipment from vehicle	3a. Muscle strain	3a. Utilize proper lifting procedure (keep your back straight) when loading equipment into truck. Bend down at the knees and lift with your legs rather than bending and lifting with your back. • Utilize material handling devices when possible to move equipment (i.e., lift gates, pallet jacks, dollies, etc.). • If necessary, utilize a ramp for loading and unloading wheeled devices, ensuring the ramp is properly supported prior to use.
4. Exposure	4a. Weather related issues	4a. Staff should understand and be able to recognize the signs and/or symptoms of cold and hot weather related illnesses. • Personnel should dress appropriately for ambient temperatures which would include but not limited to dry layered clothing.
	4b. Cold related injury	4b. For Cold weather, work schedules should be adjusted to provide sufficient break periods in a heated area.
	4c. Heat related injury	4c. For cold weather, work schedules should be adjusted to provide time intervals for replenishing fluids and which is free of contamination.
	4d. Exposure to site contaminants	4d. Review and understand action levels noted in the HASP. • Monitor (elevated) breathing zone of workers with PID. • Monitor (elevated) any enclosure with a PID. • Ensure that Level C PPE is available for a potential upgrade. Note: Matrix and/or subcontractor personnel are required to wear fire retardant clothing or protection when operating cutting tools that may generate sparks or generate conditions that act as ignition sources.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
B. Biological Hazards		
1. Exposure	1a. Exposure to hazards	1a. Wear appropriate PPE (i.e., eye protection, long pants, nitrile sampling gloves, shirt with sleeves, steel-toed boots).
	1b. Poisonous plants	1b. Do not touch or contact poisonous plants, such as poison ivy and poison oak. • If available, apply an over-the-counter barrier cream, such as Ivy Block® to prevent contact with plant oils. • Wash hands and arms immediately with soap and water if skin contacts the plants. • Wear long pants with socks pulled over legs to prevent skin contact with plants and insects.
	1c. Insects	1c. Spray any wasp/hornet nests with an insect repellent from a safe distance recommended by the product's manufacturer. • Ensure that long sleeve shirts and pants are worn at all times to prevent

Work Activity (Description) - General Site Activities - #001

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION	DATE	
Matrix Environmental Technologies Inc. 65-67 Lake Ave., Lancaster, NY	12/3/2007, Rev. 10/28/13	X NEW __ REVISED

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (Description)	JSA#
		Cutting Tool Use	003

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Jeffrey S. Hall	Environmental Engineer	Steven Marchetti	Vice President
		C. Zink	Sr. Project Manager

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PROTECTIVE EQUIPMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ AIR PURIFYING RESPIRATOR	_X_ HARD HAT	_X_ SAFETY GLASSES	___ SUPPLIED RESPIRATOR
___ FACE SHIELD	___ LIFELINE / HARNESS	_X_ SAFETY SHOES steel-toed	_X_ HEARING PROTECTION
_X_ GLOVES leather; nitrile; Kevlar (cutting activities)	_X_ PPE CLOTHING highly visible clothing such as orange coveralls; reflective safety vest	___ GOGGLES	_X_ OTHER RESPIRATORS - DUST MASK - If dust is generated during cutting activities.

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Lockout/tag out kit	2. Extra blades (if applicable)	3. Hot work Permit	

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Use of hand tools (i.e., pocket knife, Geoprobe cutter, hand saw, poly line cutter, etc.)	1a. Cuts to the skin from tool blade	1a. Wear appropriate PPE. • Inspect the cutting equipment prior to start of cut. • Make sure blades are sharp and any guards are in place. • Cut away from your body and keep hands out of the path of cutting tools. • Have bystanders maintain a 3 foot distance at all times. • Use of proper cutting tool for the job (i.e., pipe cutters for cutting poly pipe). • The material being cut must not interfere with the operator's vision.
Power Tool Use		
1. Power equipment, cutters	1a. Cuts to the skin from tool blade	1a. Wear appropriate PPE (i.e., hard hat, long pants, steel-toed boots, hearing protection). • Wear a face shield in addition to safety glasses when flying particles have the chance to strike the operator in the face. • Have bystanders maintain a 3 foot distance from the operation at all times. • The material being cut must not interfere with the operator's vision. • Equipment must be turned off and allowed to cool prior to refueling.
	1b. Spark/dust reduction	1b. When possible perform wet cuts to reduce the explosion and dust hazard.
	1c. Excessive noise	1c. Wear proper hearing protection

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
2. Contact with damage to utilities	2a. Electrocution/contact with energized equipment	2a. Obtain up-to-date as built plan to identify and subsurface utilities or obstructions. • Identify all above ground utilities and obstructions prior start. • Use LO/TO when sources of energy can be de-energized.
3. Hot work Permit	3a. Fire/explosion	3a. If sparks are generated within 35 feet of a vapor source (i.e., an operating pump island) a Hot work Permit must be furnished and air monitoring must take place.

Work Activity (Description) - Cutting Tool Use - #003

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	X NEW / ___ REVISED
Matrix Environmental Technologies Inc. 65-67 Lake Ave., Lancaster, New York		12/5/2014	
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)** *Lock-out Tag-out*	**JSA#**
DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Craig Zink	Sr. Project Manager	Steve Marchetti	Sr. Project Manager

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

x SAFETY VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	x GLOVES
x HARD HAT	____ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	x HEARING PROTECTION	___ PPE CLOTHING	
x SAFETY GLASSES	x SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Lock-out Tag-out Kit applicable for power source & equipment that is being worked on	**2. Cones or caution tape to mark work zone**		

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Set-up work area.	1a. Traffic, struck by.	1a. Wear safety vest, define work zone with cones or caution tape or both.
	1b. Slip, trip, fall	1b. Look for un-even ground and trip hazards when traversing site, use alternate route to circumvent trip
2. Identify Power Source and Equipment to be Locked/Tagged Out. Identify personnel that must be notified of lock-out/tag-out.	2b. Caught by, Electrocution, damage to equipment	2a. Before locking/tagging out, confirm the lock-out/tag-out kit is applicable. If not, get appropriate materials to fit. Determine if power source and equipment are grounded, if not, provide grounding device or connection to ground. Determine location of all shut-down switches, valves and other devices, confirm that these devices work. Notify all workers that will use the power source or equipment that it will be locked/tagged out (including for what duration), the color of the tag and type of locking device that will be used.
3. Turn off any associated equipment and deenergize the power source, apply lock and tag with date and time. *Note: only qualified personnel that have been provided a lock-out/tag-out kit are allowed to perform this task.*	3a. Struck by, pinch points	3a. Inpsect the power source and equipment. Be aware of pinch points, moving parts, loose wires or potential hazards prior to shutting down. Close any valves, switches or breakers that are required before shutting down power.
	3b. Electrocution, contact by	3b. Use insulated tools and equipment (if required) when shutting down equpiment and power source. Keep any wet clothing, tools or materials away from electrical components.
4. Reenergive power source and activate equipment	4a. Electrocution, struck by, contact by	4a. Identify where stored or residual energy is located on equipment and power source (e.g. capacitors, springs, elevated components, rotating flywheels or other parts, hydraulic systems, air, gas and water pressure, etc.) Release residual energy before reactivating the equipment or power source (e.g. grounding, repositioning, bleeding, blocking, etc.). Check area to confirm other workers are clear. Remove lock and tag. Reactivate power and equipment; confirm all are in operating order.

Work Activity (Description) - Lock-out Tag-out

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	__X_ NEW
Matrix Environmental Technologies		2/21/2012	___ REVISED
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)**	**JSA#**
Active/ Inactive Sites	Operation/ Maintenance	Operation and maintenance of Vapor Recovery system	
Development Team	**Position/ Title**	**Reviewed By:**	**Position/ Title**
Marc Havens	Remediation Technician		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ LIFE VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	___& GLOVES
___ HARD HAT	___ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	X HEARING PROTECTION	__x_ PPE CLOTHING	
X SAFETY GLASSES	X SAFETY SHOES		

REQUIRED AND/ OR RECOMMENDED TOOLS AND EQUIPMENT

1. Proper PPE	2. Hand Tools	3. PID/ Air Velocity meter. Hi vis cones

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1.Check out side of trailer or shed	1a- trips, slips & falls	1a- Inspect for damage to shell or blocking system observe enterance for slippery or obstructed walkways.
2.Open doors and pin back	2a-Caught by pinch points 2b Slips, Trips, Falls	2a- Open fully and pin back doors with caution. 2b- Observe walkway for equipment and other trip hazzards
3. Observe system for proper operation.	3a- Noise 3b- Pinch Points	3a- Recommended hearing protection 3b- Observe a safe distance from moving parts
5. Manual drain of water knockout tank(if applicable)	5a- Exposure	5a- Keep feet and equipment away from drain area
6. Restart system	6a- Noise 6b- Pinch Points	6a- Hearing protection recommended 6b- Use care while closing access panels.
7. Verify proper operation and clean work area. Exit and close doors.	7a- Contact 7b- Pinch points	7a- Watch for low overhaed in doorway 7b- Use caution while closing doors
8. Take PID and Air velocity readings	8a- Exposure to dust particles from effluent	8a- Wear safety glasses

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
ADDITIONAL TASKS		
8. Changing filters in Vacuum blower	8a- Pinch Points 8b- Cuts, contact 8c- Exposure	8a- Deenergize equipment being serviced. 8b- Use care while loosening fasteners and bolts. 8c- Wear gloves and safety glasses due to dust and other residue on spent filters
9. Clearing vent lines of water	9a- Struck by/ Traffic 9b-contact, cuts 9c- Exposure 9d- physical stress	9a- Wear hi-vis vest or coat and set up hi-vis cones around work area. Use service vehicle as barricade if possible. 9b- wear gloves and eye protection and proper tools for opening curbbox covers. Use caution removing well plugs. 9c- Wear proper gloves and eye protection due to possible contact with water and water containing high concentrations of volitiles or dirt. 9d- Use proper form while bending down to access wells. Wear proper clothing and use caution in extreme weather conditions.

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE 8/11/2016	_X__ NEW _X__ REVISED
Matrix Environmental Technologies			

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (DISCRIPTION)	JSA#
Active/ Inactive sites	Sampling	Groundwater Monitoring During Oxidant Injection	

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Craig D. Zink	Health & Safety Officer	Nick Minute	Senior Project Manager

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

_ LIFE VEST	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	_X__ GLOVES
___ HARD HAT	___ FACE SHIELD	___ SUPPLIED RESPIRATOR	__X_ OTHER _____ Hi Vis vest, shirt or coat Hi Vis Cones or Blockades
___ LIFELINE / BODY HARNESS	___ HEARING PROTECTION	___ PPE CLOTHING	
_x__ SAFETY GLASSES	__x_ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1) Interface probe/Water level indicator/Multimeter	**3) Bailer and/or Whale® pump**		

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Set up area for monitoring/sampling in vicinty of injection well	1a-Traffic/struck by	1a-Always scan the area you are working in or walking through for vehicles and be aware of your surrounding. If possible, park sample vehicle so it blocks sampling area from oncoming traffic. Be aware of the room you have to work around the drilling and injection equipment, set up area so as to not be impacted by injecting fluids.
2. Collecting sample	2a- Exposure 2b Struck by/Caught by	2a- Use caution when collecting sample from the injection point. Wear appropriate PPE to prevent exposure from injection fluids and contaminants. 2b Be aware of operating equipment, keep hands and body away from moving parts when getting samples. Be aware of overhead obstructions.
3. Field sample measurements	3a- Contact/ cuts/ burns 3b- Exposure 3c Slip/Trip/Fall	3a- Use caution when handling sample containers to prevent cuts or bruises to hands, have secure contact with containers and plenty of space to work. 3b. Wear PPE that will prevent impacts from injection fluids, contaminants and preservatives. 3c. Maintain good housekeeping with equipment and sample containers.

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	__X_ NEW ___ REVISED
Matrix Environmental Technologies Inc.		10/11/2013	
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)**	**JSA#**
All Work Locations	Remediation	Remedial Excavation	JSA02

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Pat Bliek	Sr. Technician	Craig Zink	Operations Manager

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PROTECTIVE EQUIPMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

_x__ Reflective VEST or Hi VIS Shirt	___ GOGGLES	___ AIR PURIFYING RESPIRATOR	_x__ GLOVES
_x_ HARD HAT	_&_ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
_x_ LIFELINE / BODY HARNESS	_x_ HEARING PROTECTION	___ PPE CLOTHING	
_x__ SAFETY GLASSES	_x_ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1 Pre-construction safety meeting		All employees assigned to this task will attend a pre-construction safety meeting, which will include standard operating procedures, types of potential hazards, and actual hazards present and controls for those hazards
2 Location and setup of equipment and safe work area	Damage to utilities, exposure to energy from utilities	Underground utilities, where possible, should be marked out before digging begins. Use facility maps/as-build's and local utilities to identify lines. Observe overhead lines, tree limbs or other objects before setting up and raising the bucket. Anticipate the radius of the suing up and down and plan appropriately
3 Excavation	3a. Struck by, contact with	a. Avoid moving parts of machinery. Keep fingers, hands, and arms away from bucket and other pinch points. Spoils need to be kept back from the edge of all trenches or excavation at least 3 foot.
	personnel on the ground in the vicinity of the heavy equipment	personnel on the ground should keep away from the work area unless they are required for a task such as spotting , they should keep in sight of the operator and notify when they leave the work zone
4 Sampling of excavation	Slipping or falling into excavation	Wearing of boots with treaded soles and steel toe. Avoid walking on liners or plastic that are wet and or icy. Never lean over or stand near the edge of an excavation to collect samples or observe. Never enter the excavation if it is deeper than four foot. Use the backhoe bucket to collect samples.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
5 Clean up of area	Removable contamination on equipment creates a potential health and environmental hazard by spreading	Decontaminate large equipment by power washing all exterior surfaces to remove visible dust and mud. Complete contamination surveys on the hands and feet of site workers before they eat or leave the site at the end of the day. The site in general should be cleaned of rocks and or debris to remove slip, trips and fall hazards

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE 2/27/12 Rev. 5/25/12	___ NEW _X__ REVISED
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (DISCRIPTION)** Installing above grade piping & equipment for remedial systems	**JSA# 017**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Mark Janus	Remediation Technician	Craig D. Zink	Sr. PM / Geologist

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

__x_ Saftey VEST	___& GOGGLES	___ AIR PURIFYING RESPIRATOR	_x__ GLOVES
_x__ HARD HAT	_&__ FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	__&_ HEARING PROTECTION	___& PPE CLOTHING	
__x_ SAFETY GLASSES	__x_ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Hand tools,(Saws, nut drivers, etc.)	**2. PVC glue**	**3. HDPE or PVC pipe/ fittings**	**4. Hose clamps**

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
1. Inspect work area to ensure pipiping will have no obstructions.	1. Slips, trips, falls.	1. Look for eneven ground and trip hazards when traversing site.
2. Lay out blocks for piping routes.	2a. Slips, trips, falls. 2b. Exertion	2a. Look for eneven ground and trip hazards when traversing site. 2b. Use proper lifting techniques while handeling blocks.
	3c. Cuts	3c. Wear leather gloves.
3. Route piping from header vault to point.	4a. Exertion	4a. Use proper ergonomics while un-coiling pipe.
5. Cut pipe to length	4a. Cuts 4b. Contact by, pinch points.	4a. Wear leather gloves. 4b. Wear appropriate PPE. Use the proper tool for the material to be cut.
6. Cut well, sump or pipe @ grade.	6a. Cuts 6b. Contact by, pinch points.	4a. Wear leather gloves. 6b. Wear appropriate PPE. Be aware of placement of hands with material to be cut and placed around well.
7. Glue fittings and piping to well head and process lines	7a. Exposure to fumes and liquid chemicals 7b. Contact by, pinch points, cuts.	7a. Make sure aware is ventilated. Wear gloves when handling glues and primers. 7b. Be aware of pinch points and wear gloves to prevent abrasions to hands and arms.

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION		DATE	X NEW / __ REVISED
65-67 Lake Ave, Lancaster NY		12/4/2007	
JSA TYPE CATEGORY	**WORK TYPE**	**WORK ACTIVITY (Description)**	**JSA#**
	Assessment and Remediation	Skid Loading Operations (Snow Removal, Moving Gravel, Soil Removal)	6

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Jeffrey S. Hall	Environmental Engineer	Steven Marchetti	Vice President
Sarah Weeks	Executive Assistant		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PROTECTIVE EQUIPMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ AIR PURIFYING RESPIRATOR	_X_ HARD HAT	_X_ SAFETY GLASSES	___ SUPPLIED RESPIRATOR
___ FACE SHIELD	___ LIFELINE / HARNESS	_X_ SAFETY SHOES steel-toed	___ OTHER
_X_ GLOVES leather; nitrile; Kevlar (cutting activities)	_X_ PPE CLOTHING highly visible clothing such as orange coveralls; reflective safety vest	_&_ HEARING PROTECTION. *If noise levels exceed 90 dB.*	

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1. Orange flags to direct vehicle travel	2. Lockout/Tagout Kit		

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
A. Review "General Site Activities" JSA		
1. Inspect heavy equipment	1a. Equipment failure	1a. Inspect equipment for leaks, damaged components, integrity of tracks/tires. • Check the operation of all safety/kill switches and safety equipment.
	1b. Unsafe operation	1b. All personnel must be properly trained (and licensed for some vehicles) to operate the equipment per the manufacturer's requirements.
B. Perform loading activities		
	1a. Equipment failure, unsafe operation	1a. Inspect the skid loading equipment prior to start of work. • Only trained operators are permitted to operate the skid loader. • Operators will follow the manufacturer's operating guidelines and will not make any modifications to the skid loader.
	1b. Contact with objects and personnel	1b. Bystanders must maintain a 15 foot distance from the skid loader at all times. • The load being carried must not interfere with the operator's line of sight. • Spotters will be used when the skid loader is operating in tight quarters.
	1c. Amputation, cuts	1c. Do not place any part of your body between vehicle parts (i.e., tailgate and bed of dump truck, stabilizing arms, etc.).
	1d. Fire/explosion	1d. Equipment must be turned off during refueling.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
2. Damage to utilities	2a. Electrocution/Contact with energized electrical lines	2a. Locate all sources of electricity to site parking lights, air compressor, vacuum, car wash, ID sign and deenergize lines by using locks and tags or a tag a minimum. • Notify all Affected employees on-site of the deenergized conditions.
3. Elevated Loads	3a. Falling material/ equipment	3a. Never stand/travel below elevated loads! • Maintain a 15 foot distance away from all associated equipment (counterweight swing radius, mechanical superstructure radius, vehicle travel lanes).
4. Backing equipment	4a. Contact with fixed/ moving objects	4a. Never back a vehicle without a spotter. • Utilize a spotter when entering/exiting heavily trafficked areas/roadways. • While loading vehicles, employ the use of a spotter to protect personnel working around heavy equipment. • Keep a distance of 15 feet away from the vehicle while acting as a spotter. • Keep eye contact with the spotter at all times. • Discuss any hand or verbal signals with the operator prior to moving the vehicle.

