

Periodic Review Report

*229 HOMER STREET SITE
NYSDEC SITE NUMBER C905044
OLEAN, NEW YORK*

May 2020

0311-018-001

Prepared For:

Homer Street Properties, LLC

Prepared By:

In Association With:



PERIODIC REVIEW REPORT

**229 HOMER STREET REDEVELOPMENT SITE
BCP SITE NO. C905044**

OLEAN, NEW YORK

May 2020

0311-018-001

Prepared for:

Homer Street Properties, LLC

Prepared By:



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PERIODIC REVIEW REPORT

229 Homer Street Site

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229 Homer Street Site

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1.0 INTRODUCTION

Benchmark Environmental Engineering and Science, PLLC (Benchmark) in association with TurnKey Environmental Restoration, LLC (TurnKey) has prepared this Periodic Review Report (PRR) on behalf of Homer Street Properties, LLC (Owner) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C905044, located in Olean, Cattaraugus County, New York (Site; see Figure 1).

This PRR has been prepared for the Site in accordance with NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation (Ref. 1). The NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been completed for the Site (see Appendix A).

This PRR and the associated inspections form have been completed for the post-remedial activities at the Site for the period from December 28, 2018 to April 28, 2020.

1.1 Site Background

The 229 Homer Street Redevelopment Site and surrounding area were originally developed in approximately 1890 for the oil industry and used for refinery purposes and as a petroleum storage tank farm. The site was historically occupied by a large tank, used for oil storage by Socony Vacuum and/or Felmont Oil, and two tank berm areas. The Site was identified as part of the Exxon/Mobil Legacy Site (EMLS) Works #3 area. EMLS operated as an oil refiner in the area under several different names from approximately 1880 to 1950s.

Benson Construction and Development, LLC entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in October 2015 to investigate and remediate the approximate 3.34-acre property comprised of one tax parcel identified as 229 Homer Street (SBL#94.032-1-2.5) located in the City of Olean, Cattaraugus County, New York and referred to as the 229 Homer Street Site (see Figure 1). The BCA was amended in October 2017 to add Homer Street Properties, LLC as an additional Applicant (Volunteer) to the existing BCA.

1.2 Purpose/Scope

The SMP requires, among other things, periodic inspection, and certification that the IC/ECs implemented at the Site remain in place and are functioning as designed. This PRR

serves that purpose as well as documenting post-remedial actions taken since the COC was issued.

2.0 SITE OVERVIEW

The approximate 3.34-acre 229 Homer Street Site is bounded by Two Mile Creek and Homer Street to the northwest, the Casella Waste Management Of New York transfer station to the northeast, Southern Tier Rail Authority rail lines to the southeast, and 251 Homer Street (a solar electric generating facility on a parcel previously remediated under the NYSDEC BCP) to the southwest. The Site is currently improved with a one-story building (approximately 7,500 square feet) in the central portion of the Site. The remainder of the Site remains undeveloped.

The Remedial Investigation/Interim Remedial Measures/Alternative Analysis Report (RI/IRM/AA) Work Plan (Ref. 2) was approved by the NYSDEC on November 25, 2015 with concurrence of the New York State Department of Health (NYSDOH). TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC (Benchmark-TurnKey) performed RI activities at the Site in November and December 2015. However, for various reasons as described in the revised Alternatives Analysis Report (AAR) dated June 2017 (Ref. 3), a revised remedy consisting of limited excavation of shallow grossly contaminated soil (GCS) and an air sparge (AS) and soil vapor extraction (SVE) system was proposed. Benchmark-TurnKey prepared a Work Plan for Pilot Study: Air Sparging and Soil Vapor Extraction in August 2017, which the NYSDEC approved (Ref. 4). The pilot study was undertaken to support the anticipated final design; this work was completed in October 2017 and a report submitted to the NYSDEC (Ref. 5). Using the results of the pilot study, a Remedial Action Work Plan (RAWP) (Ref. 6) was submitted to NYSDEC on February 16, 2018, approved by NYSDEC on March 5, 2018, and field activities were completed at the Site between April and October 2018. The Site was remediated to NYSDEC Part 375 Track 4 commercial soil cleanup objectives (CSCOs) for use in a commercial redevelopment capacity. The Site Management Plan (SMP; Ref. 7) and Final Engineering Report (FER; Ref. 8) were approved by the Department in December 2018. The Certificate of Completion (COC) was recorded on December 28, 2018. Remedial activities are described in the following sections.

2.1 Remedial Actions

In general, remedial activities included:

1. Limited excavation and off-site disposal of GCS-impacted soil.
2. Excavation, removal, and cleaning of abandoned subsurface piping.
3. In-situ treatment of GCS soil/fill using AS and SVE.
4. Placement of a soil cover.
5. Implementation of this Site Management Plan.

The following is a summary of the remedial action completed at the Site:

- Approximately 5,815.47 tons of GCS-impacted soil/fill was excavated and loaded by Benson Construction and Development, LLC, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY.
- Approximately 1,946 linear feet of subsurface metallic product piping was exposed, tapped, evacuated of contents, removed, cleaned, and recycled. Two portions of piping (Pipe 4) on the Site were not removed from the ground as they reside beneath the existing building (approximately 40 feet) and beneath a concrete pad (approximately 20 feet). The remaining piping was capped. Piping which extended beyond the property boundary was capped and/or grouted at the property line.
- Approximately 16.74 gross tons (18.75 tons) of piping was recycled as scrap metal. The scrap steel was transported by Benson Construction and Development, LLC to Metallico and Ben Weitsman in Allegheny, New York. Cleaning of the pipes generated four drums of pipe scale, oil, and water. They were transported by Environmental Services Group New York, Inc. (ESG) to American Recyclers Company in Tonawanda, New York for incineration.
- Installation of new monitoring wells MW-6 and MW-7 after excavation of impacted soil/fill was complete. Locations approved by NYSDEC.
- Installation and operation of an AS/SVE system to address GCS in the deeper soil/fill from approximately 5 to 15 fbg and in the upper 5 ft of the water table (i.e., smear zone). The air sparge portion of the system includes 53 injection wells connected to an air compressor in a climate-controlled trailer via individual 1" polyethylene lines. The SVE system includes 14 extraction wells connected by 2" polyethylene lines to one of two blowers in a separate climate-controlled trailer. Emissions from the SVE system are controlled using a biofilter contained within an approximate 20-foot by 7-foot steel roll-off box outfitted with perforated pipe. The biofilter has an approximate 1-foot thick gravel layer at the base of the box overlain by approximately two feet of wood chip and compost filter medium, which allows naturally occurring microbes to bioremediate the air stream and control the nuisance odors from the AS/SVE system.

The efficacy of the AS/SVE system from start-up to present is summarized in Section 3.2.2 below. Procedures for operating and maintaining the AS/SVE system are documented in the SMP (Operation and Maintenance Plan, Section 5.0 and AS/SVE System Operations and Maintenance Manual, Appendix J). Figure 5 shows the location of the AS/SVE system components installed for the site and Figure 6 shows the AS/SVE system construction detail and process flow schematic.

- Construction and maintenance of a site cover system as shown on Figure 5. The site cover system was installed at the Site in April and May 2018.
- Execution and recording of an Environmental Easement to restrict land use to commercial/industrial operations and prevent future exposure to any contamination remaining at the Site. The Environmental Easement was recorded with the Cattaraugus County in October 2017.
- Development and implementation of the SMP for management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) institutional and engineering controls, (2) excavation, (3) monitoring and reporting, and (4) operation and maintenance.

2.2 Site Redevelopment Activities

The Site remains undeveloped except for the existing building.

3.0 SITE MANAGEMENT PLAN

The SMP includes an IC/EC Plan, a Monitoring and Sampling Plan, an Operation & Maintenance (O&M) Plan, an Excavation Work Plan (EWP), and a copy of the Environmental Easement. A brief description of the components of the SMP is presented below.

3.1 IC/EC Plan

As detailed in the Environmental Easement, several IC/ECs need to be maintained as a requirement of the BCA.

3.1.1 *Institutional Controls*

- Groundwater-Use Restriction: The use of groundwater for potable and non-potable purposes is prohibited.
- Land-Use Restriction: The Site may be used for commercial and/or industrial use.
- Implementation of the SMP: The O&M Plan and EWP must be followed.

3.1.2 *Engineering Controls*

- Vapor Mitigation: There are no sub-slab depressurization systems currently. In accordance with the Decision Document, if the occupied portion of the existing building floor slab is compromised (cracked) or future building(s) are to be constructed and occupied, an evaluation of the potential for soil vapor intrusion will be completed.
- AS/SVE System: The AS/SVE system has operated and was monitored nearly continuously between September 2018 and December 2019 during times that temperatures were consistently above freezing.
- Groundwater Monitoring: Groundwater monitoring was completed in July and December 2019.
- Cover System: The cover system is intact and functioning as intended.

3.1.3 *Site Inspection & IC/EC Compliance*

On March 11, 2020, Benchmark's Certifying Professional Engineer performed a Site visit and assessment. During this visit, the Site covered by this PRR was found to be compliant with the IC/EC requirements. Appendix A includes the completed and P.E.-certified IC/EC Form for the Site.

3.2 Monitoring and Sampling Plan

The Monitoring and Sampling Plan specifies the methods used for:

- Sampling and analysis of groundwater
- Remedial AS/SVE system monitoring
- Site-wide inspection
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment

3.2.1 *Groundwater Sampling and Analysis*

Groundwater sampling was conducted July 1-2, 2019 and December 3-4, 2019 at wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) and tentatively identified compounds (TICs) using USEPA Method 8260C. TCL semi-volatile organic compounds (SVOCs) were analyzed via USEPA Method 8270D and 8270D-SIM and TICs via USEPA Method 8270D. Appendix C includes field notes and analytical data packages for both sampling events. Table 1 summarizes current and historic groundwater elevations. Table 2 summarizes the analytical results as well as historic groundwater quality data. July and December 2019 groundwater data were submitted to the NYSDEC EQuIS database.

Appendix C includes the data usability summary report (DUSR). Table 2 has been updated to reflect the final accepted data. Several SVOCs were edited to reflect non-detection after validation review identified external contamination or low recovery issues with the data.

3.2.1.1 *Groundwater Elevations*

The groundwater elevations (Table 1) were contoured as shown on Figure 3 (July 2019) and Figure 4 (December 2019). Groundwater flow direction in the uppermost sand and gravel aquifer is generally toward the southeast, consistent with the prior groundwater contour maps. This indicates that wells MW-1 and MW-4 are upgradient wells, and wells MW-2, MW-3, MW-5, MW-6 and MW-7 are downgradient wells.

3.2.1.2 Analytical Data

VOCs

The July and December 2019 groundwater concentrations indicate all VOCs were either not detected or detected below the NYSDEC Class GA groundwater quality standard/guidance values (GWQS/GVs). Between December 2015 (pre-remediation) and the December 2019 (post-remediation) sampling events, total VOC concentrations decreased in wells MW-1 through MW-5. Well MW-6, installed post-remediation, also noted a decrease in total VOCs between the July and December 2019 sampling event. Well MW-7, which was also installed post-remediation, increased slightly from 9.97 ug/L to 24 ug/L total VOCs. VOC total TIC concentration ranged from 2.9 ug/L to 135.9 ug/L in all wells during the July and December 2019 sampling events.