JOB SAFETY ANALYSIS

COMPANY/PROJECT/LOCATION	DATE	__x_ NEW ___ REVISED
Matrix Environmental	2/14/2012	

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (DISCRIPTION)	JSA#
		Injection with geoprobe	7

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Mark Janus	Remediation Technician		

MINIMUM REQUIRED (use an "X") & RECOMMENDED (use an "&") PERSONAL PRETECTIVE EQUIMENT.
Place appropriate symbol on corresponding line(s).
(SEE CRITICAL ACTIONS FOR TASK-SPECIFIC REQUIREMENTS)

___ LIFE VEST	__&_ GOGGLES	_&__ AIR PURIFYING RESPIRATOR	_x__ GLOVES
__x_ HARD HAT	___& FACE SHIELD	___ SUPPLIED RESPIRATOR	___ OTHER _____
___ LIFELINE / BODY HARNESS	_x__ HEARING PROTECTION	__x_ PPE CLOTHING	
__x_ SAFETY GLASSES	_x__ SAFETY SHOES		

REQUIRED AND/OR RECOMMENDED TOOLS AND EQUIPMENT

1 Geoprobe and geoprobe tooling	**2 Air compressor/injection pump**	**3**	**4**

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
Review locations of underground utilities across the site.	1a. Damage to underground utilities.	1a. Review site plans and UFPO mark-outs.
	1b. Fall	1b. Look for uneven ground and trip hazard when traversing the site.
Set-up work area.	2a. Traffic, struck by.	2a. Wear safety vest, define workzone with cones.
	2b. Fall	2b. Look for uneven ground and trip hazard when traversing the site.
Un-load Geoprobe.	3a. Exertion	3a. Use proper lifting techniques (bend knees, keep back straight, lift only what you can lift safely.)
	3b. Caught by, pinch points	3b. Keep hands and fingers away from liftgates and close spases, wear leather gloves.
Prepare for injection by threading tooling togother.	4a. Caught by, pinch points	4a. Keep hands and fingers away from threads and close spases, wear leather gloves.

JOB SAFETY ANALYSIS

JOB STEPS	POTENTIAL HAZARDS	CRITICAL ACTIONS
	4b. Cuts by	4b. Wear leather gloves and eye protection.
Drive tooling to desired depth.	5a. Caught by	5a. Keep body and hands free from equipment and parts that are moving.
	5b. Noise	5b. Wear ear plugs and or muffs when advancing tooling.
Attach injection equipment to geoprobe tooling.	6a. Caught by, pinch points	6a. Keep hands and fingers away from threads and close spases, wear leather gloves.
	6b. Cuts by	6b. Wear leather gloves and eye protection.
Start injection with pump	7a. Exposure to / spill/ spray.	7a. Wear face shield and PPE and or nitrill gloves.
	7b. Slips	7b. Use caution if product injecting is spilled on the ground.
Remove injection equipment from Geoprobe tooling.	8a. Caught by, pinch points	8a. Keep hands and fingers away from threads and close spases, wear leather gloves.
	8b. Exposure to / spill/ spray.	8b. Wear face shield and PPE and or nitrill gloves.
	8c. Cuts by	8c. Wear leather gloves and eye protection.
Backfill bore hole.	9a. Exertion back strain	9a. Use proper lifting techniques, use proper tools and techniques.
Load geoprobe for transportation.	10a. Caught by, pinch points	10a. Keep hands and fingers away from liftgates and close spases, wear leather gloves.
	10b. Exertion	10b. Use proper lifting techniques (bend knees, keep back straight, lift only what you can lift safely.)
Breakdown work zone	11a. Traffic, struck by.	11a. Wear safety vest, remove cones starting from area closest to workzone.
	11b. Fall	11b. Look for uneven ground and trip hazard when traversing the site.

APPENDIX C

VISITOR POLICY

MATRIX ENVIRONMENTAL TECHNOLOGIES INC.

VISITORS AND/OR TRAINEES ON SITE

Matrix Environmental Technologies Inc. is committed to providing a safe environment on all work sites for visitors, trainees, employees, and/or passersby. To accomplish this, the following guidelines must be adhered to:

1.0 VISITORS

A visitor is any person(s) who is (are) not actively participating in the work activities at the site. Visitors must be accompanied by a Matrix Environmental representative while on site.

All sites must have adequate signs, placards, barricades, etc. designating hazardous boundaries. Visitors shall not be allowed on any site that is not adequately marked. The **HASP** must define boundaries and be available on site for reference.

2.0 TRAINEES

Trainees are those employees of Matrix Environmental who have not yet completed the safety training required by the company. New hires and in-house company transfers will be considered trainees until criteria are met.

Trainees shall be informed of restrictions by their supervisor and must agree to abide by them prior to visiting active sites.

Trainees will be permitted to visit Matrix Environmental sites as observers providing the following conditions are met:

- All trainees are supervised by a qualified Matrix Environmental manager at all times while observing on site.
- Trainees perform no work functions of any type while on site.
- Trainees do not handle any equipment, tools, and/or supplies while on site.
- Trainees do not enter any hazardous or hot zone, or confined space areas while on site.

Supervisors will be responsible for informing all trainees of the above, and for insuring that conditions are adhered to, and also for insuring that trainees will not be asked to violate the conditions outlined above.

Documentation in the form of a signed agreement by both parties must be maintained in the **HASP**.

Infractions of the above agreement will be viewed as extremely serious, and will be subject to disciplinary action up to and including termination for either the trainee and/or the supervisor.

MATRIX ENVIRONMENTAL TECHNOLOGIES INC.

VISITORS/TRAINEES ON SITE

Matrix Environmental Technologies Inc. is committed to providing a safe working environment for all employees, trainees, subcontractors, and visitors. In addition, **Matrix Environmental** will comply with OSHA requirements for employee safety training prior to permitting them to participate in work activities on any hazardous site.

(This section to be filled out by visitor/trainee)

Agreement between _____
Name (Print or Type)

_____
Social Security Number

and **Matrix Environmental Technologies Inc.**

Because we have your safety in mind, you will be considered a visitor/trainee until all training criteria are met. This means you must meet training requirements prior to performing work activities on-site. Until such training requirements are met, it is critical that you agree to the following conditions:

- As a visitor/trainee, you may be asked to visit **Matrix Environmental** sites as an observer. You must be supervised on all of these site visits.

- As a visitor/trainee, your signature on this document indicates that you agree to:

  1. Perform no work functions of any type.
  2. Not handle any equipment and/or supplies of any type.
  3. Not enter any hazardous or hot zone areas.

I agree to adhere to the above conditions in all instances while on site as a visitor/trainee.

_____ _____
Signature Date

_____
(This section to be filled out by supervisor)

As supervisor to the above named visitor/trainee, I agree to the above restrictions and agree not to request him/her to perform activities contrary to the above.

_____ _____
Signature Date

APPENDIX D

HEALTH AND SAFETY PLAN AMENDMENTS

PROJECT NAME: Lakeside Village Apartments

PROJECT NUMBER: 18-025

LOCATION: 65-67 Lake Ave., Lancaster, NY

PROPOSED CHANGES IN FIELD ACTIVITIES AND/OR HAZARDS:

SUBMITTED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

SITE SAFETY OFFICER: _____

APPENDIX E

OSHA TRAINING PROGRAM

(Information is included in the Company Safety Program Manual)

Components of Waste Site Worker Training – OSHA 40 Hour

Introduction to Program
Hazardous Waste Operations and Emergency Response (29 CFR 1910.120)
Chemical and Physical Hazards
Toxicology
Personal Protective Equipment (PPE)
Respiratory Protection Principles
Air Purifying Respirators (APR's)
APR Inspection, Donning, Doffing, Maintenance
Self-Contained Breathing Apparatus (SCBA)
SCBA Inspection, Donning, Doffing, Maintenance
APR Fit Test and Certification
Site Safety
Site Control
Decontamination Procedures
Air Monitoring Equipment
Confined Spaces
Entry Permit Development
Material Handling and Spill Containment
Risk Assessment
Health and Safety Plans
Emergency Response Plans
Medical Monitoring
Hazard Communication

Components of Waste Site Worker Training – OSHA Annual 8 Hour Refresher

OSHA Requirements
Hazardous Wastes
Toxicology
Exposure Limits
Chemical and Physical Hazards
Temperature Stress
Site Control
PPE
Decontamination Procedures

APPENDIX F

ACCIDENT/INCIDENT REPORT

MATRIX ENVIRONMENTAL TECHNOLOGIES INC.
ACCIDENT/INCIDENT REPORT

Employee Section 1

Employee Name:_____ Date of Birth:_____
Address: _____
_____

Job Title _____ Supervisor:_____
Location at time of Incident:_____

Employee Section 2

Was Incident Physical_____ Chemical_____
Body parts affected:_____
Exposure Type: Dermal:_____ Inhalation_____
Ingestion:_____ Injection_____

Clearly describe the incident and its cause (if determined); turn to back of page if additional space is required.

_____
_____
_____
_____
_____

Witnesses: 1)_____ 2)_____

Manager Section

Was injury inspected by physician?_____
If Yes; Physician Name:_____
Location:_____
Date/Time:_____

Was employee hospitalized? _____
If Yes; Hospital Name:_____
Location:_____
Date/Time:_____

WHAT SPECIFIC CORRECTIVE ACTIONS HAVE BEEN TAKEN TO PREVENT A RECURRANCE: _____

_____

EMPLOYEE SIGNATURE DATE MANAGER SIGNATURE

DATE COMPLETE AND RETURN THIS FORM TO YOUR OPERATIONS MANAGER WITHIN 24 HOURS. OPERATIONS MANAGER TO FORWARD COPY TO ORCHARD PARK OFFICE ASAP.

APPENDIX G

MSDS/CONTAMINANT PROFILES

(Additional information is included in the Company MSDS binder)

SAFETY DATA SHEET

1. Identification

Product identifier	CAIROX® potassium permanganate
Other means of identification	
SDS number	-
Recommended use	Potassium Permanganate is an oxidant recommended for applications that require a strong oxidant.
Recommended restrictions	Use in accordance with supplier's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer/Supplier	CARUS CORPORATION
Address	315 Fifth Street, Peru, IL 61354, USA
Telephone	815 223-1500 - All other non-emergency inquiries about the product should be directed to the company
E-mail	salesmkt@caruscorporation.com
Website	www.caruscorporation.com
Contact person	Dr. Chithambarathanu Pillai
Emergency Telephone	For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at CHEMTREC®, USA: 001 (800) 424-9300 CHEMTREC®, Mexico (Toll-Free - must be dialed from within country): 01-800-681-9531 CHEMTREC®, Other countries: 001 (703) 527-3887

2. Hazard(s) identification

Physical hazards	Oxidizing solids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 1 (Respiratory System)
	Specific target organ toxicity, repeated exposure	Category 1 (Respiratory System, Central Nervous System)
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Causes damage to organs (Respiratory System). Causes damage to organs (Respiratory System, Central Nervous System) through prolonged or repeated exposure.
Precautionary statement	
Prevention	Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product.
Response	In case of fire: Use water for extinction. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If exposed: Call a poison center/doctor.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Supplemental information

Hazard symbol

Hazard statement: Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention: Avoid release to the environment.

Response: Collect spillage.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Potassium permanganate		7722-64-7	> 97.5

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.

Skin contact

Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. Wash contaminated clothing before reuse.

Contact with skin may leave a brown stain of insoluble manganese dioxide. This can be easily removed by washing with a mixture of equal volume of household vinegar and 3% hydrogen peroxide, followed by washing with soap and water.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Get medical attention immediately.

Ingestion

Immediately rinse mouth and drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Decomposition products are alkaline. Brown stain is insoluble manganese dioxide.

General information

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. For personal protection, see Section 8 of the SDS. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Flood with water from a distance, water spray or fog.

Unsuitable extinguishing media

The following extinguishing media are ineffective: Dry chemical. Foam. Carbon dioxide (CO2). Halogenated materials.

Specific hazards arising from the chemical

May intensify fire; oxidizer. May ignite combustibles (wood, paper, oil, clothing, etc.). Contact with incompatible materials or heat (135 °C / 275 °F) could result in violent exothermic chemical reaction. Oxidizing agent, may cause spontaneous ignition of combustible materials. By heating and fire, corrosive vapors/gases may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions	Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Dike fire control water for later disposal. Water runoff can cause environmental damage.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep upwind. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Stop leak if possible without any risk. Dike the spilled material, where this is possible. Clean up spills immediately by sweeping or shoveling up the material. Do not return spilled material to the original container; transfer to a clean metal or plastic drum. To clean up potassium permanganate solutions, follow either of the following two options: Option # 1: Dilute to approximately 6% with water, and then reduce with sodium thiosulfate, a bisulfite or ferrous salt solution. The bisulfite or ferrous salt may require some dilute sulfuric acid (10% w/w) to promote reduction. Neutralize with sodium carbonate to neutral pH, if acid was used. Decant or filter and deposit sludge in approved landfill. Where permitted, the sludge may be drained into sewer with large quantities of water. Option # 2: Absorb with inert media like diatomaceous earth or inert floor dry, collect into a drum and dispose of properly. Do not use saw dust or other incompatible media. Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to permanganates. To clean contaminated floors, flush with abundant quantities of water into sewer, if permitted by federal, state, and local regulations. If not, collect water and treat as described above. Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Do not allow to enter drains, sewers or watercourses. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

Precautions for safe handling	Take any precaution to avoid mixing with combustibles. Do not get this material in your eyes, on your skin, or on your clothing. Do not breathe dust or mist or vapor of the solution. Use personal protection as recommended in Section 8 of the SDS. If clothing becomes contaminated, remove and wash off immediately. When using, do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid release to the environment.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep container tightly closed and in a well-ventilated place. Store in a cool, dry place. Store away from incompatible materials (See Section 10). Store in accordance with NFPA 430 requirements for Class II oxidizers.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Potassium permanganate (CAS 7722-64-7)	Ceiling	5 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	TWA	1 mg/m3	Fume.

US NIOSH Pocket Guide to Chemical Hazards: Short Term Exposure Limit (STEL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	STEL	3 mg/m3	Fume.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Follow standard monitoring procedures.
Appropriate engineering controls	Provide adequate general and local exhaust ventilation. An eye wash and safety shower must be available in the immediate work area.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes.
Skin protection	
Hand protection	Wear chemical-resistant, impervious gloves. Use protective gloves made of: Rubber or plastic. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Rubber or plastic apron.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Measurement Element: Manganese (Mn) 10 mg/m3 Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100. Any supplied-air respirator. 25 mg/m3 Any supplied-air respirator operated in a continuous-flow mode. Any powered, air-purifying respirator with a high-efficiency particulate filter. 50 mg/m3 Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any supplied-air respirator with a tight-fitting face piece that is operated in a continuous-flow mode. Any powered, air-purifying respirator with a tight-fitting face piece and a high-efficiency particulate filter. Any self-contained breathing apparatus with a full face piece. Any supplied-air respirator with a full face piece. 500 mg/m3 Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode. Emergency or planned entry into unknown concentrations or IDLH conditions - Any self-contained breathing apparatus that has a full face piece and is operated in a pressure-demand or other positive-pressure mode. Escape Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any appropriate escape-type, self-contained breathing apparatus.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Dark purple solid with metallic luster.
Physical state	Solid.
Form	Solid.
Color	Dark purple.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non flammable.

Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.7 (20 °C) (Water = 1)
Solubility(ies)	6 % (20 °C) 20 % (65 °C)
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Other information	
Explosive properties	Not explosive. Can explode in contact with sulfuric acid, peroxides and metal powders.
Molecular weight	158.03
Oxidizing properties	Strong oxidizing agent.

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Contact with combustible material may cause fire. Can explode in contact with sulfuric acid, peroxides and metal powders. Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Conditions to avoid	Contact with incompatible materials or heat (135 °C / 275 °F) could result in violent exothermic chemical reaction.
Incompatible materials	Acids. Peroxides. Reducing agents. Combustible material. Metal powders. Contact with hydrochloric acid liberates chlorine gas.
Hazardous decomposition products	By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity	Harmful if swallowed.

Components	Species	Test Results
Potassium permanganate (CAS 7722-64-7)		
Acute		
Dermal		
LD50	Rat	2000 mg/kg
Oral		
LD50	Rat	2000 mg/kg

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory sensitization	Not classified.
Skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Causes damage to organs (respiratory system).
Specific target organ toxicity - repeated exposure	Causes damage to organs (respiratory system, central nervous system) through prolonged or repeated exposure.
Aspiration hazard	Not classified.
Chronic effects	May cause damage to respiratory system. Prolonged exposure, usually over many years, to manganese oxide fume/dust can lead to chronic manganese poisoning, chiefly affecting the central nervous system.

12. Ecological information

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Potassium permanganate (CAS 7722-64-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	2.7 mg/l, 96 hours, static
			2.3 mg/l, 96 hours, flow through
			2.3 mg/l, 96 hours
			1.8 - 5.6 mg/l
		Carp (Cyprinus carpio)	3.16 - 3.77 mg/l, 96 hours
			2.97 - 3.11 mg/l, 96 hours
		Goldfish (Carassius auratus)	3.3 - 3.93 mg/l, 96 hours, static
		Milkfish, salmon-herring (Chanos chanos)	> 1.4 mg/l, 96 hours
		Rainbow trout (Oncorhynchus mykiss)	1.8 mg/l, 96 hours
			1.08 - 1.38 mg/l, 96 hours
			0.77 - 1.27 mg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.275 - 0.339 mg/l, 96 hours

Persistence and degradability	Expected to be readily converted by oxidizable materials to insoluble manganese oxide.
Bioaccumulative potential	Potential to bioaccumulate is low.
Mobility in soil	The product is miscible with water. May spread in water systems.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	D001: Ignitable waste The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Do not allow this material to drain into sewers/water supplies.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Rinse container at least three times to an absence of pink color before disposing. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes

Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB8, IP2, IP4, T3, TP33
Packaging exceptions	152
Packaging non bulk	212
Packaging bulk	240

IATA

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	Yes
Labels required	5.1
ERG Code	5L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1490
UN proper shipping name	POTASSIUM PERMANGANATE
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	
Marine pollutant	Yes
Labels required	5.1
EmS	F-H, S-Q
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA) (21 CFR 1310.02 (b) 8: List II chemical.

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (6 CFR 27, Appendix A): Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Potassium permanganate	7722-64-7	> 97.5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Hazardous substance
Safe Drinking Water Act (SDWA)	Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Potassium permanganate (CAS 7722-64-7)	6579

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Potassium permanganate (CAS 7722-64-7)	15 % wt

DEA Exempt Chemical Mixtures Code Number

Potassium permanganate (CAS 7722-64-7)	6579

Food and Drug Administration (FDA)	Not regulated.
US state regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. California OSH Hazardous Substance List: Listed.

US. Massachusetts RTK - Substance List

Potassium permanganate (CAS 7722-64-7)

US. New Jersey Worker and Community Right-to-Know Act

Potassium permanganate (CAS 7722-64-7)	500 lbs

US. Pennsylvania RTK - Hazardous Substances

Potassium permanganate (CAS 7722-64-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	27-November-2013
Revision date	-
Version #	01

NFPA Ratings

List of abbreviations

GHS: Globally Harmonized System of Classification and Labeling of hazardous properties of Chemicals.
TWA: Time weighted average.
LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
IMDG: International Maritime Dangerous Goods.
IATA: International Air Transport Association.
MARPOL: International Convention for the Prevention of Pollution from Ships.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. CARUS CORPORATION DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. CARUS CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTIABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of Carus Corporation, and shall be the sole responsibility of the holder or user of the product.

This SDS contains revisions in the following section(s):

This safety data sheet contains revisions in the following section(s):

SAFETY DATA SHEET

Version 4.11
Revision Date 06/28/2017
Print Date 06/22/2019

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Tetrachloroethylene

Product Number : 371696
Brand : Sigma-Aldrich
Index-No. : 602-028-00-4

CAS-No. : 127-18-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitisation (Category 1), H317
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms	:	Perchloroethylene PCE
Formula	:	C_2Cl_4
Molecular weight	:	165.83 g/mol
CAS-No.	:	127-18-4
EC-No.	:	204-825-9
Index-No.	:	602-028-00-4

Hazardous components

Component	Classification	Concentration
Tetrachloroethylene		
	Skin Irrit. 2; Eye Irrit. 2A; Skin Sens. 1; Carc. 2; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 2; H315, H317, H319, H336, H351, H411	90 - 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
No data available

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Tetrachloroethylene	127-18-4	TWA	25.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans		
		STEL	100.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans		
		Potential Occupational Carcinogen Minimize workplace exposure concentrations. See Appendix A		
		See Table Z-2		
		TWA	100.000000 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		CEIL	200.000000 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Peak	300.000000 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		TWA	25 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans		
		STEL	100 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans		
		Potential Occupational Carcinogen Minimize workplace exposure concentrations. See Appendix A		
		See Table Z-2		

		TWA	100 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		CEIL	200 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Peak	300 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		TWA	25 ppm 170 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		STEL	100 ppm 685 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		C	300 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	25 ppm 170 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Tetrachloroethylene	127-18-4	Tetrachloroethylene	3ppm	In end-exhaled air	ACGIH - Biological Exposure Indices (BEI)
	Remarks	Prior to shift (16 hours after exposure ceases)			
		Tetrachloroethylene	0.5000 mg/l	In blood	ACGIH - Biological Exposure Indices (BEI)
		Prior to shift (16 hours after exposure ceases)			
		Tetrachloroethylene	3ppm	In end-exhaled air	ACGIH - Biological Exposure Indices (BEI)
		Prior to shift (16 hours after exposure ceases)			
		Tetrachloroethylene	0.5 mg/l	In blood	ACGIH - Biological Exposure Indices (BEI)
		Prior to shift (16 hours after exposure ceases)			

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.2 mm

Break through time: 49 min
Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid, clear Colour: colourless
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	Melting point/range: -22 °C (-8 °F) - lit.
f)	Initial boiling point and boiling range	121 °C (250 °F) - lit.
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	25.3 hPa (19.0 mmHg) at 25.0 °C (77.0 °F) 17.3 hPa (13.0 mmHg) at 20.0 °C (68.0 °F)
l)	Vapour density	No data available
m)	Relative density	1.623 g/cm3 at 25 °C (77 °F)
n)	Water solubility	0.15 g/l at 25 °C (77 °F)
o)	Partition coefficient: n-octanol/water	log Pow: 2.53 at 23 °C (73 °F)
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available

t) Oxidizing properties No data available

9.2 Other safety information

Surface tension 32.1 mN/m at 20 °C (68 °F)

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents, Strong bases

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - female - 3,385 mg/kg
(OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Mild eye irritation - 24 h

Respiratory or skin sensitisation
- Mouse
Result: May cause sensitisation by skin contact.
(OECD Test Guideline 429)

Germ cell mutagenicity
Hamster
ovary
Result: negative

OECD Test Guideline 474
Mouse - male
Result: negative

Carcinogenicity

Limited evidence of carcinogenicity in animal studies

IARC: 2A - Group 2A: Probably carcinogenic to humans (Tetrachloroethylene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Tetrachloroethylene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available

No data available

Specific target organ toxicity - single exposure
May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information

Repeated dose toxicity	Mouse - female - Oral - LOAEL : 390 mg/kg

RTECS: KX3850000

narcosis, Liver injury may occur., Kidney injury may occur.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 5 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 7.50 mg/l - 48 h
Toxicity to algae	static test EC50 - Skeletonema costatum - > 16 mg/l - 7 h

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 11 % - Not readily biodegradable. (OECD Test Guideline 301C)

12.3 Bioaccumulative potential

Bioaccumulation	Lepomis macrochirus (Bluegill) - 21 d - 0.00343 mg/l Bioconcentration factor (BCF): 49

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 1897 Class: 6.1 Packing group: III
Proper shipping name: Tetrachloroethylene
Reportable Quantity (RQ): 100 lbsReportable Quantity (RQ): 100 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 1897 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TETRACHLOROETHYLENE
Marine pollutant: yes

IATA
UN number: 1897 Class: 6.1 Packing group: III
Proper shipping name: Tetrachloroethylene

15. REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Tetrachloroethylene	127-18-4	2007-07-01

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

:

Reportable Quantity D039 lbs

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Tetrachloroethylene	127-18-4	2007-07-01

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Tetrachloroethylene	127-18-4	2007-07-01

	CAS-No.	Revision Date
Tetrachloroethylene	127-18-4	2007-07-01

New Jersey Right To Know Components

	CAS-No.	Revision Date
Tetrachloroethylene	127-18-4	2007-07-01

California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause cancer. Tetrachloroethylene	127-18-4	2007-09-28

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Carc.	Carcinogenicity

Eye Irrit.	Eye irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

HMIS Rating

Health hazard:	3
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.11 Revision Date: 06/28/2017 Print Date: 06/22/2019

APPENDIX H

CONTINGENCY PLANS

1. CONTINGENCY PLAN FOR EVACUATION

Should evacuation be deemed necessary, the Site Safety Officer will notify the Project Manager and an appropriate signal will be given for evacuation. The Site Safety Officer shall insure that the evacuation is carried out in a calm, controlled fashion. All personnel shall exit the site and shall reassemble in a predestinated area. Evacuation routes will be dependent upon wind direction, severity, and type of incident. The Site Safety Officer shall insure that all personnel are accounted for. If any personnel cannot be accounted for, the Site Safety Officer will alert emergency services personnel.

Site Safety Officer will contact the Project Manager, and/or Operations Manager as soon as possible, after evacuation procedures are instituted.

2. CONTINGENCY PLAN FOR MEDICAL EMERGENCY

The following procedures should be instituted IMMEDIATELY in the event of a medical emergency involving illness or injury to any personnel while on site:

α The site should be shut-down and immediately secured. The area in which the injury or illness occurred should be considered off-limits until the cause of injury or illness is identified. In the event of a non-trauma related incident, instantaneous real-time air monitoring by FID or PID should be acquired to determine if the incident was caused by potential exposure to hazardous materials. Monitoring should be done both up, and downwind of the incident site.

- Assess the victim's condition for the nature of injury or illness. Pay close attention to the level of consciousness and any cardiac or respiratory involvement. If the victim appears to be critically injured (i.e., unconsciousness, cardiac or respiratory abnormalities, stroke, seizures, etc.) support the victim's vital functions. Administer **CPR** if needed. Notify police, fire department, and EMS units immediately. The victim should be decontaminated as soon as possible after removal from the contaminated environment. This should be done in non-contaminated workspace, well away from the source of the problem.

- If the victim appears to be critically injured, he/she should be transported to the nearest Emergency Room by an EMS unit staffed by qualified personnel. If the victim's condition appears to be non-critical, but is more severe than minor cuts or bruises, he/she should be transported to the nearest hospital. Under no circumstances should the victim be transported to the hospital in anything other than an EMS unit staffed by qualified personnel. If the victim has sustained extremely minor injuries or a minor illness, it will be left to the discretion of the Site Safety Officer whether or not the victim should be treated on-site. If the Site Safety Officer determines that the victim may not return to work, the victim should be decontaminated, relieved of duty for the day, and returned to the office if during normal working hours. An occupational physician from the current medical surveillance contractor or the victim's family physician should be contacted.

- Contact the Project Manager and/or the Health and Safety Officer as soon as possible after attending to the needs of the victim. The incident should be reported both in the project file and on the Matrix Environmental Accident/Incident Report found in this document.

APPENDIX I

HEAT AND COLD STRESS

HEAT and COLD STRESS

1.0 HEAT STRESS

Factors that contribute to heat related disorders include high temperature and humidity, clothing, workload, and individual characteristics. Wearing personal protective equipment (PPE), particularly the higher levels, greatly increases the risk of heat stress. PPE adds weight to the individual, reduces visibility and mobility, retards the body's natural cooling processes, and causes greater consumption of energy.

Forms of heat stress, in increasing severity, are listed below. The causes, symptoms, and treatment procedures for each are discussed in Section 1.3.

- Heat rash
- Heat syncope (fainting)
- Heat cramps
- Heat exhaustion
- Heat stroke

1.1 Risk Reduction

The risk of heat stress disorders can be minimized by employing preventative measures such as maintaining fluid balance and adjusting the work schedule. Depending on the degree of risk, the following will or may be provided at the discretion of the Site HSO:

- **Fluid replacement** - Fresh drinking water will be available in the support trailer and the Contaminant Reduction Zone. Workers will also maintain a supply of fluids at each work site using appropriate safety practices such as proper storage and handling.

- **Sunscreen** - Topical application of sunscreen with a high protection factor will be applied to all exposed areas

- **Cooling mechanisms** - Sprayers or misters will be available in the Contaminant Reduction Zone to reduce body temperature. If conditions warrant, cooling vests will be made available.

- **Adjustment of work schedule** - The most labor-intensive tasks may be performed during the morning or late afternoon hours on a clear day.

- **Alcohol intake** - Advise workers that heavy consumption of alcohol the evening before the work day increases the risk of heat stroke due to dehydration.

- **Maintain constant weight** - Advise workers to weigh themselves before and after each work session. Significant weight loss may indicate serious reduction in body fluids.

1.2 Monitoring

The most effective means of preventing heat stress is using common sense. Comprehensive monitoring programs are most certainly beneficial, but cannot always be adhered to when operating with finite resources. Frequent rest periods under these circumstances can jeopardize the overall quality and usefulness of the project. That is not to say that the success of a project should be accomplished at the cost of health and safety, but rather the monitoring protocol can be simplified if the Site HSO and individual personnel ensure that the established risk reduction measures are being carried out.

There will be three (3) components of the heat stress monitoring program: periodic measurement of heart rate, self-monitoring of physical state, and awareness of physical state of one's work partners. The frequency of heart rate monitoring will depend on climatic conditions and the level of PPE. Table K-1 outlines a schedule of monitoring as suggested by the American Congress of Governmental Industrial Hygienists (ACGIH). The schedule will be used initially and adjusted appropriately.

The worker will measure his heart rate via radial pulse for 30 seconds after performing no physical labor for no more than one minute. If the heart rate exceeds 110 beats per minute, the Site HSO must be notified. The Site HSO will then create or modify the existing work-rest schedule for that individual.

It is incumbent on each worker to rest if he believes he is beginning to succumb to heat related factors and to convey that to his work partners. Conversely, an individual may not know he is succumbing to heat stress and each worker in the party should watch one another for signs of heat stress and take appropriate action. The Site HSO should be notified immediately if treatment has been administered.

Table K-1

Suggested Frequency of Physiological Monitoring for Fit and Acclimatized Workers

Adjusted Temperature Calculation	Normal Work Clothing	Impermeable Work Clothing
above 90ºF	After each 45 minutes of work	After each 15 minutes of work
87.5-90ºF	After each 60 minutes of work	After each 30 minutes of work
82.5-87.5ºF	After each 90 minutes of work	After each 60 minutes of work
77.5-82.5ºF	After each 120 minutes of work	After each 90 minutes of work
72.5-77.5ºF	After each 120 minutes of work	After each 90 minutes of work

1.3 Symptoms and Treatment

All project personnel must understand the causes, symptoms, and treatment of heat related illnesses prior to any field work. With the exception of simple heat rash, the Site HSO must be notified if any heat stress disorders.

1.3.1 Heat Rash

Cause:	Continuous exposure to heat or humid air aggravated by friction from clothing.
Symptoms:	Small red pimples on the skin, particularly at points of friction. Prickly sensation.
Treatment:	Remove source of irritation and cool the affected area water or wet cloth.

1.3.2 Heat Syncope

Cause:	Direct exposure of ultraviolet rays and a prolonged upright position can lead to dehydration and contraction of the blood vessels resulting in a temporary deficiency of blood to the brain thereby causing fainting.
Symptoms:	Self-explanatory
Treatment:	Place victim in shade and elevate legs. Apply wet towel to head or forehead. When victim regains consciousness, rehydrate with cool water.

1.3.3 Heat Cramps

Cause:	Heavy perspiration and inadequate replenishment of bodily fluids and electrolytes.
Symptoms:	Muscle spasms and pain in the extremities and abdomen.
Treatment:	If practical, move the victim to the support trailer. Remove protective clothing and rehydrate with cool water. Decrease body temperature with cool water or wet cloths and allow period of rest in a cool location.

1.3.4 Heat Exhaustion

Cause: Increase stress on various parts of the body including inadequate blood circulation due to cardiovascular insufficiency or dehydration.

Symptoms: Heavy perspiration, dizziness, nausea, fainting, skin which is pale, cool and moist.

Treatment: Make arrangements for transport to a medical facility. If practical, transport the victim to the support trailer. Remove protective clothing. Lie the worker down on his or her back in a cool place and raise the feet 6 to 12 inches. Keep warm, but loosen all clothing. If conscious, provide sips of salt water solution using 1 teaspoon salt in 12 ounces of water. Transport the worker to a medical facility.

1.3.5 Heat Stroke

THIS IS A LIFE-THREATENING MEDICAL EMERGENCY REQUIRING IMMEDIATE ACTION. SUMMON EMERGENCY MEDICAL PERSONNEL IMMEDIATELY.

Cause: Same as heat exhaustion.

Symptoms: Dry, red, hot skin, dry mouth, lack of or reduced perspiration, dizziness, nausea, headache, rapid pulse. Temperature continues to rise unless treatment is implemented.

Treatment: The basic principle is to lower the body temperature rapidly. SUMMON EMERGENCY MEDICAL PERSONNEL. In the meantime:

- Move the victim out of the sun
- Remove clothes
- DO NOT administer any drugs or medication
- Submerge victim in water

- Place victim in front of a fan or breeze, if possible.
- If ice is available, apply directly to the victim, especially under the arms and on the head. Rub skin briskly during cool down.
- Monitor body temperature with thermometers. Body temperature should begin to decrease within minutes. Any seizure activity will stop as the body cools.
- As temperature approaches 101°F, stop cooling measures and initiate transport to a hospital or declare an emergency response. The temperature should continue to fall, often to subnormal, during this period.