SVOCs

Pre-remediation data (December 2015) was either non-detect or below GWQS/GVs for all wells except for MW-3. During the December 2019 sampling event three SVOCs were detected above GWQS/GVs. All seven wells had GWQS/GVs exceedances for benzo(a)pyrene and chrysene. Unlike the December 2015 event, analytes identified during the December 2019 event were analyzed using 8270D-SIM method which allows for lower detection limits. SVOC total TIC concentration ranged from 3.1 ug/L to 174.6 ug/L in all wells during the July and December 2019 sampling events.

3.2.2 AS/SVE System and Monitoring

The AS/SVE system in operation at the Site is comprised of two main components:

1. The AS portion of the system is constructed of a series of vertical injection wells connected individually to a 53-point manifold with solenoid valves and rotameter flow meters connected to the air compressor; thus, enabling individual operation of banks of AS wells. The AS process equipment consists of blower, motors, aftercooler, and ancillary equipment to provide the required flow rate and pressure for the injection housed inside a climate-controlled trailer.
2. The SVE collection system is constructed of a series of 14 vertical extraction wells and extraction well piping connected to a 14-point manifold. The SVE process equipment (blowers, motors, moisture separator, and ancillary equipment) are housed in a climate-controlled trailer separate from the AS trailer.

The extracted air is treated in a biofilter prior to discharge to the atmosphere. The biofilter treatment medium consists of a mixture of compost and mulch (each approx. 50% by weight). The natural bacteria in the biofilter use the organics in the waste stream as a source of energy. The biofilter medium is maintained in a slightly wet state and periodically mixed (fluffed-up). Biofilter media requires mixing when nuisance odors become evident or a thick cake layer forms on top preventing proper venting; the top 4-6 inches of the biofilter media is mixed/raked to keep the media broken up and loose. Dates that biofilter media is mixed is noted on the field sheets. If significant odors are noted at the downgradient property line, the medium will be replenished/replaced and noted on the OM&M field sheets. Condensate water that accumulates in the moisture separator is used to maintain moisture in the biofilter, and/or pumped through filter bags, treated with carbon and then discharged under permit to the City of Olean sewer system. A temporary discharge permit with the City of Olean is required due to the volume of water (condensate) generated by the system. Condensate discharged to the sewer is measured by the in-line totalizer and logged on the OM&M field sheets. During 2019, Benchmark-TurnKey reported approximately 4,504 gallons of treated water discharged to the City of Olean Sewer system.

The AS/SVE system operates while temperatures are consistently above freezing, typically during the spring, summer, fall, and early winter. The system has operated nearly continuously in these conditions since September 2018. Figure 6 is a layout of the AS/SVE collection system and well locations. Figure 7 is a process flow schematic of the AS/SVE system.

3.2.2.1 Results

The SVE system has been successful in removing volatile organic vapors from the subsurface soil/fill. Appendix D1 includes a summary of monitoring data and a chart depicting cumulative mass of contaminant removed. The estimated mass of organic petroleum hydrocarbons removed by the system through April 27, 2020 is approximately 11,006 pounds. The average rate of removal was approximately 18 pounds per day over the first 223 days of the 2019/2020 reporting period and dropped off during the next 35 days at the start of 2020, averaging 0.5 pounds per day.

An initial soil vapor sample was collected at system start-up (9/13/2018) and an additional SVE soil vapor sample was collected on 4/15/2020, both analyzed for VOCs via a summa canister (Method TO-15). Table 3 summarizes the results of these samples. Most VOC

concentrations were not detected above method detection limits. Two compounds identified in the April 2020 event but not during startup are 1,2,5-trimethylbenzene and 4-methyl-2-pentanone. Cyclohexane concentrations were reduced by over 99% from 56,500 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 96 $\mu\text{g}/\text{m}^3$. Appendix D2 includes the analytical data. The next SVE soil vapor sample will be collected in April 2021.

During start-up operations, the air sparge system was turned on and off to determine the most efficient application of oxygen to the subsurface. After adjustments, the air sparge system was programmed to run 15 minutes every day for all wells. Air sparging may be increased or operated more frequently if dissolved oxygen (DO) falls below 1.5 mg/L. Times that air sparge system was turned off are documented in the notes column of the AS/SVE OM&M summary table.

Table 4 summarizes water level and dissolved oxygen (DO) concentrations monitored monthly during system operation. In general, DO concentrations increase throughout the summer and decrease during the fall. During the fall of this first reporting period, the DO concentrations in wells MW-1, MW-3, MW-5, MW-6, and MW-7 dropped below 1.5 mg/L at least once. April 2020 start-up DO concentrations at wells MW-2, MW-3, and MW-7 are below the recommended minimum limit of 1.5 mg/L. Continued monitoring will be performed with the potential for increased air sparge system operation.

3.2.3 Site-Wide Inspection - Cover System Monitoring

The existing cover system is comprised of a minimum of 12 inches of clean gravel, an existing building pad, and concrete pads. A demarcation layer, consisting of orange plastic mesh material, provides a visual reference to the top of the remaining contamination zone, which is the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP.

In accordance with the SMP, the cover system must be maintained and replaced in the event it is breached as described in the EWP (SMP Appendix B). The cover will be inspected on an annual basis and following severe storm events. The key maintenance concerns and corrective actions are provided below.

- Gravel/Stone Cover Monitoring
 - *Ruts or erosion will be repaired by re-grading the localized area and adding additional material.*

- Concrete Pad Cover Monitoring
 - *Cracks or penetrations through the concrete pad will be sealed and/or patched.*

At the time of the Site inspection the gravel/stone cover was in good condition. No erosion issues were identified within the swale at time of inspection. The building is not currently occupied. Prior to occupancy, Benchmark will assess the building foundation for potential soil vapor intrusion issues. Appendix B includes a photographic log showing Site conditions at the time of the inspection.

If the type of cover system changes from that which existed (i.e., a gravel cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent PRR.

3.3 O&M Plan

The O&M Plan addresses operation and maintenance for the AS/SVE System.

3.3.1 SVE System

3.3.1.1 Routine System Operation and Maintenance

The SVE system is designed to require little maintenance over the expected duration of use at the 229 Homer Street site. The blower bearings are maintenance free. Any required maintenance will be completed in compliance with the OM&M manual included in Appendix J of the SMP.

3.3.1.2 System Monitoring Devices and Alarms

Monitored system operating conditions that trigger an alarm condition include moisture separator tank high level. This alarm condition automatically shuts down the SVE blower. The SVE system includes a Siemens PLC (Programmable Logic Controller), which allows all alarm conditions to be monitored directly in the field or remotely. Based on the alarm, the remedial party will respond and/or contact the appropriate repair vendor (e.g. electrician, mechanical repair service).

There were some short-term SVE system shut-downs during the reporting period to complete routine maintenance. The system was shut down from October 21 to November 6, 2019 since the previous City of Olean temporary discharge permit expired on October 4, 2019.

On behalf of the Owner, Benchmark-TurnKey applied for a new temporary discharge permit (included in Appendix A). As part of the application, an effluent sample was collected by Benchmark-TurnKey from the SVE system and analyzed by Alpha Analytical; all parameters were below the permit limits except total suspended solids (TSS). A smaller nominal particle size bag filter was installed on November 4 and a new effluent sample was collected by the City of Olean. The new TSS result was below the discharge limits and the system was restarted November 6, 2019. Appendix E contains the temporary discharge permit and effluent sample analytical.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on our observation during the March 11, 2020 inspection, the Site covered by this PRR was fully compliant with the IC/EC requirements.

Long-term groundwater monitoring indicates improvement to the groundwater quality for VOCs and SVOCs. The next semi-annual groundwater monitoring is planned for June 2020.

4.2 Recommendations

In accordance with the SMP, further monitoring of on-site wells will be completed in June and December 2020.

5.0 DECLARATION/LIMITATION

Benchmark Environmental Engineering & Science, PLLC, personnel conducted the annual site inspection for Brownfield Cleanup Program Site No. C905044, Olean, New York, according to generally accepted practices. This report complied with the scope of work provided to Homer Street Properties, LLC by Benchmark Environmental Engineering & Science, PLLC.

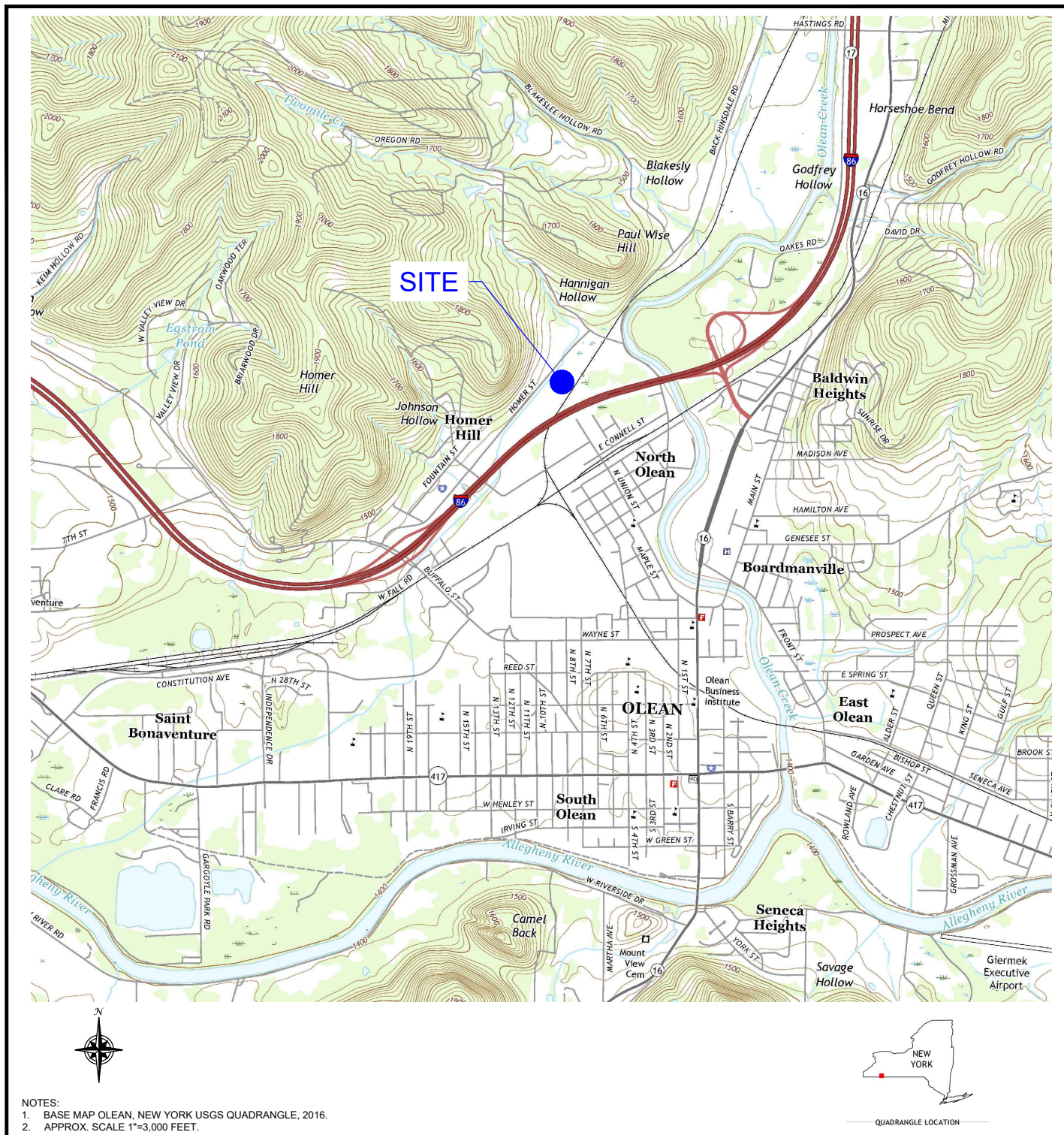
This report has been prepared for the exclusive use of Homer Street Properties, LLC. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of Homer Street Properties, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

6.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10/Technical Guidance for Site Investigation and Remediation*. May 2010.
2. TurnKey Environmental Restoration, LLC. *Remedial Investigation / Interim Remedial Measures / Alternatives Analysis Work Plan, 229 Homer Street Site, Olean New York*. Revised November 2015.
3. TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC. *Revised Alternative Analysis Report, 229 Homer Street Site, BCP Site Number: C905044, Olean New York*. June 2017.
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FIGURES

FIGURE 1



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0311-018-001

DATE: JANUARY 2020

DRAFTED BY: RFL-CMC

SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

229 HOMER STREET SITE

BCP SITE NO. C905044

OLEAN, NEW YORK

PREPARED FOR

HOMER STREET PROPERTIES, LLC

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SITE PLAN (AERIAL)

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BCP SITE NO. C905044
OLEAN, NEW YORK
PREPARED FOR
HOMER STREET PROPERTIES, LLC

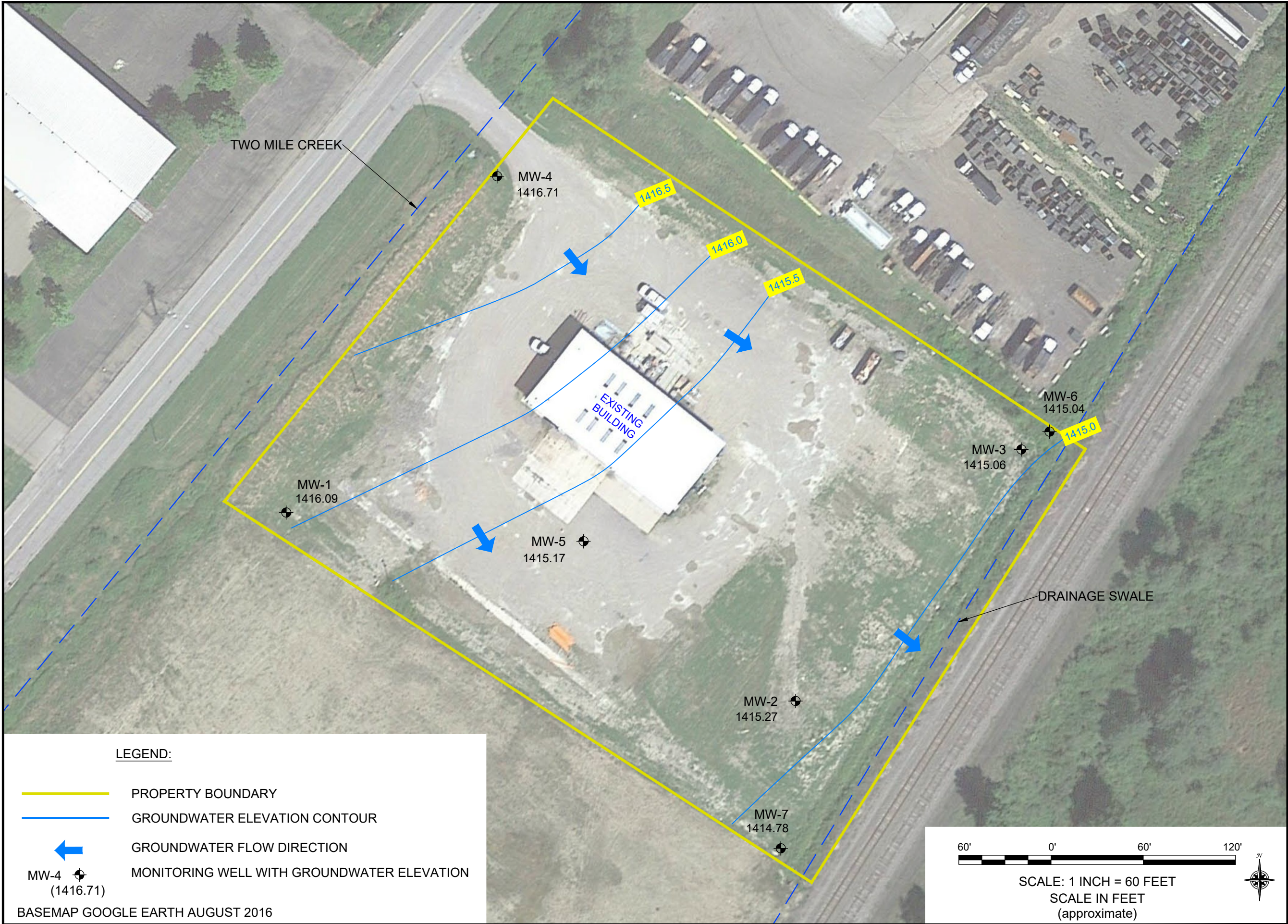


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FIGURE 2

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ISOPOENTIAL MAP (JULY 2019)

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BCP SITE NO. C905044
OLEAN, NEW YORK

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ASSOCIATION
WITH

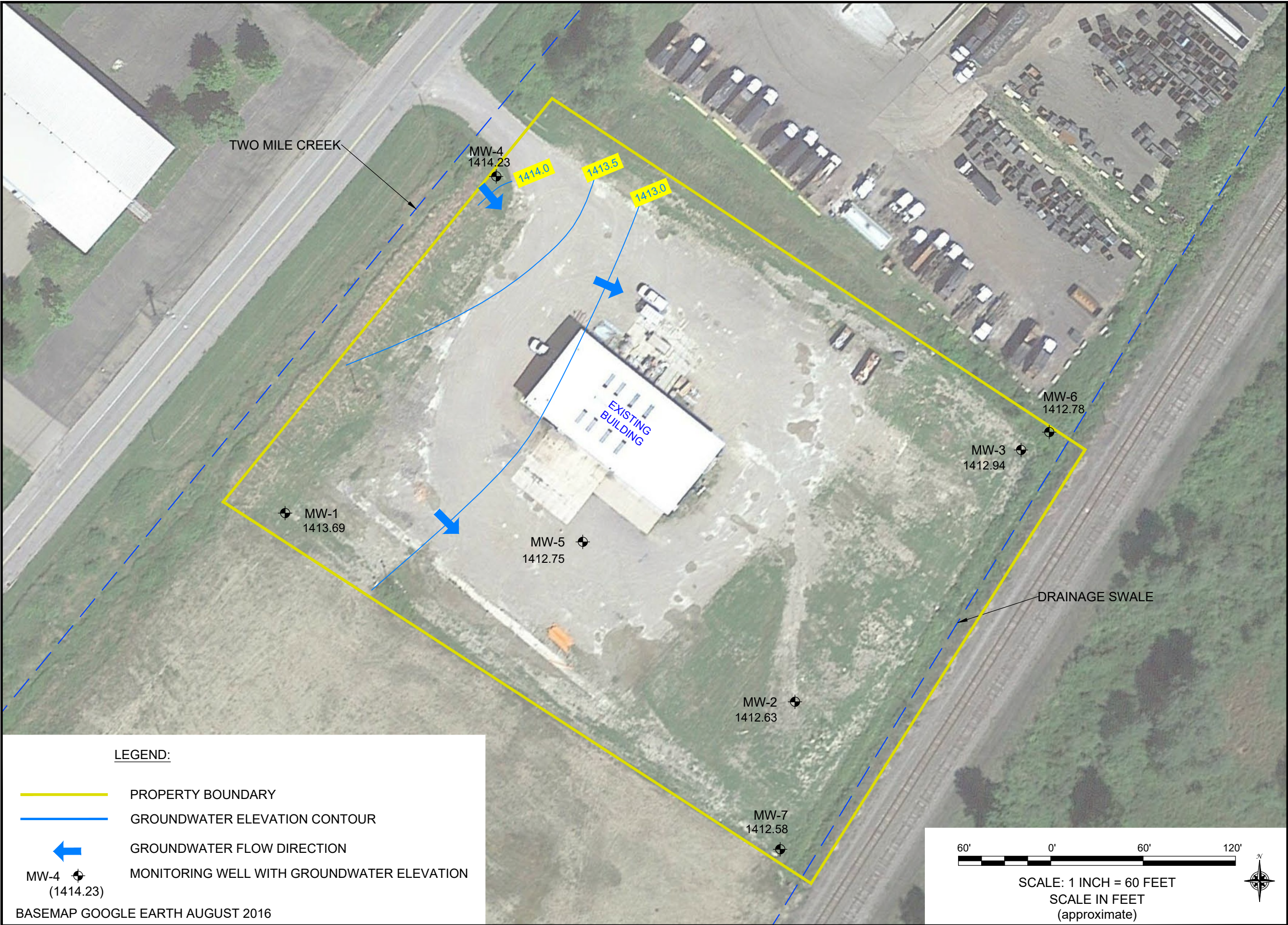
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FIGURE 3

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ISOPOTENTIAL MAP (DECEMBER 2019)