2.0 COLD STRESS

During the cold months, workers can be susceptible to illness or injury caused by prolonged exposure to cold temperatures. Ambient air temperature and wind velocity are the two dominant weather factors which contribute to cold stress injury. When evaluating safeguards against cold stress conditions, temperature and wind velocity must both be factored into the process. Since wind velocity decreases the temperature at points of contact, there is a direct relationship between ambient temperature and wind velocity. The higher the wind speed, the colder the apparent temperature and the higher the risk for cold stress. The wind chill index calculates the apparent, or equivalent, temperature for given wind speeds at given ambient temperatures. The wind chill index is included as Table K-2.

Contact with or immersion in cold water, snow, or ice also contributes to cold stress conditions and will be addressed in the following sections.

Forms of cold stress disorders, in increasing severity are listed below. The symptoms and treatments for each are discussed in Section 2.3.

- Frost nip
- Frost bite
- Mild hypothermia
- Moderate hypothermia
- Severe hypothermia

2.1 Risk Reduction

The risk of cold stress disorders can be minimized by applying controls and preventative measures such as wearing appropriate clothing, providing warm shelter, and having extra dry clothing available. Specific measures are listed below. Assume risk for cold stress is imminent, i.e. it is not summer.

- **Clothing** - Dead air space between the warm body, clothing, and outside air is essential. Multiple layers of light clothing with an outer shell of windproof material is optimum. Hats, insulated gloves, wool socks, etc. will be worn as appropriate. All workers will keep emergency clothing and footwear either in the service vehicles or in the support trailer.

- **Heated shelter** - The support trailer will be heated to a temperature of at least 70ºF. Workers can also use service vehicles in the Exclusion Zone. Unless under emergency response, personnel must proceed with the standard decontamination process. Service vehicles must be decontaminated prior to leaving the site.

- **Dehydration** - Like heat related conditions, cold conditions can cause dehydration. Fresh drinking water will be available in the support trailer and the Contamination Reduction Zone. Workers will also maintain a supply of fluids at each work site using appropriate safety practices such as proper storage and handling.

- **Warm drinks** - A supply of hot drinking water with tea, coffee, and hot chocolate mix will be available at the support trailer. Field personnel will be encouraged to have a supply of hot beverage at the work sites using appropriate safety practices such as proper storage and handling.

- **Minimization of perspiration** - Field personnel shall adjust the amount or type of clothing worn such that he is comfortable and protected, but is not perspiring to the point that clothing becomes damp or wet.

- **Windbreaks** - If practical and safe, install a windbreak to minimize exposure to high winds and to raise the equivalent temperature.

- **Education** - Personnel will be trained to recognize the symptoms of cold stress and how to respond.

- **Buddy system** - Work partners shall be aware of the physical condition of each other relative to cold stress.

- **Work duration** - If the ambient temperature is less than 0ºF, the maximum work duration is four hours per eight hour work day with alternating one hour on-off periods in the cold work zone.

2.2 Monitoring

Physiological monitoring will not be required since the human response to cold stress is more direct than that of heat stress. A worker can often succumb to any level of heat stress and not necessarily be aware of it. A worker suffering from cold stress will more likely seek comfort without the aid of physiological indicators. Severe cases of cold stress such as hypothermia are typically the result of a situation for which the worker had little or no control such as breaking through an ice covered body of water.

Monitoring weather conditions will be the primary mechanism evaluating and responding to risk for cold stress conditions. Thermometers and wind velocity gauges will be installed at the support trailer and at strategic areas in the Exclusion Zone. Measurements will be taken at periodic intervals and recorded in the meteorological log by the Site HSO. The corresponding equivalent temperature will be obtained from Table K-2. Drastic changes in weather conditions, predicted or measured, will be relayed to the field teams so that actions can be taken to protect health and safety.

Work may be stopped or the work schedule may be amended by the Site HSO if weather conditions deteriorate significantly. The decision to enact such measures will be based on the ability of the field personnel to work efficiently in such conditions without undue risk to health and safety. Recommendations and concerns of the field personnel will be included in the decision-making process.

2.3 Symptoms and Treatment

All project personnel must understand the causes, symptoms, and treatment of heat related illnesses prior to any field work. The Site HSO must be notified immediately if frost bite or hypothermia is confirmed or suspected.

2.3.1 Frost Nip

General Information: First sign of frost bite.

Symptoms: A whitened area of the skin that burns or throbs.

Treatment: Warm the affected area until the symptoms disappear.

2.3.2 Frost Bite

General Information: Ice crystals form superficially or deeply in the fluids and underlying soft tissue.

Symptoms: Skin is cold, hard, white, and numb. Blisters may appear. Affected areas will feel cold, but there may be no pain. Skin will eventually turn black after prolonged exposure and may result in permanent damage.

Treatment: Transport victim to protected area. Prevent further heat loss with warmer clothing or blankets. Transport to medical facility or summon emergency medical personnel.

Do not:

- Walk on a thawed feet or use thawed hands
- Allow victim to smoke or drink alcohol
- Rub affected area with anything
- Break any blisters
- Apply heat of any kind

2.3.3 Mild Hypothermia

General Information: Hypothermia affects the central nervous system. Although impaired, victims of mild hypothermia can communicate.

Symptoms: Change in behavior, notable decrease in work efficiency, sluggishness, forgetfulness, poor judgment, poor motor skills, shivering, victim knows he is cold.

Treatment: The victim should be moved indoors or into a heated vehicle. Remove all wet or damp clothing, dry skin, and apply dry clothing. The head should be covered with a hat or blanket. Cover victim with blankets. Consume hot beverage. Transport to medical facility or summon emergency medical personnel.

Do not consume alcoholic beverages.

2.3.4 Moderate Hypothermia

MODERATE HYPOTHERMIA IS A LIFE-THREATENING CONDITION. SUMMON EMERGENCY MEDICAL PERSONNEL IMMEDIATELY.

General Information: For field purposes, this may be defined as the stage at which the patient is clearly incapable of functioning effectively, but is conscious.

Symptoms: Body temperature well below normal, disorientation, hallucination, unusual behavior, absence of shivering and does not feel cold, heart rate diminishes.

Treatment: SUMMON EMERGENCY MEDICAL PERSONNEL. In the interim, proceed with treatment for mild hypothermia and apply heat with mechanical heaters or body contact.

2.3.5 Severe Hypothermia

SEVERE HYPOTHERMIA IS A LIFE-THREATENING CONDITION. SUMMON EMERGENCY MEDICAL PERSONNEL IMMEDIATELY.

General Information:	Vital signs are weak. Victim is not able to respond.
Symptoms:	Characterized by a decrease in the body temperature which results in a deep coma where vital signs become very weak or undetectable.
Treatment:	Do not consider the victim to be dead. SUMMON EMERGENCY MEDICAL PERSONNEL. In the interim, remove wet clothes, dry skin, and apply dry clothes. Perform CPR, if necessary. Initiate warming with mechanical or body heat. Handle the victim carefully and minimally because of extreme reaction to even minor trauma.

Table K-2

Wind Chill Index

ESTIMATED WIND SPEED (mph)	ACTUAL TEMPERATURE READING (°F)											
	50	**40**	**30**	**20**	**10**	**0**	**-10**	**-20**	**-30**	**-40**	**-50**	**-60**
	EQUIVALENT CHILL TEMPERATURE (°F)											
calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	68
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-121
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(Wind speeds greater than 40 mph have little additional effect)	LITTLE DANGER In <1 hr with dry skin Max. danger = false sense of security				INCREASING DANGER Freezing of exposed flesh within one minute			GREAT DANGER Flesh may freeze within 30 seconds				
	Trenchfoot and immersion foot may occur at any point on this chart											

Developed by the US Army Research Institute of Environmental Medicine, Natick, MA

APPENDIX J

Respirator Inspection Check List

Respirator Inspection Checklist

Type of Respirator:	Location:
Respirator Issued to:	Type of Hazard:
Face piece	**_____ Cracks, tears, or holes** **_____ Face mask distortion** **_____ Cracked or loose lenses/face shield**
Head straps	**_____ Breaks or tears** **_____ Broken buckles**
Valves:	**_____ Residue or dirt** **_____ Cracks or tears in valve material**
Filters/Cartridges:	**_____ Approval designation** **_____ Gaskets** **_____ Cracks or dents in housing** **_____ Proper cartridge for hazard**
Air Supply Systems	**_____ Breathing air quality/grade** **_____ Condition of supply hoses** **_____ Hose connections** **_____ Settings on regulators and valves** **_____ Compressor in working condition** **_____ Air supply tanks working and full**
Rubber/Elastomer Parts	**_____ Pliability** **_____ Deterioration**

Inspected by:	**Date:**
Action Taken:	

APPENDIX F

Community Air Monitoring Program

COMMUNITY AIR MONITORING PLAN

March 2023

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
Site #C915344

Prepared For:
65 Lake Avenue LLC
32 Central Avenue
Lancaster, New York 14086

Prepared By:

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1.0 INTRODUCTION

This document presents a Community Air Monitoring Plan (CAMP) to be implemented during remedial investigation (RI) activities at the Lakeside Village Apartments Site in Lancaster, New York. Matrix Environmental Technologies Inc. (METI) has prepared this CAMP on behalf of 65 Lake Avenue LLC.

Generic CAMP monitoring will be performed during non-intrusive activities, such as the collection of surface soil and groundwater samples from pre-existing monitoring wells, and during intrusive activities not taking place within 20 feet of potentially exposed populations or structures. Additional special requirements CAMP monitoring will be conducted during the installation of soil borings and monitoring wells located within 20 feet of potentially exposed populations or structures.

This CAMP will be completed in general accordance with NYSDEC DER-10 Appendix 1A, which is included in **Attachment A**, and the "Special CAMP Requirements for Work In or Near Buildings" provided by NYSDEC, included in **Attachment B**. Proposed monitoring locations are shown in **Figure 1**.

2.0 VOLATILE ORGANIC COMPOUND AIR MONITORING

VOCs will be monitored at the upwind and downwind perimeters of the work area on a continuous basis during intrusive activities and periodically during non-intrusive activities. The upwind and downwind locations will be determined based on observed wind conditions during ground intrusive work. MiniRAE 3000 organic vapor meters (OVMs) equipped with a photoionization detector (PID) with an 11.7 eV lamp will be used provide real-time recordable air monitoring data. The meters will be capable of calculating 15-minute running average concentrations for comparison to the action levels and will be equipped with an audible and/or visual alarm to indicate exceedance of the action level.

Generic CAMP VOC monitoring action levels as per DER-10 Technical Guidance for Site Investigations and Remediation are as follows:

- 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 (as measured at the upwind perimeter of the work area) for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If the organic vapor level at the perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions take to abate emissions, and monitoring continued. After these steps, work activities can 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 must be shut down.

Additional special requirements CAMP VOC monitoring action levels as per NYSDEC guidance are as follows:

- If total VOC concentrations next to the nearest air intake for the occupied building nearest the work area exceed 1 ppm, monitoring will occur within the occupied structure. Background readings in the occupied spaces will be taken prior to the commencement of the planned work assuming access is granted by the lessee.

3.0 PARTICULATE AIR MONITORING

The remediation crew will make all efforts to suppress dust and particulate matter during the handling of contaminated soil. Fugitive dust and particulate monitoring will be completed in accordance with the Special CAMP Requirements and DER-10 Appendix 1B, as included in **Attachment C**. The following techniques have been shown to be effective for the controlling the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and/or
(g) Reducing the excavation size and/or number of excavations.

Care will be taken not to use excess water, which can result in unacceptably wet site conditions.

Weather conditions will be evaluated during remedial work. When extreme wind conditions make dust control ineffective, remedial actions may need to be suspended as a last resort.

Dust and particulate monitoring will be conducted continuously at upwind and downwind perimeters of the work area during ground intrusive activities. If visual evidence of dust is apparent in other locations, monitoring equipment will be placed where necessary.

Particulate air monitoring will be done with a DataRAM-4 (or similar), which will be capable of reading particles less than 10 micrometers in size (PM-10). The meters will be capable of calculating 15-minute running average concentrations for comparison to the action levels and will be equipped with an audible and/or visual alarm to indicate exceedance of the action level. Particulate monitoring action levels for general CAMP monitoring are as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work must be stopped and a reevaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

Additional special requirements CAMP particulate monitoring action levels as per NYSDEC guidance are as follows:

- If total particulate concentrations next to the nearest air intake for the occupied building nearest the work area exceed 150 $\mu g/m^3$, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentrations to 150 $\mu g/m^3$ or less at the monitoring point.

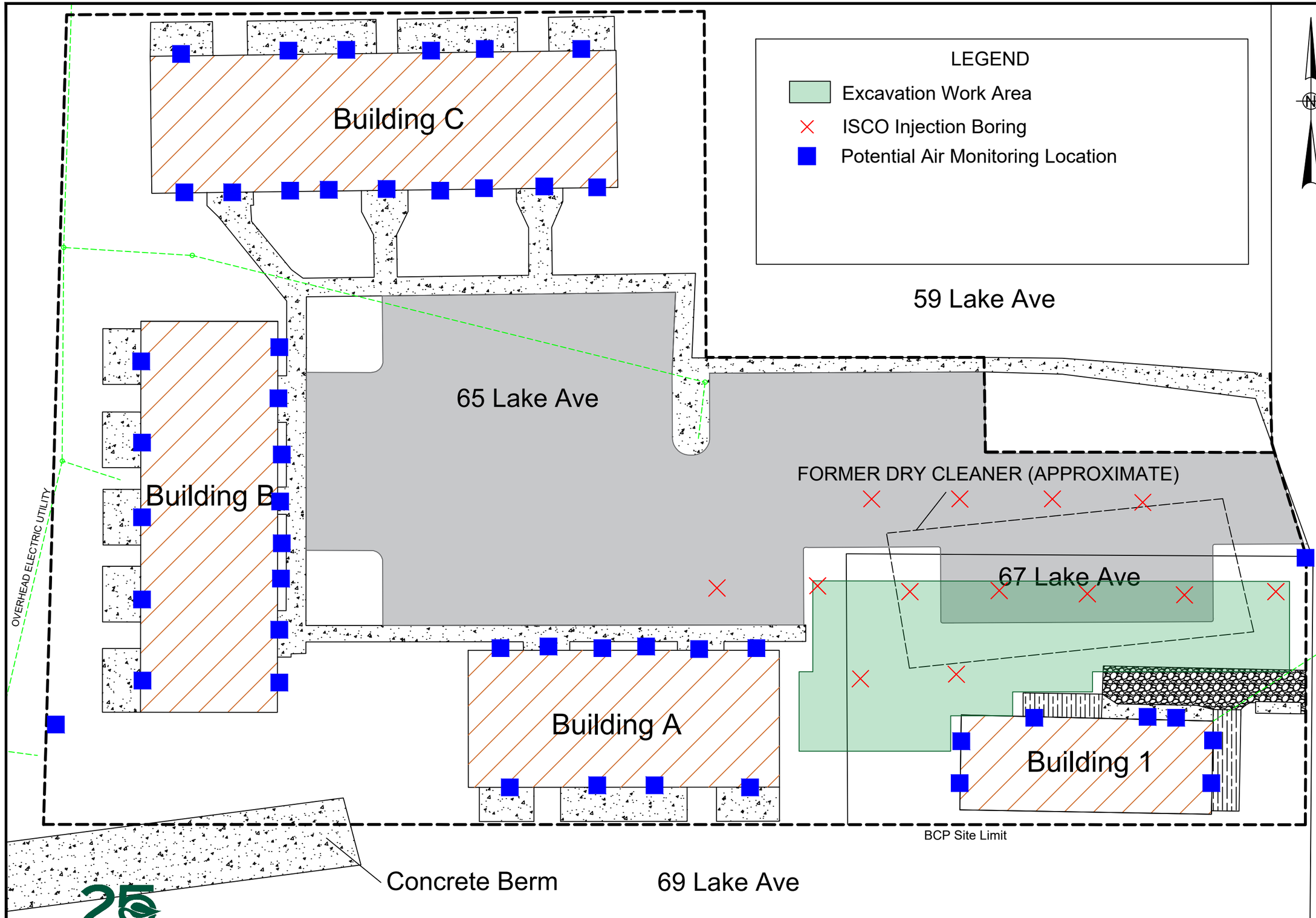
4.0 DOCUMENTATION

All 15-minute readings will be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Such personnel will be notified of any exceedances within 24 hours via email. Instantaneous readings, if any, used for decision purposes should also be recorded.

5.0 WIND DIRECTION

Prevailing wind direction will be recorded at the beginning of each work day by visual observations of an on-site windsock. As wind direction may change throughout the work day, direction will be reestablished if a significant change in direction is observed. The wind direction results will be utilized to determine the placement of the monitoring equipment.