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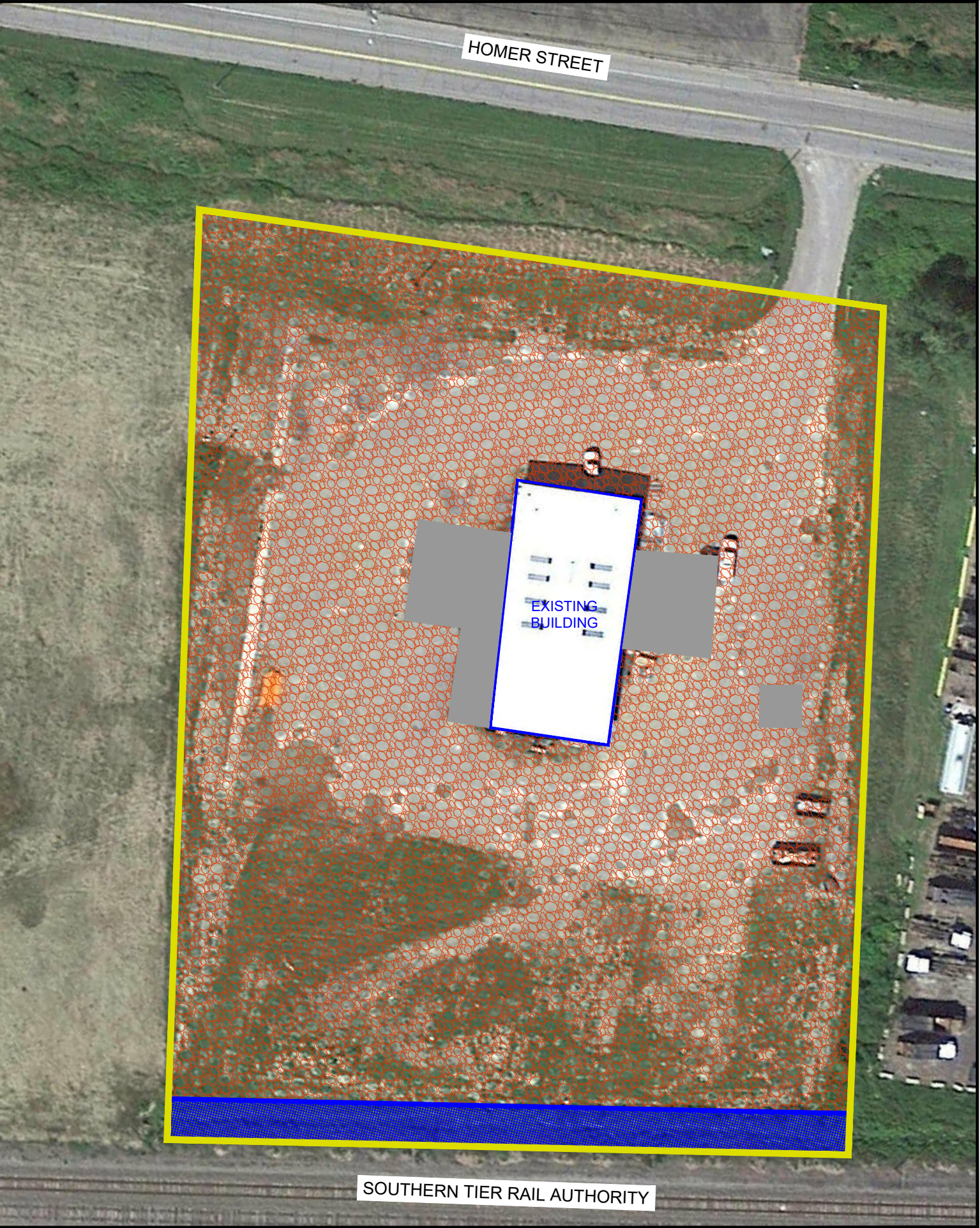
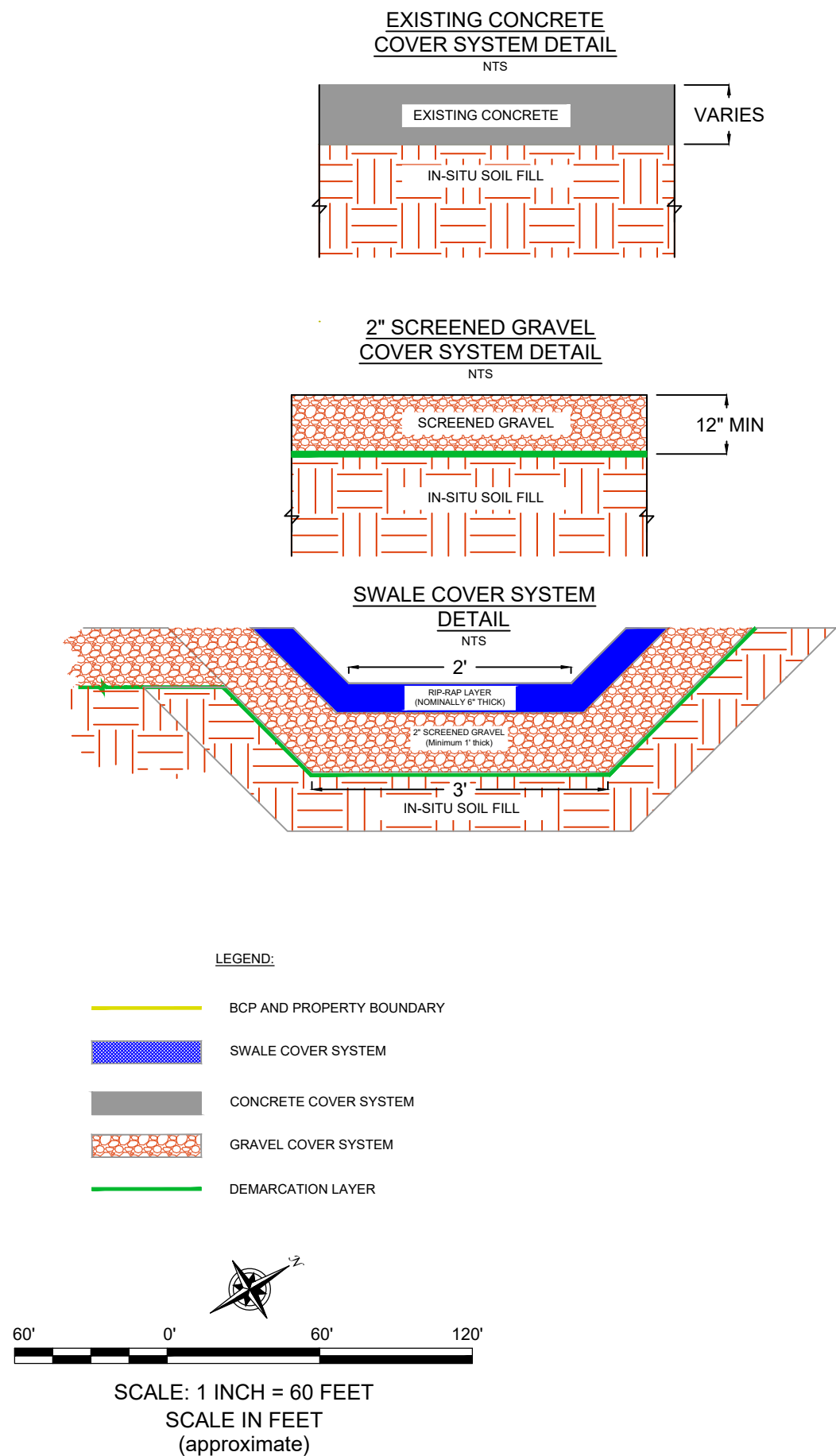
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0311-018-001

FIGURE 4

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DATE: AUGUST 2018
DRAFTED BY: RFL



SITE COVER SYSTEM AND DETAILS

PERIODIC REVIEW REPORT
229 HOMER STREET SITE
BCP SITE NO. C905044
OLEAN, NEW YORK
PREPARED FOR
HOMER STREET PROPERTIES, LLC

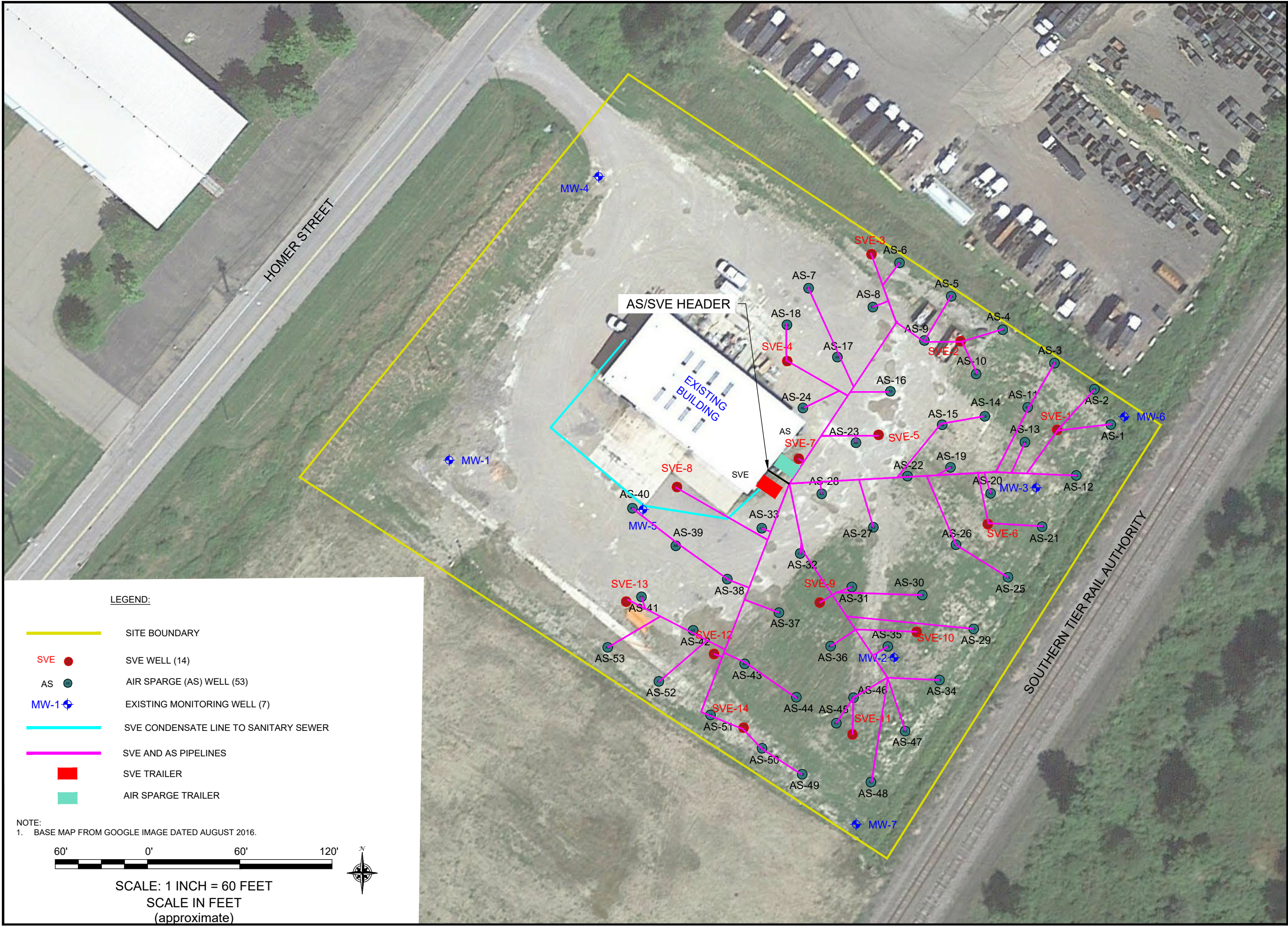


2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0311-018-001

FIGURE 5

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AIR SPARGE AND SOIL VAPOR EXTRACTION

SYSTEM LAYOUT

PERIODIC REVIEW REPORT

229 HOMER STREET SITE

BCP SITE NO. C905044

OLEAN, NEW YORK

PREPARED FOR

HOMER STREET PROPERTIES, LLC



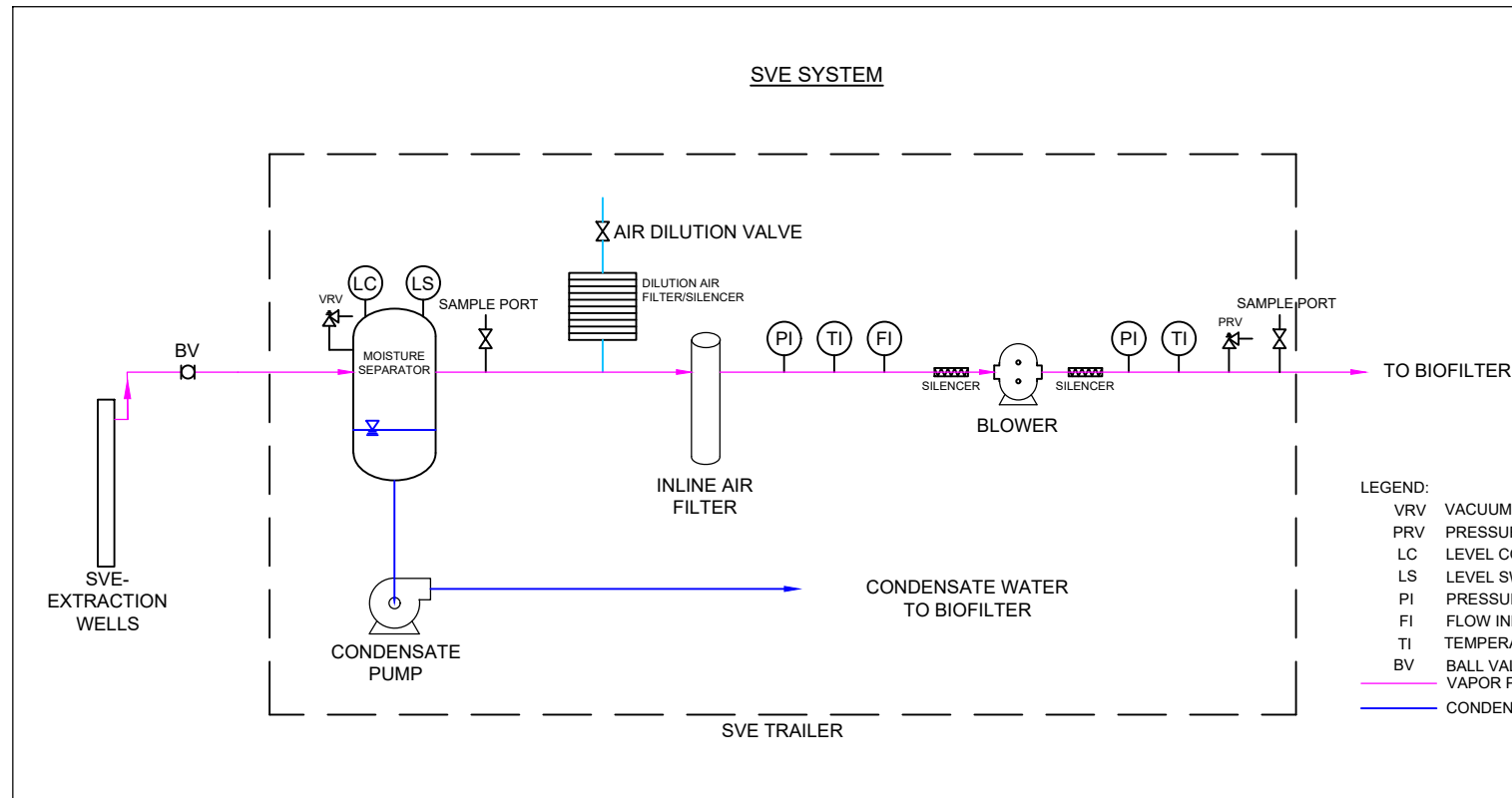
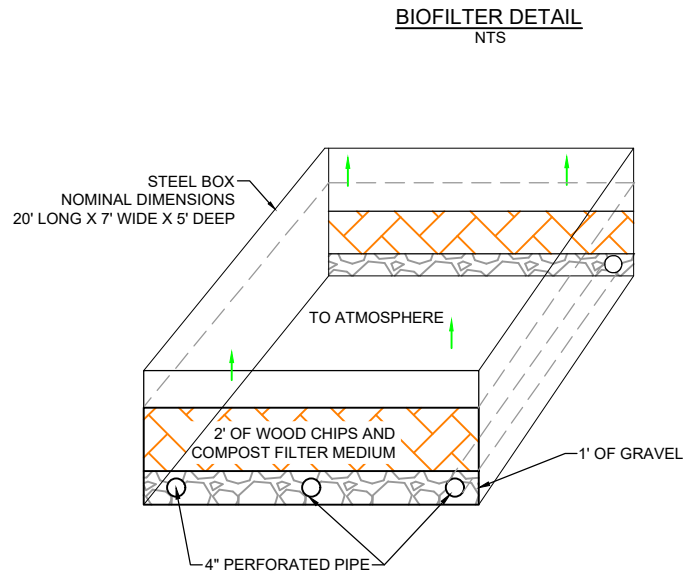
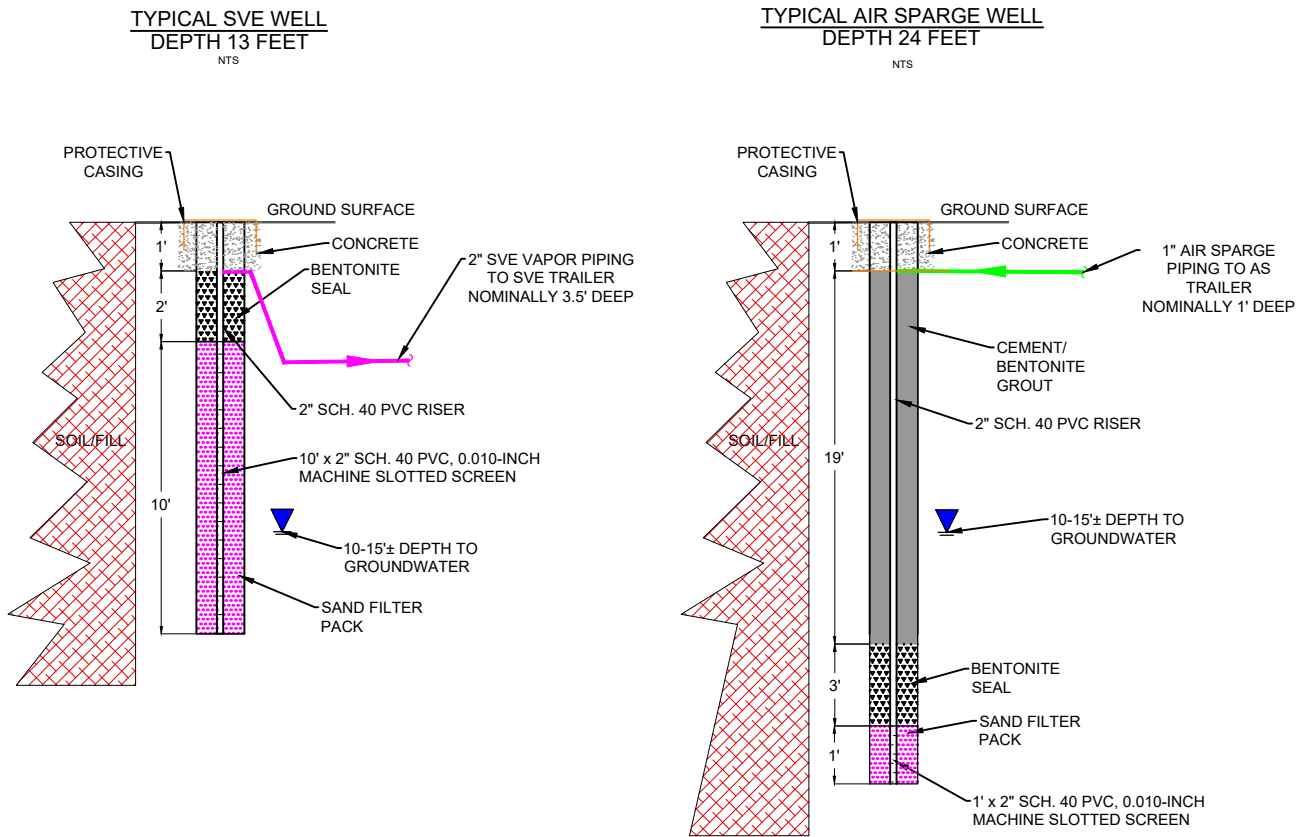
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0311-018-001

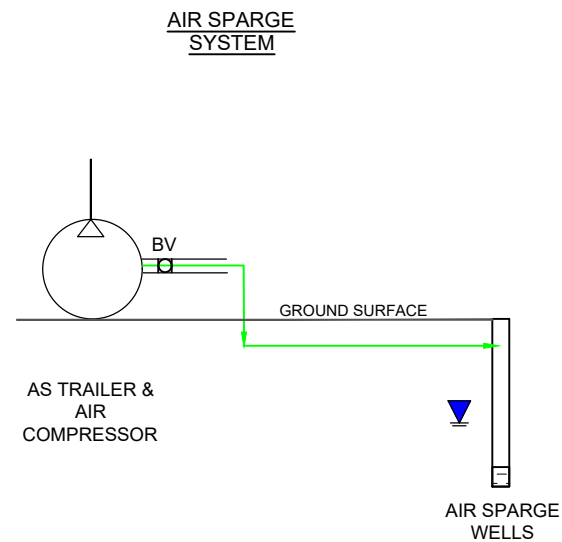
FIGURE 6

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DATE: AUGUST 2018
DRAFTED BY: RFL



LEGEND:
VRV VACUUM RELIEF VALVE
PRV PRESSURE RELIEF VALVE
LC LEVEL CONTROL
LS LEVEL SWITCH
PI PRESSURE INDICATOR
FI FLOW INDICATOR
TI TEMPERATURE INDICATOR
BV BALL VALVE
VAPOR PIPING
CONDENSATE WATER PIPING



AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM SCHEMATIC AND WELL DETAILS

PERIODIC REVIEW REPORT
229 HOMER STREET SITE
BCP SITE NO. C905044
OLEAN, NEW YORK
PREPARED FOR
HOMER STREET PROPERTIES, LLC



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0311-018-001

FIGURE 7

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TABLES



TABLE 1
SUMMARY OF GROUNDWATER ELEVATIONS
PERIODIC REVIEW REPORT
229 HOMER STREET SITE
OLEAN, NEW YORK

Location ¹	Grade Elevation (ft)	TOR Elevation ² (ft)	DTW (fbTOR)	Groundwater Elevation (ft)	DTW (fbTOR)	Groundwater Elevation (ft)
			7/1/2019 & 7/2/2019		12/3/2019 & 12/4/2019	
MW-01	1424.90	1424.49	8.40	1416.09	10.80	1413.69
MW-02	1425.16	1424.72	9.45	1415.27	12.09	1412.63
MW-03	1424.83	1424.34	9.28	1415.06	11.40	1412.94
MW-04	1425.67	1425.34	8.63	1416.71	11.11	1414.23
MW-05	1426.06	1425.73	10.56	1415.17	12.98	1412.75
MW-06	1424.25	1423.99	8.95	1415.04	11.21	1412.78
MW-07	1424.66	1424.66	9.88	1414.78	12.08	1412.58

Notes:

1. Wells MW-01, MW-02, MW-03, MW-04, & MW-05 were installed in December 2015. Wells MW-06 & MW-07 were installed in June 2018.
2. Elevations are referenced to NAVD 88.