FIGURE



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REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	3/30/23

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
Potential Air Monitoring Device Locations

DATE: N/A

PROJECT NO.: 18-046

FIGURE: 1

25 years dedicated to a CLEANER ENVIRONMENT 1991-2016

ATTACHMENT A

NYSDEC DER-10 Appendix 1A New York State Department of Health Generic Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. 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 must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. 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 must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

ATTACHMENT B

Special CAMP Requirements for Work in or Near Buildings

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m^3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m^3 or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Special Requirements for Indoor Work With Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under “Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures” except that in this instance “nearby/occupied structures” would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

ATTACHMENT C

NYSDEC DER-10 Appendix 1B Fugitive Dust and Particulate Monitoring

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Appendix 1C
DEC Permits Subject to Exemption

In accordance with section 1.10, exemptions from the following permit programs may be granted to the person responsible for conducting the remedial programs undertaken pursuant to section 1.2:

Air - Title 5 permits
Air - State permits
Air - Registrations
Ballast Discharge
Chemical Control
Coastal Erosion Hazard Areas
Construction of Hazardous Waste Management Facilities
Construction of Solid Waste Management Facilities
Dams
Excavation and Fill in Navigatable Waters (Article 15)
Flood Hazard Area Development
Freshwater Wetland
Hazardous Waste
Long Island Wells
Mined Land Reclamation
Navigation Law - Docks
Navigation Law - Floating Objects
Navigation Law - Marinas
Non-Industrial Waste Transport
Operation of Solid Waste Management Facilities
Operation of Hazardous Waste Management Facilities
State Pollution Discharge Elimination Systems (SPDES)
Stream Disturbance
Tidal Wetlands
Water Quality Certification
Water Supply
Wild, Scenic and Recreational Rivers

APPENDIX G

"Contained-In" Determination

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Hazardous Waste and Radiation Management
625 Broadway, 9th Floor, Albany, New York 12233-7256
P: (518) 402-8651 | F: (518) 402-9024
www.dec.ny.gov

August 15, 2023

Sent via e-mail, no hard copy to follow

Christine M. Curtis
Senior Engineer
Matrix Environmental Technologies INC.
95 Brown Road, M/S 1052
Ithica, NY 14850

Re: Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, Erie County, NY 14086
Site No. C915344

Dear Christine B Madsen:

The New York State Department of Environmental Conservation (NYSDEC or the Department) has reviewed your letter and data submitted with the email on April 27, 2023, and additional information on July 25, 2023, requesting a “contained-in” determination for about 1,090 tons excavated soil/fill from Excavation Area A and Excavation Area B at the Lakeside Village Apartments site (Please see attached Figure 5).

Evaluation

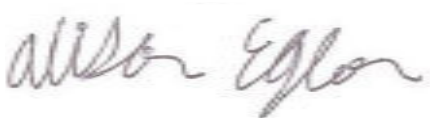
Concentrations (Lab Sample ID: AD18267-001, AD18267-002, AD18267-003, AD18267-004, AD18267-005, AD18291-001, AD18291-002, AD18291-003, AD18291-004, AD18291-005, AD18291-006, AD18291-007, AD18313-001, AD18313-002, AD18554-001, AD18554-002, , AD18554-006, AD18348-001, AD18348-002, AD18348-004, AD18396-001, AD18415-001, AD18415-002, AD18415-003, AD18415-004, AD18415-005, FA77215-1, FA77215-2, FA77215-3, FA77215-4, FA77215-5, FA77215-6, FA77215-7, FA77215-8, FA77313-1, FA77313-2, FA77313-3, FA77361-1, FA77361-2, FA77633-1, FA77908-1, FA77908-2, FA77908-3, FA77908-4, FA77908-5) detected for individual volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals were all less than their current NYSDEC "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs and SVOCs, were not detected above the reporting limit. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

Concentration for Tetrachloroethylene (PCE) detected in the soil sample (Lab Sample ID: AD18267-001, AD18267-002, AD18267-003, AD18267-004, AD18267-005, AD18291-001, AD18291-002, AD18291-003, AD18291-004, AD18291-005, AD18291-006, AD18291-007, AD18313-001, AD18313-002, AD18554-001, AD18554-002, , AD18554-006, AD18348-001, AD18348-002, AD18348-004, AD18396-001, AD18415-001, AD18415-002, AD18415-003, AD18415-004, AD18415-005, FA77215-1, FA77215-2, FA77215-3, FA77215-4, FA77215-5, FA77215-6, FA77215-7, FA77215-8, FA77313-1, FA77313-2, FA77313-3, FA77361-1, FA77361-2, FA77633-1, FA77908-1, FA77908-2, FA77908-3, FA77908-4, FA77908-5) was below the current NYSDEC "contained in" soil action level and the Land Disposal Restriction concentration. Therefore, about 1,090 tons of soil/fill excavated from Excavation Area A outside the boundary of DS1/LF3, DS2/LF4 and DS3/LF5 from 0-7 feet, and within the boundary from 4-7 feet, and Excavation Area B from 0-5 feet, do not have to be managed as hazardous waste and may be transported off-site to a permitted solid waste facility for proper disposal as non-hazardous waste. Please provide the Department the name and address of the facility that will receive it and how much each facility will receive.

The area within the boundary of DS1/LF3, DS2/LF4 and DS3/LF5 (Lab Sample ID: AD18267-001, AD18267-002, AD18267-003, AD18267-004, AD18267-005, AD18291-001, AD18291-002, AD18291-003, AD18291-004, AD18291-005, AD18291-006, AD18291-007, AD18313-001, AD18313-002, AD18554-001, AD18554-002, , AD18554-006, AD18348-001, AD18348-002, AD18348-004, AD18396-001, AD18415-001, AD18415-002, AD18415-003, AD18415-004, AD18415-005, FA77215-1, FA77215-2, FA77215-3, FA77215-4, FA77215-5, FA77215-6, FA77215-7, FA77215-8, FA77313-1, FA77313-2, FA77313-3, FA77361-1, FA77361-2, FA77633-1, FA77908-1, FA77908-2, FA77908-3, FA77908-4, FA77908-5) from 0-3 feet is not part of this contained-in determination. The area fails the contained-in determination criteria for tetrachloroethene. The soil/fill must be disposed of as hazardous waste.

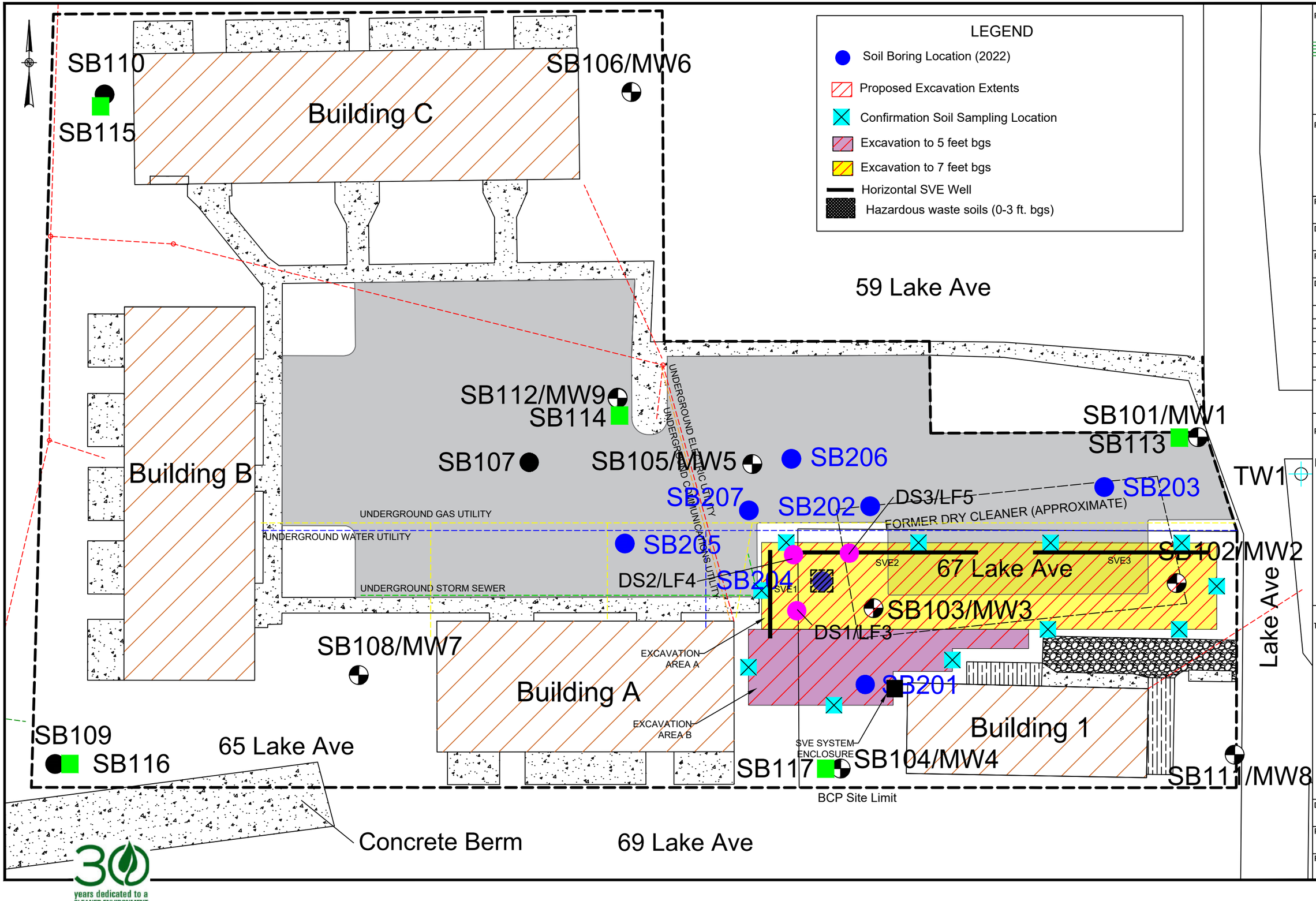
Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9594 or email me at alison.egbon@dec.ny.gov.

Sincerely,



Alison Egbon
Assistant Environmental Engineer
RCRA Technical Assistance Section

ec: B. J Mcpherson , DEC



30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	7/17/23

SCALE IN FEET: 1" = 20'

0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

Proposed Remedial Soil Excavation and SVE Well Locations

DATE:

PROJECT NO.: 18-046

FIGURE: 5

April 7, 2023

New York State Department of Environmental Conservation
Contained-InRequest@dec.ny.gov

Re: Contained-In Determination Request
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, Erie County, NY 14086
Site No. C915344

The purpose of this letter is to request a determination that soils to be excavated from a portion of the Lakeside Village Apartments Site No. C915344 (Site) do not require management as a hazardous waste under the "contained-in" criteria as outlined in Technical and Administrative Guidance Memorandum (TAGM) 3028. Work is being completed under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). Brownfield Cleanup Agreement (BCA) #C915344-11-19 was executed on December 16, 2019. A Remedial Action Work Plan (RAWP) was submitted on January 30, 2023, revised based on comments from the NYSDEC and NYSDOH, and resubmitted on April 7, 2023.

Site Description:
Historically, the eastern portion of the Site was utilized as a dry cleaner from at least 1949. The former dry-cleaning building was located on the eastern portion of 65 Lake Avenue and the northern portion of 67 Lake Avenue. The Site is currently utilized as a residential apartment complex in a moderately developed residential area in the Town of Lancaster, Erie County, New York. The Site includes two parcels totaling approximately 1.18 acres of land: SBL #115.27-1-22.21 addressed as 65 Lake Avenue and SBL #115.27-1-23.11 addressed as 67 Lake Avenue. On-site structures include three (3) two-story townhomes constructed in 2006 (65 Lake Avenue) and a two-story apartment building constructed in 1903 (67 Lake Avenue). The Site is bordered by undeveloped land and apartment buildings to the south, residences to the north and west, and Lake Avenue to the east. Properties beyond those adjacent to the Site, including to the south, consist mostly of private residences. Cayuga Creek is located approximately 200 feet to the southwest. A current site plan is included as **Figure 1.**

Summary of Contamination:
The results of a Remedial Investigation (RI) and subsequent investigations identified an area of shallow contaminated soil above the water table located within and near the footprint of the former dry cleaner. This "source area" includes soil and fill material from ground surface to a depth of approximately 6 feet below grade that is contaminated with tetrachloroethene (PCE), trichloroethene (TCE), cis and trans-1,2-dichloroethane (DCE) and vinyl chloride (VC). Below the shallow soils are 6 to 7 feet of laminated silt and clay that has impeded the downward migration

of contaminants. Soil samples collected above the top of bedrock in the groundwater plume were non-detect for volatile organic compounds (VOCs) and dense non-aqueous phase liquid (DNAPL) was not found. Soil VOC analytical data is summarized in **Table 1** and **Figure 2.**

A groundwater plume is well defined with a two order of magnitude range in VOC concentrations and numerous non-detect samples. The 5 μg/L standard for PCE was exceeded in four monitoring wells, ranging from 15 μg/L in MW3 to 3,200 μg/L in MW2 in August 2021. The most elevated concentrations of the five target compounds were detected in MW2 located in the source area. Groundwater VOCs were non-detect in four wells located downgradient of the source area (MW4, MW6, MW7 and MW8) and the upgradient off-site well TW1. Two chlorinated VOCs were detected below standards from MW9 located on the leading edge of the groundwater plume. The footprint of the plume and magnitude of the VOC concentrations are similar in the 2020 and 2021 sampling events. Groundwater VOC analytical data is summarized in **Table 2** and **Figure 3.**

PCE was detected in two groundwater samples (4.0 and 11.9 μg/L) collected from sumps in Building A. Based on the elevation of the sumps and the observed water level of 7.12 feet below grade, water in the sumps is being recovered from above the laminated silt and clay layer.

The plume has migrated down gradient from the source area in a westerly direction in the sand and gravel soils located below the silt and clay layer. In the groundwater plume the sand and gravel soils are found from approximately 8 feet below grade to the assumed bedrock surface at a depth of 18 to 20 feet below grade. Currently the plume appears to be stable and there is no evidence of vertical migration into bedrock or off-site migration.

Chlorinated VOCs have been detected in indoor air and vapor mitigation systems are operating in Buildings 1 and A. These buildings are located in close proximity to the source area and groundwater plume. Based on the findings of the RI, shallow soils in the source area and the groundwater plume are a source of vapor contamination to indoor air in the on-site buildings. A soil vapor sampling event was completed and all VOCs detected were similar to background levels. TCE, DCE, and VC were not detected. PCE was detected at a concentration of 0.68 $\mu g/m^3$, below the background level of 2.5 $\mu g/m^3$.

Scope of Work:
A combined remedy of shallow soil excavation in the source area, soil vapor extraction (SVE) near the underground utilities in the source area, groundwater remediation with *in situ* chemical oxidation (ISCO) and the continued operation of sub-slab depressurization (SSD) systems in Buildings 1 and A is the remedial measure. This approach will remove subsurface contamination from the Site and reduce human exposure from vapor migration in the shortest time frame while meeting the Remedial Action Objectives and BCP Cleanup Track 2 criteria. A figure showing all elements of the proposed remedy is included as **Figure 4**. The entire groundwater plume and all VOC contaminated soils at the Site are addressed with removal or active remediation. Based on volume calculations in the plume, it is estimated that 75% to 80% of the source of VOCs to indoor

air in the on-site buildings will be eliminated following excavation of shallow soils and the initial ISCO injection event. With the SVE system operating and groundwater VOCs reduced to below cleanup standards with the follow up ISCO injection event(s), it is estimated that over 95% of the source of VOCs to indoor air will be eliminated and the pathways for vapors to enter the buildings removed or controlled.

An area of shallow soil contamination above the water table has been identified in the former footprint of the dry cleaner. The overburden soils at the Site are found in three distinct depth intervals. The most impacted interval is from ground surface to a depth of approximately 5-7 feet below grade. The deepest interval consisting of sand and gravel soils to the assumed bedrock surface does not meet criteria for excavation as soil samples measured non-detect for VOCs and DNAPL was not found. This depth interval is located in the groundwater plume and will be more effectively treated *in situ.*

The estimated excavation area totals approximately 2,850 square feet, with an area of 2,070 square feet being excavated to a depth of 7 feet below grade (Excavation Area A) and an area of 780 square feet being excavated to a depth of 5 feet below grade (Excavation Area B) as shown in **Figure 5**. A total volume of 680 cubic yards (1,090 tons) will be excavated.

Installation of horizontal SVE wells will be completed as the excavation is backfilled. Clean backfill material and topsoil will be transported from an off-site location, in compliance with 6 NYCRR 375-6.7(d) regulations for importing backfill and soil cover as described in Section 5.4(e) of DER-10. Sampling of imported backfill will be completed at a frequency of at least one sample for every source and one sample per 50 cubic yards of soil or sand backfill in accordance with Table 5.4(e)10 of DER-10. Gravel, rock, or stone backfill consisting of virgin material from a permitted mine or quarry may be imported without chemical testing provided that the backfill contains less than 10% by weight material which would pass through a size 80 sieve. Documentation of the source of the fill will be provided to NYSDEC for approval before it is used on site. Once transported to the Site, the backfill will be compacted to prevent settling and the surface will be finished with asphalt and/or topsoil based on location.

The groundwater plume will be remediated using ISCO technology, which is effective at degrading soluble phase chlorinated VOCs, including vinyl chloride. Permanganate injections will be completed through direct-push batch injections using a Geoprobe® and injection tooling to disperse the oxidant laterally into the formation. Direct push allows for injection points to be offset from one injection event to the next and for adjustments to injection locations based on observations in the field during the initial application. Direct push is appropriate given the relatively shallow extent of the contamination. Injection will be completed at discrete intervals using the “bottom-up” method.

Where excavation extends to 7 feet below grade (Excavation Area A), injection will be completed in the sand and gravel soils at approximately 16 and 13 feet below grade and in the clay layer at approximately 9 feet below grade. In all other areas, including those where excavation extends

to 5 feet below grade, injection will be completed in the sand and gravel soils at approximately 15 and 11 feet below grade and in the clay layer at approximately 7 feet below grade, which is the approximate average depth to groundwater within the treatment zone. The total length of the injection interval is 7 feet within the footprint of Excavation Area A and 8 feet in all other areas. Treatment depths and intervals may be modified slightly based on Site conditions and the results of the remedial excavation to minimize loss of oxidant to the imported backfill.

The selected remedy for the Site will include the continued operation of the SVE system and the SSD systems in Buildings 1 and A as engineering controls. The systems will remain functional until the selected remedy is completed, and indoor air testing indicates that vapor intrusion is no longer occurring (for the SSD systems) or system effluent analytical results show asymptotic low-level recovery (for the SVE system). System operation and maintenance parameters will be the subject of a Site Management Plan (SMP). The systems will not be deactivated without prior approval from NYSDEC and NYSDOH. It is anticipated that the SVE system will operate for less than five years. Engineering controls also include a Groundwater Monitoring Plan for long-term monitoring of the groundwater plume using the network of nine groundwater monitoring wells.