Acronyms:

- fbTOR = Feet below top of riser
DTW = Depth to water

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL DATA

PERIODIC REVIEW REPORT

229 HOMER STREET SITE

OLEAN, NEW YORK

Parameter ¹	NYSDEC Class GA GWQS ²	Sample Location and Date																		
		MW-1			MW-2			MW-3			MW-4			MW-5			MW-6		MW-7	
		12/8/2015	7/1/2019	12/4/2019	12/8/2015	7/2/2019	12/3/2019	12/8/2015	7/2/2019	12/4/2019	12/8/2015	7/1/2019	12/3/2019	12/8/2015	7/1/2019	12/3/2019	7/2/2019	12/3/2019	7/1/2019	12/4/2019
TCL Volatile Organic Compounds (VOCs) - ug/L																				
Acetone	50	29	15 J	ND	14	13	ND	ND	11	ND	15	13	ND	37	14	ND	13	ND	9.3	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.98 J	ND	2.4 J	1.4 J	ND	1 J
Methylcyclohexane	--	1.2	ND	ND	4.9	ND	3.4 J	100 DL	0.98 J	1.9 J	1.8	ND	ND	52	31	3.6 J	28	11	0.67 J	23
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	--	--	2.9 J	4.15 J	--	66.35 J	57.4 J	--	27.41 J	24.2 J	--	2.35 J	2.93 J	--	135.9 J	47.7 J	107.18 J	66.4 J	50.34 J	113 J
Total VOCs	--	39.1 J	15 J	ND	538.9	13	ND	590 DL	11.98 J	1.9 J	94.94 J	13	ND	379	45.98 J	3.6 J	43.4 J	12.4 J	9.97 J	24 J
TCL Semi-Volatile Organic Compounds (SVOCs) - ug/L																				
2-Methylnaphthalene ³	--	ND	ND	ND	ND	ND	0.06 J	ND	ND	ND	ND	ND	0.03 J	3.2 J	ND	0.03 J	ND	ND	ND	0.04 J
2-Chloronaphthalene ³	10 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02 J	ND	ND	ND	ND	ND	ND	ND
Acenaphthene ³	20 *	ND	ND	ND	ND	ND	ND	ND	ND	0.04 J	ND	ND	ND	ND	0.06 J	0.18	ND	ND	0.07 J	0.06 J
Acenaphthylene ³	--	ND	ND	0.02 J	ND	ND	ND	ND	ND	ND	ND	ND	0.02 J	ND	ND	0.05 J	ND	ND	ND	0.04 J
Anthracene ³	50 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02 J	ND	ND	ND	ND	ND
Benzo(a)anthracene ³	0.002 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene ³	ND	ND	ND	0.03 J	ND	ND	0.03 J	ND	ND	0.02 J	ND	ND	0.05 J	ND	ND	0.02 J	ND	0.02 J	ND	0.04 J
Benzo(b)fluoranthene ³	0.002 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene ³	0.002 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene ³	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	5	ND	ND	1.9 J	ND	ND	1.8 J	0.68 J	ND	ND	ND	ND	1.7 J	ND	ND	1.9 J	ND	1.7 J	ND	ND
Chrysene ³	0.002 *	ND	ND	0.04 J	ND	ND	0.03 J	ND	ND	0.02 J	ND	ND	0.04 J	ND	ND	0.02 J	ND	0.02 J	ND	0.04 J
Dibenzo(a,h)anthracene ³	--	ND	ND	0.02 J	ND	ND	0.03 J	ND	ND	ND	ND	ND	0.03 J	ND	ND	ND	ND	ND	ND	0.03 J
Diethyl phthalate	50 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6 J	ND	ND	ND
Di-n-octyl phthalate	50 *	ND	ND	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene ³	50 *	ND	ND	0.03 J	ND	ND	0.13	0.7 J	ND	0.1	ND	ND	0.03 J	ND	0.26	0.33	ND	0.06 J	0.04 J	0.3
Fluoranthene ³	50 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene ³	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04 J	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene ³	0.002 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene ³	10 *	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	0.09 J	0.07 J	ND	ND	ND	0.09 J	0.07 J
Pentachlorophenol ³	1	ND	ND	ND	ND	ND	0.18 J	7.1 J	ND	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J
Phenanthrene ³	50 *	ND	ND	ND	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.06 J	2.8 J	0.09 J	ND	ND	ND	ND	0.2
Pyrene ³	50 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	--	--	7.8 J	5.8 J	--	90.7 J	174.6 J	--	3.1 J	27.46 J	--	30.99 J	5.48 J	--	49.93 J	40.67 J	32.61 J	62.76 J	33.38 J	76.04 J
Total SVOCs	--	ND	ND	2.04 J	ND	ND	2.37 J	9.96 J	ND	0.35 J	0.25 J	ND	2.02 J	6 J	0.26 J	2.6 J	2.6 J	1.8 J	0.2 J	1 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table;
all other compounds were reported as non-detect.

2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards (GWQS).

3. SVOCs results obtained using method 1,870D-SIM, during the July and December 2019 sampling events only.

Definitions:

ND = Parameter not detected above laboratory detection limit.

NA = Parameter not analyzed

--" = No GWQS available.

* * * = Groundwater Quality Guidance Value

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

J- = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.

UJ = The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

BOLD	= Sample result exceeds NYSDEC Class GA GWQS
	= Samples collected pre-remediation.

TABLE 3
SUMMARY OF SVE VAPOR ANALYTICAL DATA
229 HOMER STREET SITE
OLEAN, NEW YORK

Parameter	Initial SV ¹	Soil Vapor ¹
	9/13/2018	4/15/2020
<i>Volatile Organics Compounds (VOCs) - ug/m³</i>		
1,1-Dichloroethane	ND (<809)	ND (<3.11)
1,1-Dichloroethene	ND (<793)	ND (<3.05)
1,1,1-trichloroethane	ND (<1090)	ND (<4.20)
1,1,2-Trichloro-1,2,2-Trichloroethane	ND (<1530)	--
1,1,2-Trichloroethane	ND (<1090)	ND (<4.20)
1,1,2,2-Tetrachloroethane	ND (<1370)	ND (<5.28)
1,2,4-Trichlorobenzene	ND (<1480)	ND (<5.71)
1,2,4-Trimethylbenzene	ND (<983)	ND (<3.78)
1,3,5-Trimethylbenzene	ND (<983)	6.34
2,2,4-Trimethylpentane	ND (<934)	ND (<3.59)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND (<1400)	--
1,2-Dichlorobenzene	ND (<1200)	ND (<4.62)
1,2-Dichloroethane	ND (<809)	ND (<3.11)
1,2-Dichloropropane	ND (<924)	ND (<3.55)
1,2-Dibromoethane	ND (<1540)	ND (<5.91)
1,3-Butadiene	ND (<442)	ND (<1.70)
1,3-Dichlorobenzene	ND (<1200)	ND (<4.62)
1,4-Dichlorobenzene	ND (<1200)	ND (<4.62)
1,4-Dioxane	ND (<721)	ND (<2.77)
2-Butanone	ND (<1470)	ND (<5.66)
3-Chloropropene	ND (<626)	ND (<2.41)
4-Ethyltoluene	ND (<983)	ND (<3.78)
4-Methyl-2-pentanone	ND (<2050)	28
Acetone	ND (<2380)	ND (<9.15)
Benzene	ND (<639)	ND (<2.46)
Benzyl chloride	ND (<1040)	ND (<3.98)
Bromodichloromethane	ND (<1340)	ND (<5.15)
Bromoform	ND (<2070)	ND (<7.95)
Bromomethane	ND (<777)	ND (<2.99)
Carbon disulfide	ND (<623)	ND (<2.39)
Carbon tetrachloride	ND (<1260)	ND (<4.84)
Chlorobenzene	ND (<921)	ND (<3.54)
Chloroform	ND (<977)	ND (<3.76)
Chloromethane	ND (<413)	ND (<1.59)

TABLE 3
SUMMARY OF SVE VAPOR ANALYTICAL DATA
229 HOMER STREET SITE
OLEAN, NEW YORK

Parameter	Initial SV ¹	Soil Vapor ¹
	9/13/2018	4/15/2020
<i>Volatile Organics Compounds (VOCs) - ug/m³</i>		
Chloroethane	ND (<528)	ND (<2.03)
cis-1,2-dichloroethene	ND (<793)	ND (<3.05)
cis-1,3-Dichloropropene	ND (<908)	ND (<3.49)
Cyclohexane	56,500	96
Dichlorodifluoromethane	ND (<989)	ND (<3.8)
Dibromochloromethane	ND (<1700)	ND (<6.55)
Ethanol / Ethyl Alcohol	ND (<9420)	ND (<36.2)
Ethylbenzene	ND (<869)	ND (<3.34)
Ethyl Acetate	ND (<1800)	ND (<6.92)
Freon-113	--	ND (<5.89)
Freon-114	--	ND (<5.38)
iso-Propyl Alcohol / Isopropanol	ND (<1230)	ND (<4.72)
Methyl Butyl Ketone (2-Hexanone)	ND (<820)	ND (<3.15)
Methyl tert butyl ether	ND (<721)	ND (<2.77)
Methylene Chloride	ND (<1740)	ND (<6.67)
Heptane	ND (<820)	ND (<3.15)
Hexachlorobutadiene	ND (<2130)	ND (<8.20)
n-Hexane	ND (<705)	ND (<2.71)
Styrene	ND (<852)	ND (<3.27)
tert-Butyl alcohol / tertiary butyl alcohol	ND (<1520)	ND (<5.82)
Tetrachloroethene (PCE)	ND (<1360)	ND (<5.21)
Tetrahydrofuran	ND (<1470)	ND (<5.66)
Toluene	ND (<754)	ND (<2.90)
trans-1,2-Dichloroethene	ND (<793)	ND (<3.05)
trans-1,3-Dichloropropene	ND (<908)	ND (<3.49)
Trichloroethene (TCE)	ND (<1070)	ND (<4.13)
Trichlorofluoromethane	ND (<1120)	ND (<4.32)
Vinyl Chloride	ND (<511)	ND (<1.97)
Vinyl Bromide	ND (<874)	ND (<3.36)
o-Xylene	ND (<869)	ND (<3.34)
p,m-Xylene	ND (<1740)	ND (<6.69)

Definitions:

ND = Parameter not detected above laboratory detection limit.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

"--" = Not analyzed for

Notes:

1. Vapor results were obtained through dilution

TABLE 4
SUMMARY OF GROUNDWATER LEVELS AND DISSOLVED OXYGEN CONCENTRATIONS
229 HOMER STREET SITE
OLEAN, NEW YORK

Well	Date/Time	Grade	TOR Elevation (ft)	DTW (ftTOR)	Water Elevation (ft)	Dissolved Oxygen (mg/L)	Notes
MW-1	4/24/19 8:30	1424.90	1424.49	9.25	1415.24	--	
	4/26/19 9:00			7.75	1416.74	2.37	
	5/6/19 11:00			8.52	1415.97	3.31	
	5/24/19 8:00			8.45	1416.04	--	
	6/11/19 8:30			8.05	1416.44	1.60	
	6/19/19 10:00			8.41	1416.08	2.08	
	7/16/19 16:30			8.40	1416.09	2.55	
	8/1/19 10:00			10.12	1414.37	6.85	
	8/13/19 9:15			10.39	1414.10	7.02	
	9/4/19 7:30			10.46	1414.03	8.00	
	10/10/19 10:00			12.11	1412.38	1.72	
	11/27/19 8:00			11.00	1413.49	1.27	
	4/23/20 8:00			8.21	1416.28	1.79	
	4/24/19 8:30	1425.16	1424.72	9.25	1415.47	--	
MW-2	4/26/19 9:00			9.05	1415.67	2.04	
	5/6/19 11:00			9.65	1415.07	2.18	
	5/24/19 8:00			9.81	1414.91	--	
	6/11/19 8:30			10.43	1414.29	2.33	
	6/19/19 10:00			9.80	1414.92	1.28	
	7/16/19 16:30			9.45	1415.27	1.60	
	8/1/19 10:00			11.40	1413.32	6.88	
	8/13/19 9:15			11.67	1413.05	8.02	
	9/4/19 7:30			11.78	1412.94	8.10	
	10/10/19 10:00			13.11	1411.61	1.86	
	11/27/19 8:00			12.05	1412.67	2.58	
	4/23/20 8:00			9.41	1415.31	1.35	
MW-3	4/24/19 8:30	1424.83	1424.34	8.91	1415.43	--	
	4/26/19 9:00			8.73	1415.61	2.50	
	5/6/19 11:00			9.12	1415.22	2.25	
	5/24/19 8:00			9.29	1415.05	--	
	6/11/19 8:30			8.65	1415.69	2.00	
	6/19/19 10:00			9.17	1415.17	4.08	
	7/16/19 16:30			9.28	1415.06	1.78	
	8/1/19 10:00			11.04	1413.30	6.51	
	8/13/19 9:15			11.30	1413.04	8.08	
	9/4/19 7:30			11.35	1412.99	8.07	
	10/10/19 10:00			12.70	1411.64	1.77	
	11/27/19 8:00			11.65	1412.69	1.36	
	4/23/20 8:00			9.06	1415.28	1.33	
MW-4	4/24/19 8:30	1425.67	1425.34	8.40	1416.94	--	
	4/26/19 9:00			7.60	1417.74	5.36	
	5/6/19 11:00			8.19	1417.15	5.27	
	5/24/19 8:00			8.70	1416.64	--	
	6/11/19 8:30			8.18	1417.16	4.35	
	6/19/19 10:00			8.62	1416.72	3.71	
	7/16/19 16:30			8.63	1416.71	2.05	
	8/1/19 10:00			10.43	1414.91	5.34	
	8/13/19 9:15			10.70	1414.64	7.91	
	9/4/19 7:30			10.74	1414.60	8.02	
	10/10/19 10:00			12.34	1413.00	6.65	
	11/27/19 8:00			11.10	1414.24	3.90	
	4/23/20 8:00			8.25	1417.09	2.04	

TABLE 4
SUMMARY OF GROUNDWATER LEVELS AND DISSOLVED OXYGEN CONCENTRATIONS
229 HOMER STREET SITE
OLEAN, NEW YORK

Well	Date/Time	Grade	TOR Elevation (ft)	DTW (fbTOR)	Water Elevation (ft)	Dissolved Oxygen (mg/L)	Notes
MW-5	4/24/19 8:30	1426.06	1425.73	10.10	1415.63	--	
	4/26/19 9:00			9.85	1415.88	1.96	
	5/6/19 11:00			10.59	1415.14	2.64	
	5/24/19 8:00			10.65	1415.08	--	
	6/11/19 8:30			9.35	1416.38	1.86	
	6/19/19 10:00			10.49	1415.24	2.05	
	7/16/19 16:30			10.56	1415.17	1.27	
	8/1/19 10:00			12.26	1413.47	6.94	
	8/13/19 9:15			12.52	1413.21	7.74	
	9/4/19 7:30			12.65	1413.08	7.81	
	10/10/19 10:00			14.04	1411.69	1.03	
	11/27/19 8:00			12.97	1412.76	1.77	
	4/23/20 8:00			10.20	1415.53	2.23	
	4/24/19 8:30	1424.25	1423.99	8.45	1415.54	--	
MW-6	4/26/19 9:00			8.45	1415.54	3.08	
	5/6/19 11:00			8.75	1415.24	2.45	
	5/24/19 8:00			8.05	1415.94	--	
	6/11/19 8:30			8.43	1415.56	2.39	
	6/19/19 10:00			8.91	1415.08	1.50	
	7/16/19 16:30			8.95	1415.04	1.53	
	8/1/19 10:00			10.59	1413.40	6.34	
	8/13/19 9:15			10.91	1413.08	7.98	
	9/4/19 7:30			10.93	1413.06	8.07	
	10/10/19 10:00			12.03	1411.96	0.76	
	11/27/19 8:00			11.40	1412.59	1.48	
	4/23/20 8:00			8.80	1415.19	1.69	
MW-7	4/24/19 8:30	1424.66	1424.66	9.42	1415.24	--	
	4/26/19 9:00			9.30	1415.36	2.55	
	5/6/19 11:00			9.55	1415.11	2.08	
	5/24/19 8:00			9.90	1414.76	--	
	6/11/19 8:30			9.35	1415.31	2.15	
	6/19/19 10:00			10.20	1414.46	1.26	
	7/16/19 16:30			9.88	1414.78	1.00	
	8/1/19 10:00			11.55	1413.11	6.79	
	8/13/19 9:15			11.85	1412.81	7.95	
	9/4/19 7:30			11.88	1412.78	8.03	
	10/10/19 10:00			13.14	1411.52	1.05	
	11/27/19 8:00			12.15	1412.51	0.77	
	4/23/20 8:00			9.54	1415.12	1.05	

Notes:

ft = feet
fbTOR = feet below top of riser
mg/L = milligrams per liter
"--" = Not measured
Elevation datum; NAVD 88

APPENDIX A

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. C905044

Site Name 229 Homer Street

Site Address: 229 Homer Street Zip Code: 14760

City/Town: Olean

County: Cattaraugus

Site Acreage: 3.340

Reporting Period: December 28, 2018 to April 28, 2020

- | | YES | NO |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| 1. Is the information above correct? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet. | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | | |
| 5. Is the site currently undergoing development? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

See Appendix E

Box 2

- | | YES | NO |
|--------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Commercial and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES NO
☐ ☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☒ ☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C905044**Box 3****Description of Institutional Controls**Parcel**94.032-1-2.5**Owner

Benson Construction and Development, LLC

Institutional Control

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

Box 4**Description of Engineering Controls**Parcel**94.032-1-2.5**Engineering Control

Cover System
Air Sparging/Soil Vapor Extraction

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C905044

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Homer Street Properties, LLC

I Don Benson at 423 West Riverside Drive, Olean, NY, 14760,
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

MAY 11, 2020
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Lori E. Riker, P.E. at Benchmark Environmental Engineering & Science, PLLC
print name 2558 Hamburg Turnpike, Buffalo, NY 14218
print business address

am certifying as a Professional Engineer for the Owner
(Owner or Remedial Party)

Lori Riker



Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification

Stamp
(Required for PE)

05/11/2020

Date

APPENDIX B

SITE PHOTOGRAPHIC LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Stone cover along the northeastern property boundary looking southeast.

Photo 2: Stone cover along the northwestern boundary looking southwest

Photo 3: Stone cover along southwestern boundary looking northwest.

Photo 4: Stone cover along the southeastern boundary looking northeast, rip rap within swale in place. No erosion issues were noted.

SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: SVE/AS well field and stone cover along the northeastern property boundary looking northwest.

Photo 6: Stone and concrete cover northwest of existing building, looking southwest.

Photo 7: Concrete cover on southwest side of existing building, looking east.

Photo 8: From left to right, biofilter, SVE treatment trailer, and AS treatment trailer (looking northwest).

APPENDIX C

GROUNDWATER SAMPLING FIELD FORMS AND ANALYTICAL DATA



GROUNDWATER FIELD FORM

Project Name: 229 Homer Street Site (Homer Street Redevelopment, LLC)

Date: July 1, 2019

Location: 229 Homer St., Olean, NY

Project No.: T0311-018-001 / 005

Field Team: Conor Deubell

Well No.		MW-1		Diameter (inches): 2"		Sample Date / Time: 7-1-19 / 1320			
Product Depth (ftTOR): -		Water Column (ft): 10.05		DTW when sampled: 9.84		DTW (static) (ftTOR): 8.40			
DTW (static) (ftTOR): 8.40		One Well Volume (gal): 1.6		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample		Total Depth (ftTOR): 18.45			
Total Depth (ftTOR): 18.45		Total Volume Purged (gal): 10 gal		Purge Method: Typhoon		Time			
	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1230	0 Initial	0	6.65	17.4	443.5	871	2.55	122	Cloudy Turbid
1240	1 8.37	1	6.5	13.5	500.7	437	2.25	89	L Light Sweet odor
1250	2 8.63	2.05	6.38	12.7	648.6	226	1.074	45	"
1255	3 9.19	3.5	6.36	12.3	778	148	1.13	11	Clear Turbid - fine odor
1300	4 9.19	6	6.43	11.9	853.7	71.2	1.05	-2	"
1310	5 7.20	7	6.46	12.0	907	64.6	0.90	-14	"
1515	6 9.81	8	6.46	11.9	930	51.3	0.55	-28	Clear / Light odor
	7								
	8								
	9								
	10								
Sample Information:									
1320	S1 9.21	9	6.65	11.5	982.8	49.6	0.75	-49	Clear / Light odor
1325	S2 9.24	10	6.65	11.7		36.6	0.90	-53	"

Well No.		MW-2		Diameter (inches): 2"		Sample Date / Time: 7-2-19 / 1000			
Product Depth (ftTOR): -		Water Column (ft): 9.95		DTW when sampled: 9.93		DTW (static) (ftTOR): 9.45			
DTW (static) (ftTOR): 9.45		One Well Volume (gal): 1.6 gal		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample		Total Depth (ftTOR): 19.40			
Total Depth (ftTOR): 19.40		Total Volume Purged (gal): 6 gal		Purge Method: Typhoon pump		Time			
	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0900	0 Initial	0	7.90	13.4	1038	712	-110	1.60	Cloudy Turbid
0915	1 9.41	1	7.38	13.0	899	450	-110	1.38	L Light Puro
0925	2 9.75	2	7.04	12.8	883	246	-106	1.32	"
0935	3 9.90	3	6.99	12.4	872	173	-102	1.04	Cloudy Turbid
0950	4 9.90	4	6.94	12.0	859	126	-99	1.03	L Light Puro
1006	5 9.92	5	6.83	11.4	839	75	-93	1.34	Clear Light Puro
1005	6 9.93	6	6.68	11.3	832	23.2	-88	0.97	Clear, "
	7								
	8								
	9								
	10								
Sample Information:									
1000	S1								
1005	S2								

REMARKS: ** MW-1 = MS/MSD & BLIND DEP

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All measurements are in feet, distance from top of riser.