Institutional controls will be in the form of an environmental easement as identified in ECL §71-3605. The easement will name the state, acting through the NYSDEC, as grantee and will contain a complete description of the use restrictions and engineering controls to which the property is subject. The easement will be enforceable in perpetuity, or until it is extinguished by the commissioner. 65 Lake Avenue LLC will ensure that the easement is recorded and indexed in Erie County.

Contaminated Soil and Water Disposal:
The soil and water generated during Site remediation will be characterized and disposed of off-Site and in accordance with local, state, and federal regulations. The non-hazardous soil will go to Republic Allied Niagara Falls Landfill at 5600 Niagara Falls Blvd, Niagara Falls, NY 14304. Waste profile soil samples were collected on March 2, 2022 from the source area for analysis of TCL VOCs, pH, total petroleum hydrocarbons (TPH), flash point, reactive cyanide and sulfide, Toxicity Characteristic Leaching Procedure (TCLP) volatiles, TCLP semi-volatiles, TCLP metals, PCBs, herbicides and pesticides. Results are summarized in **Table 3**. Additional waste profile samples will be collected from the source area for laboratory analysis in the Spring of 2023.

Groundwater generated from monitoring well sampling and the SVE system moisture separator will be treated on site with carbon filtration and discharged to the ground surface. The deepest target excavation depth extends to at or just below the groundwater interface; therefore, dewatering and water treatment will not be required. In the event that significant precipitation accumulates in the excavation and requires removal, a sump pump will be utilized to pump water from the excavation to a temporary frac tank. The frac tank water will be sampled for laboratory analysis of VOCs and with NYSDEC approval, transported off Site to a permitted disposal facility.

Please contact us with any questions or comments.

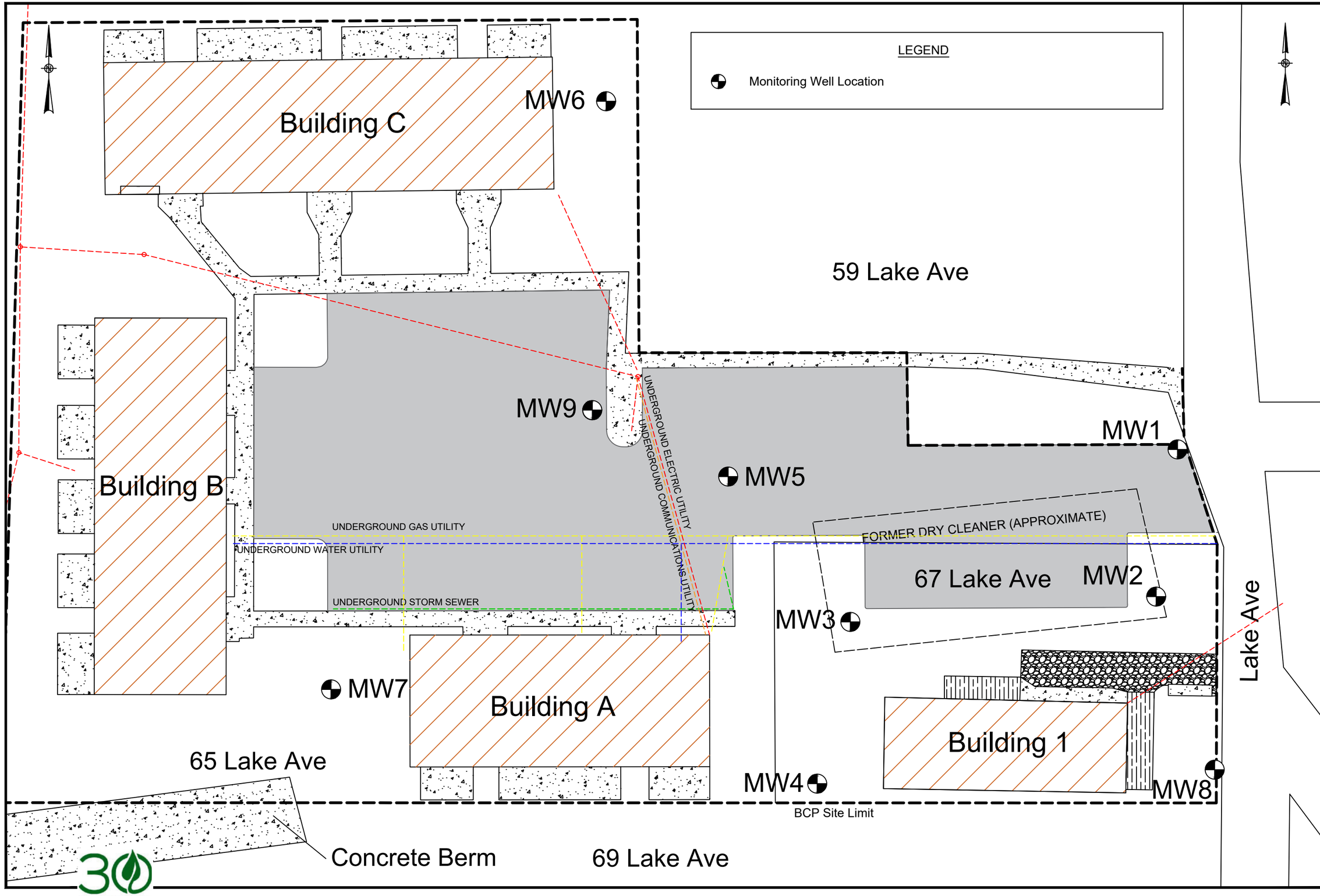
Sincerely,
Matrix Environmental Technologies Inc.

Christine M. Curtis, P.E.
Senior Engineer

Sean R. Carter, P.E.
Principal Engineer

Attachments: Figures 1-4 and Tables 1-3

cc: Mr. Benjamin McPherson, P.E., NYSDEC Region 9
Mr. Mark Aquino, 65 Lake Avenue LLC
Mr. Richard Moore, Esq.



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PREPARED FOR:
65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION	
BY	DATE
CMC	10/14/22

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
SITE PLAN

DATE:

PROJECT NO.: 18-046

FIGURE: 1

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

LEGEND

- Soil Boring & Overburden Monitoring Well Location (2020-2021)
- Soil Boring Location (2020-2021)
- Soil Boring Location (2022)

NOTE: Results are shown only for samples exceeding the selected SCOs. Compounds exceeding the SCO are highlighted.

Sample ID
Sample Depth (ft below grade)
Total VOC Concentration (mg/kg)
PCE Concentration (mg/kg) (PGSCO = 1.3 mg/kg)
TCE Concentration (mg/kg) (PGSCO = 0.47 mg/kg)
cis-1,2-DCE Concentration (mg/kg) (PGSCO = 0.25 mg/kg)
trans-1,2-DCE Concentration (mg/kg) (PGSCO = 0.19 mg/kg)
Vinyl Chloride Concentration (mg/kg) (PGSCO = 0.02 mg/kg)

SB204	
(2.75-3.2)	(5.5-6)
30.3	1.077
19	0.026 J
7.0	ND
3.0	0.990
1.3	0.028
ND	0.033

SB206	
(2)	(6)
0.670	0.0053
0.670	0.0053
ND	ND
ND	ND
ND	ND
ND	ND

SB203	
(2-2.5)	(5-5.5)
1.6	0.486
1.6	0.23
ND	0.037
ND	0.16
ND	0.013
ND	ND

SB207	
(1-3)	(6-6.5)
3.40	0.0431
3.40	ND
ND	ND
ND	0.0061
ND	ND
ND	ND

SB202	
(2-2.5)	(6-6.5)
8.98	3.833
8.8	2.9
0.18 J	0.71
ND	0.21
ND	0.013
ND	ND

SB205	
(1.5)	(6-6.5)
0.49	8.26
0.49	8.1
ND	0.16
ND	ND
ND	ND
ND	ND

SB201	
(1.8-2.3)	(6-6.5)
2.565	0.084
1.8	0.084
ND	ND
ND	ND
ND	ND
ND	ND

LF1
(6)
4.21
2.50
1.20
0.370
0.14
ND

SB102		
(4.5'-5.5')	(9.8'-10.5')	(19.6'-20.0')
5.4	0.164	ND
3.4	0.035	ND
0.34	0.011	ND
1.3	0.086	ND
ND	0.0022	ND
ND	ND	ND

SB110 · Building C · 59 Lake Ave · SB112/MW9 · SB101/MW1 · SB107 · SB105/MW5 · SB206 · SB207 · SB202 · SB203 · TW1 · FORMER DRY CLEANER (APPROXIMATE) · SB205 · 67 Lake Ave · SB102/MW2 · SB204 · SB103/MW3 · LF1 · Lake Ave · Building B · SB10 · Building · SB201 · SB109 · 65 Lake Ave · BCP S · 4/MW4 · 11/MW8 · Concrete Berm · 69 Lake Ave

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

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PREPARED FOR:
65 Lake Avenue LLC

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DESIGNED BY: CMC
REVIEWED BY: SRC
DRAWN BY: CMC

REVISION

BY	DATE
CMC	11/11/22

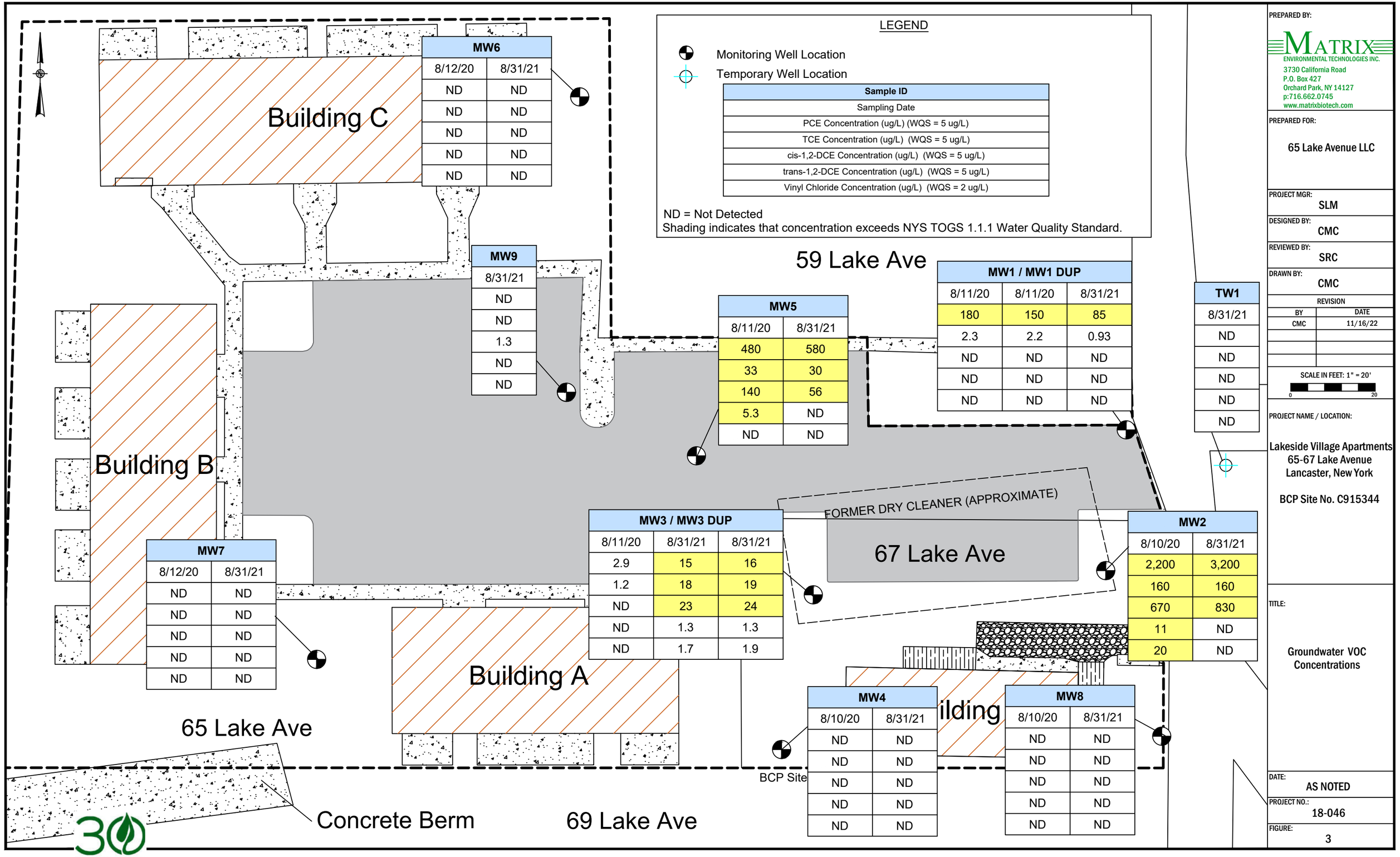
SCALE IN FEET: 1" = 20' (0 – 20)

PROJECT NAME / LOCATION:
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:
VOC Concentrations in Soil

DATE: AS NOTED
PROJECT NO.: 18-046
FIGURE: 2



LEGEND

Monitoring Well Location

Temporary Well Location

Sample ID
Sampling Date
PCE Concentration (ug/L) (WQS = 5 ug/L)
TCE Concentration (ug/L) (WQS = 5 ug/L)
cis-1,2-DCE Concentration (ug/L) (WQS = 5 ug/L)
trans-1,2-DCE Concentration (ug/L) (WQS = 5 ug/L)
Vinyl Chloride Concentration (ug/L) (WQS = 2 ug/L)

ND = Not Detected

Shading indicates that concentration exceeds NYS TOGS 1.1.1 Water Quality Standard.

PREPARED BY:

MATRIX ENVIRONMENTAL TECHNOLOGIES INC.

3730 California Road
P.O. Box 427
Orchard Park, NY 14127
p:716.662.0745
www.matrixbiotech.com

PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	11/16/22

SCALE IN FEET: 1" = 20'

0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

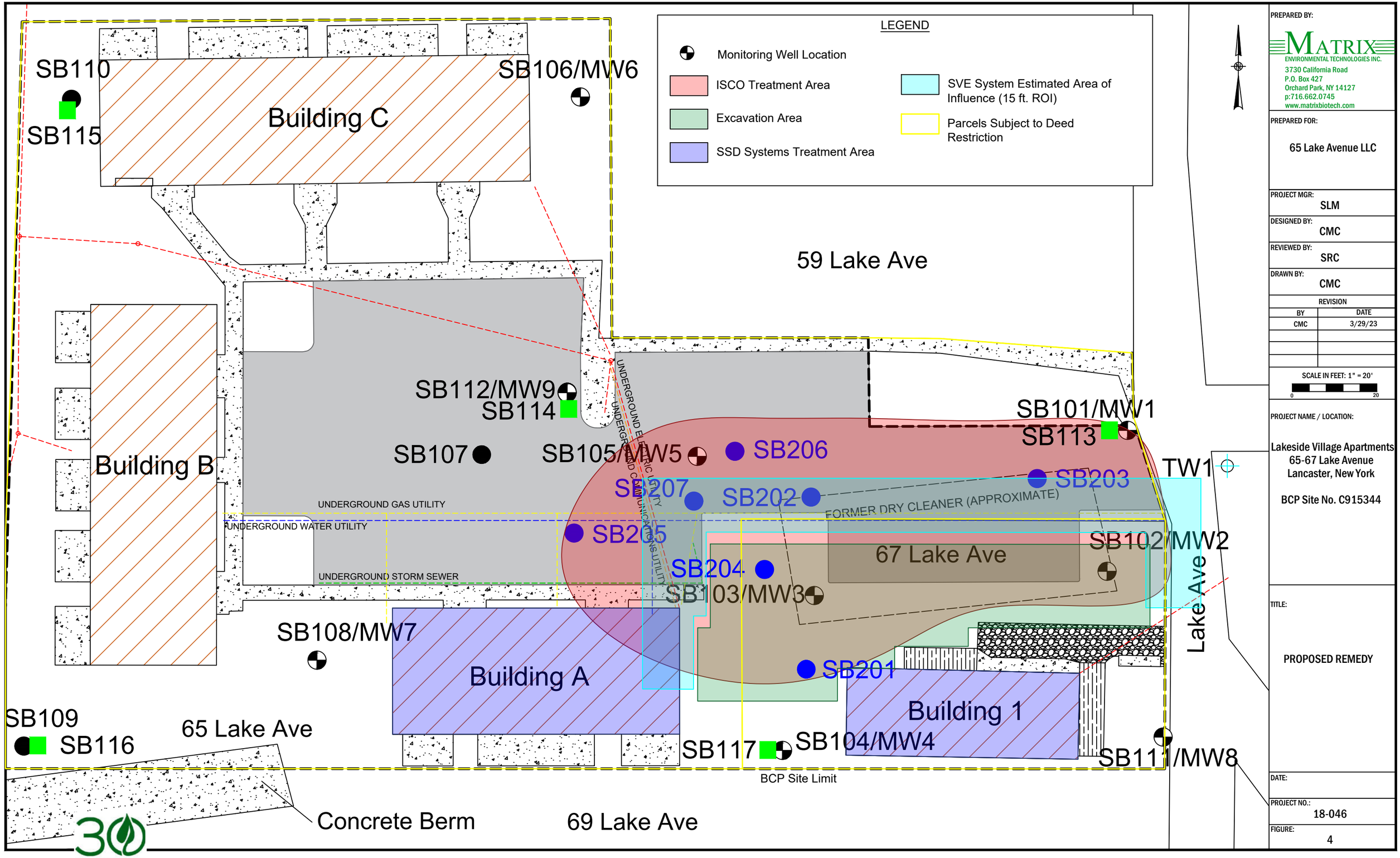
Groundwater VOC Concentrations

DATE: AS NOTED

PROJECT NO.: 18-046

FIGURE: 3

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021



30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION	
BY	DATE
CMC	3/29/23

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

PROPOSED REMEDY

DATE:

PROJECT NO.: 18-046

FIGURE: 4

LEGEND

- Soil Boring Location (2022)
- Proposed Excavation Extents
- Confirmation Soil Sampling Location
- Excavation to 5 feet bgs
- Excavation to 7 feet bgs
- Horizontal SVE Well

SB110
SB115
SB106/MW6
Building C
59 Lake Ave
SB112/MW9
SB114
SB101/MW1
SB113
SB107
SB105/MW5
SB206
SB207
SB202
SB203
TW1
Building B
UNDERGROUND GAS UTILITY
UNDERGROUND WATER UTILITY
UNDERGROUND STORM SEWER
UNDERGROUND ELECTRIC UTILITY
UNDERGROUND COMMUNICATIONS UTILITY
SB205
FORMER DRY CLEANER (APPROXIMATE)
SVE2
SVE3
SVE1
SB204
SB1
2/MW2
Lake Ave
SB108/MW7
EXCAVATION AREA A
EXCAVATION AREA B
Building A
SB201
Building 1
SB109
SB116
65 Lake Ave
SVE SYSTEM ENCLOSURE
SB117
SB104/MW4
SB111/MW8
BCP Site Limit
Concrete Berm
69 Lake Ave

30 years dedicated to a CLEANER ENVIRONMENT 1991-2021

PREPARED BY:

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PREPARED FOR:

65 Lake Avenue LLC

PROJECT MGR: SLM

DESIGNED BY: CMC

REVIEWED BY: SRC

DRAWN BY: CMC

REVISION

BY	DATE
CMC	3/29/23

SCALE IN FEET: 1" = 20'
0 20

PROJECT NAME / LOCATION:

Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York

BCP Site No. C915344

TITLE:

Proposed Remedial Soil Excavation and SVE Well Locations

DATE:

PROJECT NO.: 18-046

FIGURE: 5

Table 1
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB201 (1.8-2.3)		SB201 (6-6.5)		SB202 (2-2.5)		SB202 (6-6.5)		SB203 (2-2.5)	
		Sampling Date	3/2/2022		3/2/2022		3/2/2022		3/2/2022		3/2/2022	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND	
Acetone	0.05	**100**	0.37	J	ND		ND		ND		ND	
cis-1,2-Dichloroethene	**0.25**	100	ND		ND		ND		0.210		ND	
Cyclohexane	NA	**NA**	0.095		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	0.300		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	1.800		0.084		8.800		2.900		1.600	
trans-1,2-Dichloroethene	**0.19**	100	ND		ND		ND		0.013	J	ND	
Trichloroethene	**0.47**	21	ND		ND		0.180	J	0.710		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		ND		ND		ND	
		Total	**2.565**		**0.084**		**8.980**		**3.833**		**1.6000**	

Table 1 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB203 (5-5.5)		SB204 (2.75-3.2)		SB204 (5.5-6.0)		LF1		SB205 (1.5)	
		Sampling Date	**3/2/2022**		**3/2/2022**		**3/2/2022**		**3/2/2022**		**6/20/2022**	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND	
Acetone	0.05	**100**	ND		ND		ND		ND		ND	
cis-1,2-Dichloroethene	**0.25**	100	0.160		3.0		0.990		0.370		ND	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	0.046	J	ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	0.230		19		0.026	J	2.50		0.490	
trans-1,2-Dichloroethene	**0.19**	100	0.013	J	1.3		0.028	J	0.14		ND	
Trichloroethene	**0.47**	21	0.037	J	7.0		ND		1.2		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		0.033	J	ND		ND	
		Total	**0.486**		**30.3**		**1.077**		**4.21**		**0.49**	

Table 1 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB205 (7)		SB206 (2)		SB206 (6)		SB207 (1-3)		SB207 (6-8)	
		Sampling Date	**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		0.004	J
Acetone	0.05	**100**	ND		ND		0.0053	J	ND		0.024	
cis-1,2-Dichloroethene	**0.25**	100	ND		ND		ND		ND		0.0061	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		0.009	J
Methylcyclohexane	NA	**NA**	ND		ND		ND		ND		ND	
Tetrachloroethene	**1.3**	19	8.100		0.670		ND		3.400		ND	
trans-1,2-Dichloroethene	**0.19**	100	ND		ND		ND		ND		ND	
Trichloroethene	**0.47**	21	0.160		ND		ND		ND		ND	
Vinyl chloride	**0.02**	0.9	ND		ND		ND		ND		ND	
		Total	**8.260**		**0.670**		**0.0053**		**3.40**		**0.0431**	

Table 1 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB113 (1-5)		SB113 (15-18)		SB114 (0.5-2)		SB114 (6-10)		SB114 (12-16)	
		Sampling Date	**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		0.004	J	ND	
Acetone	0.05	**100**	ND		0.012	J	ND		0.027		0.0063	J
Benzene	0.06	**4.8**	ND		0.00046	J	ND		ND		ND	
Carbon disulfide	2.7	**NA**	ND		ND		ND		0.0051		ND	
Cyclohexane	NA	**NA**	ND		0.0016	J	ND		ND		ND	
Methyl acetate	NA	**NA**	ND		ND		ND		ND		ND	
Methylcyclohexane	NA	**NA**	ND		0.00094		ND		ND		ND	
Tetrachloroethene	**1.3**	19	0.410		ND		0.140		ND		ND	
Toluene	0.7	**100**	ND		0.0019	JT	ND		ND		ND	
Xylenes, Total	**1.6**	**100**	ND		0.0011	JT	ND		ND		ND	
		Total	**0.410**		**0.017**		**0.140**		**0.036**		**0.0063**	

Table 1 (Continued)
Soil VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	Protection of Groundwater SCO	Restricted-Residential Use SCO	SB115 (0-3)		SB115 (6-8)		SB116 (0.5-2.5)		SB116 (6.0-7.5)		SB117 (0.5-3.0)		SB117 (8-10)	
		Sampling Date	**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**		**6/20/2022**	
2-Butanone (MEK)	0.3	**NA**	ND		ND		ND		ND		ND		ND	
Acetone	0.05	**100**	ND		0.0058	J	ND		ND		ND		ND	
Benzene	0.06	**4.8**	ND		ND		ND		ND		ND		ND	
Carbon disulfide	2.7	**NA**	ND		ND		ND		ND		ND		ND	
Cyclohexane	NA	**NA**	ND		ND		ND		ND		0.051	J	ND	
Methyl acetate	NA	**NA**	ND		ND		0.140	J	ND		0.130	J	ND	
Methylcyclohexane	NA	**NA**	ND		ND		0.027	J	ND		0.150		ND	
Tetrachloroethene	**1.3**	19	ND		ND		0.140		0.00054	J	0.092		ND	
Toluene	0.7	**100**	ND		ND		ND		ND		0.031	J	ND	
Xylenes, Total	**1.6**	**100**	ND		ND		ND		ND		ND		ND	
		Total	**ND**		**0.0058**		**0.307**		**0.00054**		**0.454**		**ND**	

NOTES:
1. Analytical testing for VOCs via EPA Method 8260C by Eurofins Buffalo.
2. Results present in mg/kg.
3. ND = Not Detected; NA = Not Applicable
4. Regulatory standards and results are shown for detected compounds only.
5. Soil Cleanup Objectives (SCOs) from NYCRR Part 375
6. "J" = estimated value
7. The applicable SCO (Protection of Groundwater or Restricted Residential) for each compound is shaded.
8. Yellow highlighted values exceed the applicable Protection of Groundwater SCO or Restricted Residential SCO.

Table 2
Groundwater VOC Concentrations

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	NYS Water Quality Standard or Guidance Value	MW1	MW1 Duplicate	MW2	MW3	MW4	MW5	MW6	MW7	MW8
	Sampling Date	8/11/2020	8/11/2020	8/10/2020	8/11/2020	8/10/2020	8/11/2020	8/12/2020	8/12/2020	8/10/2020
cis-1,2-Dichloroethene	5	ND	ND	**670**	ND	ND	**140**	ND	ND	ND
Tetrachloroethene	5	**180**	**150**	**2,200**	**2.9**	ND	**480**	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	**11**	ND	ND	**5.3**	ND	ND	ND
Trichloroethene	5	**2.3**	**2.2**	**160**	**1.2**	ND	**33**	ND	ND	ND
Vinyl chloride	2	ND	ND	**20**	ND	ND	ND	ND	ND	ND
	Total	**182**	**152**	**3061**	**4.1**	ND	**658**	ND	ND	ND

PARAMETER	NYS Water Quality Standard or Guidance Value	MW1	MW2	MW3	MW3 Duplicate	MW4	MW5	MW6	MW7	MW8	MW9	TW1
	Sampling Date	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021	8/31/2021
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.21**	ND
Acetone	NA	ND	ND	**3.0**	ND	ND	ND	**4.1**	ND	ND	ND	16
cis-1,2-Dichloroethene	5	ND	**830**	**23**	**24**	ND	**56**	ND	ND	ND	**1.3**	ND
Tetrachloroethene	5	**85**	**3,200**	**15**	**16**	ND	**580**	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	**1.3**	**1.3**	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	**0.93**	**160**	**18**	**19**	ND	**30**	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	**1.7**	**1.9**	ND	ND	ND	ND	ND	ND	ND
	Total	**86**	**4,190**	**62**	**62**	ND	**666**	**4.1**	ND	ND	**1.5**	**16**

NOTES:
1. Analytical testing for VOCs via EPA Method 8260.
2. Results present in ug/L.
3. ND = Not Detected
4. Results and regulatory standards are shown for detected compounds only.
5. NA = Not Applicable
6. Yellow highlighting indicates exceedance of NYS Ambient Water Quality Standard (TOGS 1.1.1) for Class GA waters.

Table 3
LF1 and LF2 Analytical Results

Lakeside Village Apartments
65-67 Lake Avenue, Lancaster, New York
BCP Site No. C915344

PARAMETER	ANALYTICAL METHOD	UNITS	LF1 (5-7)		LF2 (10-11)	
Tetrachloroethene (TCLP)	8260C TCLP	mg/L	0.011		0.014	
Trichloroethene (TCLP)		mg/L	0.011		ND	
Barium (TCLP)	6010C TCLP	mg/L	0.75	J	0.63	J
Cadmium (TCLP)		mg/L	0.0018	J	0.00086	J
Lead (TCLP)		mg/L	0.0075	J	0.011	J
Flashpoint	1010A	Degrees F	>175		>175	
pH	9045D	SU	8.8	HF	9.2	HF
Temperature		Degrees C	19.8	HF	19.9	HF
GRO [C6-C10]	8015D	mg/kg	1.8		1.8	
DRO [C10-C28]		mg/kg	9.6	J	28	
cis-1,2-Dichloroethene	8260C	ug/kg	370		NA	
Tetrachloroethene		ug/kg	2500		NA	
trans-1,2-Dichloroethene		ug/kg	140		NA	
Trichloroethene		ug/kg	1200		NA	

PARAMETER	ANALYTICAL METHOD	UNITS	LF1 (8-9)		LF2 (10-11)	
Permanganate Natural Oxidant Demand	ASTM D7262010 Test Method A	g/kg	13.2		5.3	
			12.4		4.5	
			11.3		4.2	

NOTES:
1. Analytical testing by Eurofins TestAmerica Buffalo and Carus Corporation.
2. ND = Not Detected; "NA" = Not Analyzed
3. "J" = approximate value; "HF" = field parameter with a holding time of 15 minutes

APPENDIX H

SVE Calculations and Blower Specifications

GAST MANUFACTURING, INC.
A Unit of IDEX Corporation
Post Office Box 97
Benton Harbor, Michigan
Ph: 269/926-6171
Fax: 269/925-8288

Product Specifications

PART NUMBER: LTD146

REVISION: E

MODEL NUMBER	MOTOR SPECIFICATIONS	RPM	MAX VAC		MAX PRESS		HP	kW	NET WT.	
			"H_2O	mbar	"H_2O	mbar			lbs.	kg
R5125-2	110/220-240-50-1	2850	47	117	50	125	1.85	1,38	76	34,5
	115/208-230-60-1	3450	60	149	65	162	2.5	1,86		

SOUND LEVEL 75/73 dB(A) MAX. 60/50 Hz

NORMAL AMBIENT -29°C TO 40°C

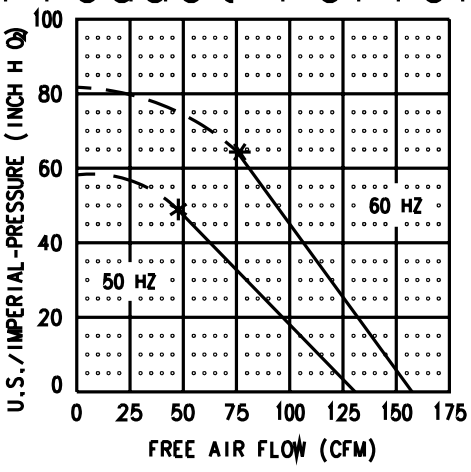
RELATIVE HUMIDITY 0% - 100% NON CONDENSING

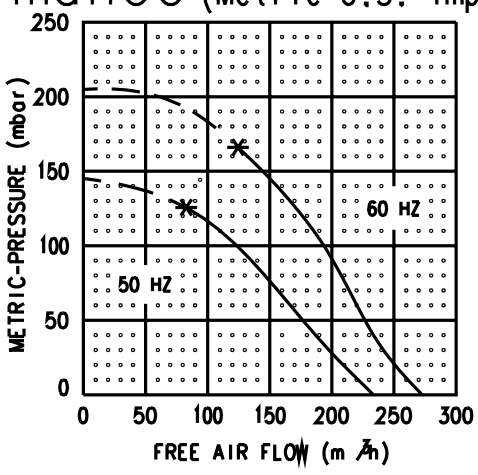
ENVIRONMENT CLEAN DUST FREE

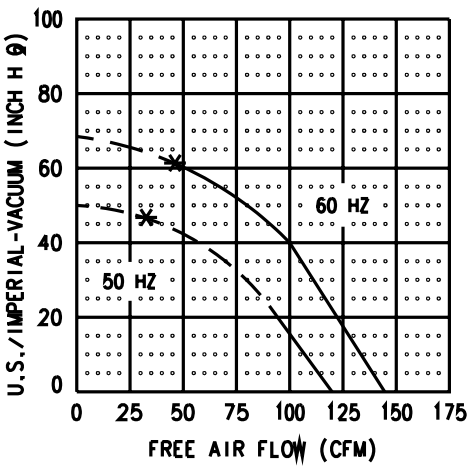
TECHNICAL DATA SUBJECT TO CHANGE WITHOUT NOTICE

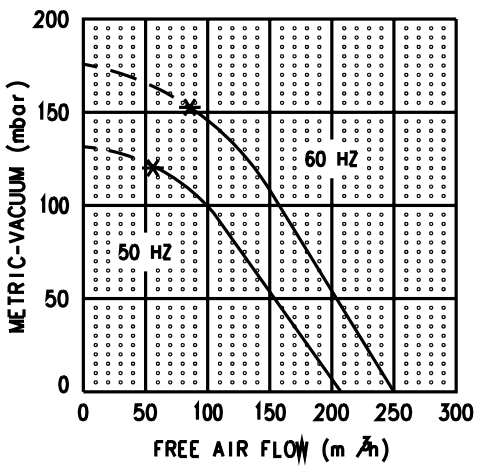
* = RECOMMENDED MAXIMUM DUTY
--- INTERMITTENT DUTY ONLY

Product Performance (Metric U.S. Imperial)









PERFORMANCE DATA
THE PERFORMANCE DATA SHOWN WAS DETERMINED UNDER THE FOLLOWING CONDITIONS:

LINE VOLTAGE 60 Hz. 230V OR 460V FOR 3 PHASE UNITS. 115V OR 230V FOR 1 PHASE UNITS.

LINE VOLTAGE 50 Hz. 220V FOR 3 PHASE OR 1 PHASE UNITS.

UNITS IN A TEMPERATURE STABLE CONDITION.

DELIVERY MEASUREMENTS MADE WITH OUTPUT PORT THROTTLED.

SUCTION MEASUREMENTS MADE WITH INPUT PORT THROTTLED.

TEST CONDITIONS: INLET AIR DENSITY 0.075 lbs. per cu. ft. [20°C (68°F), 29.92" Hg (14.7 PSIA)].

NORMAL PERFORMANCE VARIATIONS ON THE RISISTANCE CURVE WITHIN ±10% OF SUPPLIED DATA CAN BE EXPECTED.

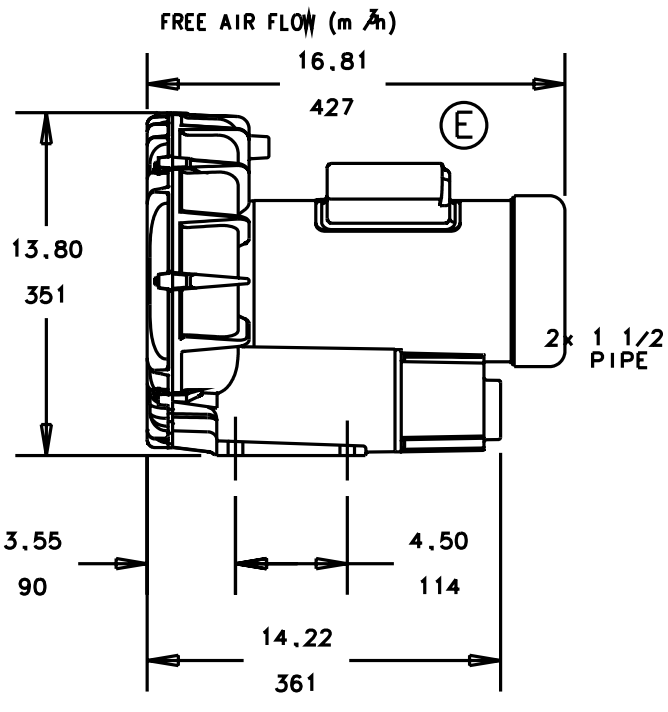
LOW VOLTAGE

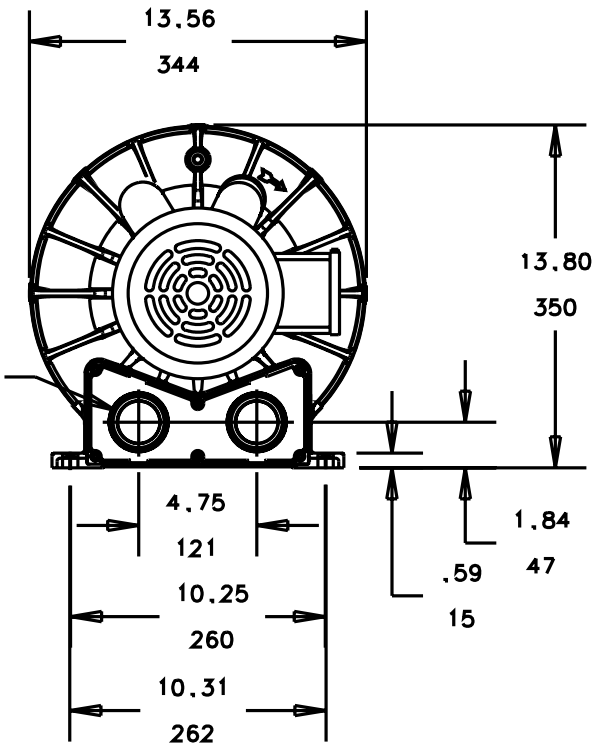
P1 — LINE
P2, T3 — TIE TOGETHER AND INSULATE
T2, T4 — LINE

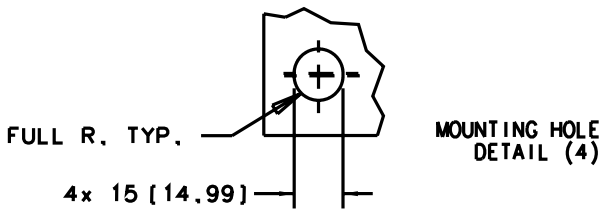
HIGH VOLTAGE

P1 — LINE
P2 — INSULATE
T3, T2 — TIE TOGETHER AND INSULATE
T4 — LINE

WIRING DIAGRAM







SVE System Design Calculations

E =	720	min	target for 2 PV exchanges per day
e =	0.38	ft3/ft3	soil porosity
V =	12160	ft3	soil volume
Q =	6.4	SCFM	target flow rate for desired E
Q =	2.1	SCFM	target flow rate per point

Blower specifications:	120	cfm	selected blower, GAST 5125-2
	35	" H2O	

# vapor extraction points:	3	
Flow rate available per point:	40	cfm

Estimated Losses:

Formation	10	" H2O
Piping	10.36	" H2O
Manifold	0.90	" H2O
Header to blower	12.64	" H2O
	34	" H2O

PIPING LOSSES

pipe diameter, d =	2	inch
Area = (pi*d^2)/4 =	0.022	ft^2
Flow rate, Q =	40.0	ft^3/min
Velocity, V =Q/Area=	1833.5	ft/min

AIR at 80 F

kinematic viscosity, v =	1.69E-04	ft^2/s
Reynold's number, Re =	30136	

Friction factor

f = 0.25 / {log(e/d/3.7 + 5.74/Re^0.9)}^2

e =	0.00006	in
f =	0.0234	

Headloss, Hf = f*L/d*(V/4005)^2

where Hf = head loss due to friction, in water
L = length of duct, ft
d = diameter of duct, ft
V = velocity of air, ft/min
f = nondimensional friction coefficient
4005 = a constant to convert head loss from feet of air to inches of water

Length of pipe, L = 113 ft

Minor Losses:

Number	description	equiv length (ft)	number*equiv length
9	2" 90	8.5	76.5
3	2" ball valve	54	162
		total =	238.5

Pipe losses (Hf)	3.33	inches of water
Minor losses	7.03	inches of water
Pipe + minor losses =	10.36	inches of water

MANIFOLD LOSSES

pipe diameter, d =	2	inch
Area = (pi*d^2)/4 =	0.022	ft^2
Flow rate, Q =	40.0	ft^3/min
Velocity, V =Q/Area=	1833.5	ft/min

AIR at 80 F

kinematic viscosity, v =	1.69E-04	ft^2/s
Reynold's number, Re = V*(	30136	

Friction factor

f = 0.25 / {log(e/d/3.7 + 5.74/Re^0.9)}^2

e =	0.00006	in
f =	0.0234	

Headloss, Hf = f*L/d*(V/4005)^2

where Hf = head loss due to friction, in water
L = length of duct, ft
d = diameter of duct, ft
V = velocity of air, ft/min
f = nondimensional friction coefficient
4005 = a constant to convert head loss from feet of air to inches of water

Length of pipe, L = 5 ft

Minor Losses:

Number	description	equiv length (ft)	number*equiv length
3	2" 90	8.5	25.5
		total =	25.5

Pipe losses (Hf)	0.15	inches of water
Minor losses	0.75	inches of water
Pipe + minor losses =	0.90	inches of water

HEADER TO BLOWER LOSSES

pipe diameter, d =	2	inch
Area = (pi*d^2)/4 =	0.022	ft^2
Flow rate, Q =	40	ft^3/min
Velocity, V =Q/Area=	1833.5	ft/min

AIR at 80 F

kinematic viscosity, v =	1.69E-04	ft^2/s
Reynold's number, Re = V*d/v =	30136	

Friction factor

f = 0.25 / {log(e/d/3.7 + 5.74/Re^0.9)}^2

e =	0.00006	in
f =	0.0234	

Headloss, Hf = f*L/d*(V/4005)^2

where Hf = head loss due to friction, in water
L = length of duct, ft
d = diameter of duct, ft
V = velocity of air, ft/min
f = nondimensional friction coefficient
4005 = a constant to convert head loss from feet of air to inches of water

Length of pipe, L = 10 ft

Minor Losses

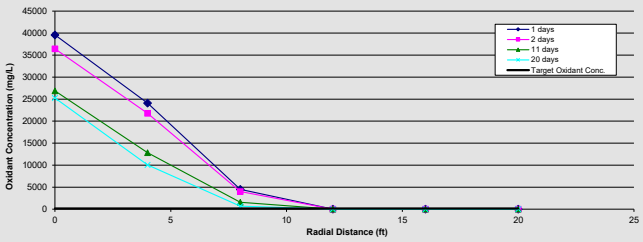
Number	description	equiv length (ft)	number*equiv length
3	2" 90	8.5	25.5
1	2" ball valve	54	54
		total =	79.5

Pipe losses (Hf)	0.29	inches of water
Minor losses	2.34	inches of water
Moisture Separator losses	10.0	inches of water
Pipe + minor losses =	12.64	inches of water

APPENDIX I

CDISCO Model

Model Output



INSTRUCTIONS

Selected	Run Number	Injection Duration (day)	Aquifer Thickness (ft)	Thickness of Mobile Zone (ft)	NOD Fraction Instantaneous (-)	Total NOD (g KMnO4/kg)	Slow NOD Rate (L / mmol - d)	Injection Oxidant Conc (mg/L)	Injection Rate (gal/Day)	ROI (ft)	Minimum Oxidant Conc to Calc ROI (mg/L)	Target Number of Days to Calc ROI (days)	Injection Duration / Well or Point (day)	Injection ROI Overlap	Additional Inj Events Planned
	1	1	10	5	0.2	4.2	0.01	5,000	1,680	0.00	200	15	1	1.5	1
	2	1	10	5	0.1	4.2	0.01	5,000	1,680	0.00	200	15	1	1.5	1
	3	1	10	5	0.05	4.2	0.01	5,000	1,680	0.00	200	15	1	1.5	1
	4	1	10	2	0.1	4.2	0.01	5,000	1,680	0.00	200	15	1	1.5	1
	5	1	10	8	0.1	4.2	0.01	5,000	1,680	0.00	200	15	1	1.5	1
	6	1	10	5	0.1	4.2	0.01	5,000	1,680	0.00	100	15	1	1.5	1
	7	1	10	5	0.1	4.2	0.01	5,000	1,680	0.00	50	15	1	1.5	1
	8	1	10	5	0.1	4.2	0.01	5,000	1,680	3.18	200	4	1	1.5	1
	9	1	10	5	0.1	4.2	0.01	5,000	1,680	6.77	200	2	1	1.5	1
	10	1	10	5	0.1	4.2	0.005	5,000	1,680	7.36	200	2	1	1.5	1
	11	1	10	5	0.1	4.2	0.001	5,000	1,680	7.64	200	2	1	1.5	1
	12	1	10	5	0.1	4.5	0.001	5,000	1,680	7.62	200	2	1	1.5	1
	13	1	10	5	0.1	5.3	0.001	5,000	1,680	7.58	200	2	1	1.5	1
	14	1	10	5	0.05	4.5	0.001	5,000	1,680	7.68	200	2	1	1.5	1
	15	1	10	5	0.2	4.5	0.001	5,000	1,680	7.07	200	2	1	1.5	1
	16	1	10	5	0.1	4.5	0.001	5,000	1,680	7.72	150	2	1	1.5	1
	17	1	10	5	0.1	4.5	0.001	5,000	1,570	7.69	150	2	1	1.5	1
	18	1	10	5	0.1	4.5	0.001	5,000	1,570	7.79	100	2	1	1.5	1
	19	1	10	5	0.1	4.5	0.001	5,000	1,570	7.90	50	2	1	1.5	1
	20	1	10	5	0.1	4.5	0.001	5,000	1,570	7.79	100	2	1	1.25	1
	21	1	10	5	0.1	4.5	0.001	20,000	1,570	11.60	100	2	1	1.5	1
	22	1	10	5	0.1	4.5	0.001	10,000	1,570	7.92	100	2	1	1.5	1
	23	1	10	5	0.1	4.5	0.001	25,000	1,570	11.77	100	2	1	1.5	1
	24	1	10	5	0.1	4.5	0.001	40,000	1,570	11.90	100	2	1	1.5	1
	25	1	10	5	0.1	4.5	0.001	40,000	1,570	11.85	150	2	1	1.5	1
	26	1	10	5	0.1	4.5	0.001	30,000	1,570	11.84	100	2	1	1.5	1
	27	1	10	5	0.1	4.5	0.001	50,000	1,570	11.93	100	2	1	1.5	1
	28	1	10	5	0.1	4.5	0.001	40,000	1,570	11.80	200	2	1	1.5	1
	29	1	10	5	0.1	4.5	0.001	40,000	1,570	11.70	300	2	1	1.5	1
✓	30	1	10	5	0.1	4.5	0.001	40,000	1,570	11.85	150	2	1	1.5	1

Detailed Description of Model

The model portion of this ISCO tool is based on a chemical engineering approach of a series of completely stirred The transport and reactions of oxidant through the reactors are described by the equations below. The spreadsheet converts all model parameters to units of mmol, L and Kg, prior to completing the model

C = contaminant concentration (mmol/L)
M = oxidant concentration (mmol/L)
N_I = instantaneous NOD (solid phase) (mmol/Kg)
N_S = slow NOD (solid phase) (mmol/Kg)
$Y_{M/C}$ = stoichiometric ratio of contaminant to oxidant consumed (mmol/mmol)
R = contaminant retardation factor total mass of contaminant / aqueous mass
ρ_B= bulk density (Kg/L)
n = porosity (L/L)
k_s = 2nd order slow NOD consumption rate (L/mmol-d)
Q = flow rate through reactor (L/d)
V = volume of reactor (L)

Dispersion is simulated by setting the length of each reactor to two times the longitudinal dispersivity. The volume of each reactor increases outward as injected water migrates radially outward from the injection well.

The volume of the first reactor is:

$$V_1 = Volume\ of\ reactor\ 1 = B_e\ n\ \pi\ (\alpha_L)^2$$

The volume of each additional reactor (N) is:

$$V_N = B_e\ n\ \pi\ [(\alpha_L + 2(N\text{-}1)\ \alpha_L))^2 - (\alpha_L + 2(N\text{-}2)\ \alpha_L))^2]$$

where

N =reactor number
α_L = Longitudinal dispersivity
B_e = effective saturated thickness

A number of stepwise calculations are performed for each reactor at every time step. The concentration of

<u>Step 1 Advective-Dispersive Transport of Oxidant and Contaminant</u>

The change in concentration of oxidant and contaminant is calculated for each reactor by the following equations:

$$\frac{dC}{dt} = QC_I/(R_C V) - QC/(R_C V)$$
$$\frac{dM}{dt} = QM_I/V - QM/V$$

Step 2 Instantaneous Reaction of Oxidant with Contaminant

When excess oxidant is present, the contaminant concentration is set to zero and the oxidant concentration is

$$C * Y_{M/C} * R$$

where

C = contaminant concentration

$Y_{M/C}$= stoichiometric ratio of contaminant to oxidant consumed

R = ratio of the total contaminant mass / aqueous mass

When excess contaminant is present, the oxidant concentration is set to zero and the contaminant concentration

$$M/(Y_{M/C} * R)$$

Mathematically, this is expressed as:

$$\boxed{\begin{array}{c} If\ M > C*R*Y_{M/C},\ then\ ((M = M - C*R*Y_{M/C})\ and\ (C = 0)) \\ else\ \left(\left(C = C - M/\left(R*Y_{M/C}\right)\right)\ and\ \left(M = 0\right)\right) \end{array}}$$

Step 3 Instantaneous Reaction of Permanganate with Soil and Groundwater (NOD $_I$)

When excess oxidant is present, the instantaneous NOD concentration is set to zero and the oxidant

$$\boxed{N_I^t \rho_B / n}$$

where

N_I = Instantaneous NOD concentration

ρ_B = bulk density

n = porosity

When excess N_I is present, the oxidant concentration is set to zero and the N_I is reduced by an amount equal to:

$$\boxed{N_I^t n / \rho_B}$$

Mathematically, this is expressed as:

$$\boxed{\begin{array}{c} If\ M > N_I \rho_B / n,\ then\ ((M = M - N_I \rho_B / n)\ and\ (N_I = 0)) \\ else\ \left(\left(N_I = N_I - Mn/\rho_B\right)\ and\ \left(M = 0\right)\right) \end{array}}$$

Step 4 Slow Consumption of Oxidant with Soil and Groundwater (NOD $_S$)

groundwater. The rate of oxidant loss with time (dM / dt) is proportional to the oxidant concentration times the slow NOD (N_S) concentration. The amount of NOD undergoing this slower reaction will thus also be reduced by this same reaction. Bulk density and water filled porosity are included in the equations to convert from aqueous concentrations to soil concentrations.

Mathematically, this is expressed as:

$$\frac{dM}{dt} = -k_S N_S M \rho_B / n$$
$$\frac{dN_S}{dt} = -k_S N_S M$$

where

k_s = 2nd order slow NOD consumption rate
N_S = slow NOD concentration
ρ_B= bulk density
n = porosity

APPENDIX J

Field Sheet Templates

Date: _____ Project #18-046

Recorded By: _____

GROUNDWATER EVALUATION SHEET

WELL ID:							
Time	**DTW (ft)**	**DO (mg/L)**	**ORP (mV)**	**pH (SU)**	**Temp. (°C)**	**Cond. (ms/cm)**	**Turb. (NTU)**

Time Sampled: _____ Total Volume Removed (gal): _____

WELL ID:							
Time	**DTW (ft)**	**DO (mg/L)**	**ORP (mV)**	**pH (SU)**	**Temp. (°C)**	**Cond. (ms/cm)**	**Turb. (NTU)**

Time Sampled: _____ Total Volume Removed (gal): _____

Date: _____ Project #18-046

Recorded By: _____

SVE SYSTEM EVALUATION SHEET

System Status (ON/OFF)	Pre/Post Filter Vac. (in. WC)	Temp. (°F)	Effluent PID (ppm)

Well ID	PID Measurement (ppm)	Vacuum (in. WC)	Valve (% Open)
SVE1			
SVE2			
SVE3			

COMMENTS/MAINTENANCE PERFORMED:

_____

_____

_____

_____

_____

_____

_____

Date: _____ Project #18-046

Recorded By: _____

DAILY REPORT FORM

Weather Conditions: _____

Sample Summary:

Sample ID/Depth	PID Reading (ppm)	Date/Time

Soil Removal Summary:

Truck #	Time	Estimated Tons

Deviations From Scope of Work:

_____

_____

Date: _____ Project #18-046

Recorded By: _____

DAILY REPORT FORM (CONTINUED)

Daily Work Performed (excavation locations/depths, backfill, SVE installation details, etc.):

NOTE: Attach groundwater evaluation sheet, SVE system evaluation sheet, or injection data logs as appropriate.

Injection Data Summary Sheet

Date:		**Pipe Diam (in):**	
Site Location:		**Fluid Injected:**	

Start Time	End Time	Depth (ft bgs)	Flowrate (gpm)	Injection Pressure (psi)	Solution Injected (gal)

INJECTION MONITORING DATA

Well	Date	Time	DTW (ft.)	DO	ORP	pH	Temp	Conductivity	Turbidity	NOTES
Well	Date	Time	DTW (ft.)	DO	ORP	pH	Temp	Conductivity	Turbidity	NOTES
Well	Date	Time	DTW (ft.)	DO	ORP	pH	Temp	Conductivity	Turbidity	NOTES