PREPARED BY:

CFO



GROUNDWATER FIELD FORM

Project Name: 229 Homer Street Site (Homer Street Redevelopment, LLC)

Date: July 1, 2019

Location: 229 Homer St., Olean, NY

Project No.: T0311-018-001 / 005

Field Team: Conor Deubell

Well No. MW-5		Diameter (inches): 2"				Sample Date / Time: 7-1-19 / 1430			
Product Depth (ftTOR): -		Water Column (ft): 8.54				DTW when sampled: 10.74			
DTW (static) (ftTOR): 10.56		One Well Volume (gal): 1.45 gal				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR): 19.10		Total Volume Purged (gal): 6.0 gal				Purge Method: Typhoon			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1345	0 Initial	Initial	6.87	14.2	903.4	611	1.27	-20	Cloudy, Turbid, Pero
	1 6.25	10.51	6.68	13.0	712.5	247	1.24	-34	
	2 2.5	10.55	6.63	12.7	714.2	134	1.21	-45	Cloudy, Light Turb / Light Pero
	3 3.5	10.59	6.61	12.6	909	91.4	1.17	-54	
	4 4	10.64	6.61	12.6	907.8	73.8	1.10	-54	
	5 5.5	10.67	6.65	12.5	910	55.3	1.02	-55	
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1405	S1 5.65	10.71	6.7	12.4	710	37.3	0.88	-55	Clear, Light Pero
1430	S2 6	10.74	6.7	12.3	711.2	25.9	0.77	-60	"

Well No. MW-3 MW-5		Diameter (inches): 2"				Sample Date / Time: 7-2-19 / 1345			
Product Depth (ftTOR): 9.28		Water Column (ft): 10.12				DTW when sampled: 10.00			
DTW (static) (ftTOR): 17.40		One Well Volume (gal): 1.6 gal				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR):		Total Volume Purged (gal): 6				Purge Method: Typhoon			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1235	0 Initial	0	7.12	14.0	393	502	1.28	-47	Cloudy Turbid
1250	1 9.24	1.25	6.80	13.5	415	380	1.60	-48	2x Cloudy Turbid
1315	2 9.42	2.5	6.54	13.1	448	222	1.52	-46	"
1325	3 9.65	3.75	6.32	13.0	477	165	1.44	-35	Cloudy Cloudy - Pero odor
1330	4 9.84	5.5	6.45	13.0	482	86	1.28	-45	"
	5								
	6								
	7								
	8								*Bucker Has 1 liter
	9								STEEN on top of water
	10								
Sample Information:									
1340	S1 9.99	6.6	6.20	12.8	486	60.4	1.26	-44	Clear, Pero odor
1345	S2 10.00	6.50	6.11	11.9	490	51.5	1.25	-36	"

REMARKS:

* No more data for MW-3 + MW-5

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:



GROUNDWATER FIELD FORM

Project Name: 229 Homer Street Site (Homer Street Redevelopment, LLC)

Date: July 1, 2019

Location: 229 Homer St., Olean, NY

Project No.: T0311-018-001 / 005

Field Team: Conor Deubell

Well No. <u>MW-6</u>			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>7-2-19 / 1200</u>				
Product Depth (ftTOR): <u>-</u>			Water Column (ft): <u>9.55</u>			DTW when sampled: <u>9.99</u>				
DTW (static) (ftTOR): <u>8.95</u>			One Well Volume (gal): <u>1.5</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample				
Total Depth (ftTOR): <u>18.50</u>			Total Volume Purged (gal): <u>9 gal.</u>			Purge Method: <u>Typhoon</u>				
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
1030	Initial	0	7.61	14.0	377	183	1.53	-28	Cloudy, Cloudy, Turbid	
1040	8.90	1	7.28	13.7	374	239	1.54	-39	Cloudy Turbid - Petro odor	
1050	9.10	2	7.02	13.9	404	NA	1.56	-46	"	
1105	9.35	3	6.94	12.3	414	NA	1.57	-55	Cloudy, Cloudy, Petro	
1115	9.72	4	6.94	11.9	434	397	1.23	-54	"	
1125	9.90	5	6.92	12.0	428	454	0.91	-58	Cloudy, Petro	
1140	9.92	6	6.82	11.7	449	403	0.89	-64	"	
1150	9.95	7	6.83	11.8	463	277	0.87	-67	"	
8										
9										
10										
Sample Information:										
1200	S1	9.99	8	6.82	11.5	463	220	0.61	-73	CLEARISH Cloudy, Petro
1205	S2	9.99	9	6.82	11.4	465	214	0.61	-76	LIGHT PETRO

Well No. <u>MW-4</u>			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>7-1-19 / 1050</u>			
Product Depth (ftTOR): <u>-</u>			Water Column (ft): <u>10.67</u>			DTW when sampled: <u>9.49</u>			
DTW (static) (ftTOR): <u>8.63</u>			One Well Volume (gal): <u>1.75 gal</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR): <u>19.30</u>			Total Volume Purged (gal): <u>7.5 gal</u>			Purge Method: <u>Typhoon</u>			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1000	Initial		5.47	14.9	164.3	NA	2.05	146	Grey Turbid / No odor
1010	1.0		5.80	13.3	275.8	887	1.72	144	"
1015	2.0		5.87	13.0	296.6	814	1.66	144	Turbid / Little odor
1020	3.0		6.02	12.7	300.4	572	1.57	135	"
1030	4.0		6.10	12.4	304.7	529	1.49	122	Cloudy Turbid / Little odor
1035	5.0		6.13	12.4	305.1	369	1.40	115	"
1040	6.0		6.19	12.3	306.7	288	1.39	116	"
1045	7.0		6.22	12.4	313	235	1.38	116	Clear / No odor
8									
9									
10									
Sample Information:									
1050	S1	7.25	6.23	12.4	313	141	1.33	115	Clear / No odor
1100	S2	7.5	6.42	12.4	312.8	804	1.31	115	"

REMARKS: * Used Hand Pump (Manual) for Sampling
@ 229-6-1-19

Volume Calculation	
Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.489

Stabilization Criteria	
Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All measurements are in feet, distance from top of riser.



GROUNDWATER FIELD FORM

Project Name: 229 Homer Street Site (Homer Street Redevelopment, LLC)

Date: July 1, 2019

Location: 229 Homer St., Olean, NY

Project No.: T0311-018-001 / 005

Field Team: Conor Deubell

Well No. MW-7			Diameter (inches): 2"			Sample Date / Time: 7.1.19 / 1545			
Product Depth (ftTOR): -			Water Column (ft): 9.02			DTW when sampled: 10.70			
DTW (static) (ftTOR): 9.84			One Well Volume (gal): 1.45 gal			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR): 18.90			Total Volume Purged (gal): 12.5 gal			Purge Method: Typhoon			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1445	0 Initial	0	6.94	13.7	907.0	NA	1.00	-56	Gray Cloudy, Turbid
1455	1 9.92	1.5	6.84	12.0	879.4	901	0.89	-69	Light Purple
1505	2 90.02	2.05	6.84	12.7	896.3	NA	0.82	-76	Dark Gray Turbid
1515	3 10.25	3.0	6.97	12.5	855	NA	0.82	-81	Strong Purple
1520	4 10.65	5.5	6.89	12.1	859	NA	0.34	-84	* Dark Turb Gray
1525	5 10.65	7.0	6.85	11.8	867	NA	0.77	-89	"
1530	6 10.67	8.5	6.82	11.2	883	NA	0.73	-92	"Clearing up"
1535	7 10.68	10.0	6.76	11.2	880.3	878	0.60	-93	
	8								
	9								
	10								
Sample Information:									
	S1 10.70	11.0	6.78	11.1	878.9	584	0.88	-93	Cloudy Turbid
1545	S2 12.0	12.0	6.76	11.0	881.2	363	1.13	-94	Purple Odor

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (ftTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (ftTOR):			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (ftTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

REMARKS:

[Handwritten signature]

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All measurements are in feet, distance from top of riser.

PREPARED BY:



ANALYTICAL REPORT

Lab Number:	L1929034
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	HOMER ST. REDEVELOPMENT
Project Number:	0311-018-001
Report Date:	07/11/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1929034-01	MW-4	WATER	229 HOMER ST., OLEAN, NY	07/01/19 10:50	07/02/19
L1929034-02	MW-1	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:20	07/02/19
L1929034-03	MW-5	WATER	229 HOMER ST., OLEAN, NY	07/01/19 14:30	07/02/19
L1929034-04	MW-7	WATER	229 HOMER ST., OLEAN, NY	07/01/19 15:45	07/02/19
L1929034-05	MW-2	WATER	229 HOMER ST., OLEAN, NY	07/02/19 10:00	07/02/19
L1929034-06	MW-6	WATER	229 HOMER ST., OLEAN, NY	07/02/19 12:00	07/02/19
L1929034-07	MW-3	WATER	229 HOMER ST., OLEAN, NY	07/02/19 13:45	07/02/19
L1929034-08	BLIND DUP	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:30	07/02/19
L1929034-09	TRIP BLANK	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:30	07/02/19

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Case Narrative

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

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

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

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

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

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

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1929034-09: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody. This sample was not analyzed.

Semivolatile Organics by SIM

The WG1257198-1 Method Blank, associated with L1929034-05, -06 and -07, has concentrations above the reporting limit for Acenaphthene, Naphthalene, Fluorene, Phenanthrene and 2-Methylnaphthalene. Since the samples were non-detect to the RL for these target analytes, no further actions were taken. The results of the original analysis are reported.

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

Authorized Signature:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 07/11/19

ORGANICS

VOLATILES

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 13:07
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-01**Date Collected:** 07/01/19 10:50**Client ID:** MW-4**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	13		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	2.35	J	ug/l	1
iso-Propyl Alcohol	2.35	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	103		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-02
Client ID: MW-1
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:20
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 13:45
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-02**Date Collected:** 07/01/19 13:20**Client ID:** MW-1**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	15		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	2.90	J	ug/l	1
iso-Propyl Alcohol	2.90	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	103		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 14:23
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-03**Date Collected:** 07/01/19 14:30**Client ID:** MW-5**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	14		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.98	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	31		ug/l	10	0.40	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	151	J	ug/l			1
Butane, 2,3-Dimethyl-	27.6	NJ	ug/l			1
Cyclopentane, 1,1-dimethyl-	20.6	NJ	ug/l			1
Pentane, 2,3-dimethyl-	15.1	NJ	ug/l			1
Unknown Cyclohexane	15.7	J	ug/l			1
Unknown Cyclopentane	10.4	J	ug/l			1
Butane, 2-Methyl-	12.7	NJ	ug/l			1
Cyclopentane, 1,1,3-trimethyl-	12.5	NJ	ug/l			1
Butane, 2,2-dimethyl-	12.3	NJ	ug/l			1
Unknown Cyclohexane	13.0	J	ug/l			1
Unknown Cyclopentane	10.7	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 15:01
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-04**Date Collected:** 07/01/19 15:45**Client ID:** MW-7**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	9.3		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.67	J	ug/l	10	0.40	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	57.4	J	ug/l			1
Unknown Cyclohexane	6.89	J	ug/l			1
Pentane, 2,3-dimethyl-	7.06	NJ	ug/l			1
Unknown Cyclohexane	5.95	J	ug/l			1
Unknown Cyclopentane	3.00	J	ug/l			1
Unknown Cyclohexane	9.64	J	ug/l			1
Unknown Alkane	4.71	J	ug/l			1
Butane, 2,3-Dimethyl-	3.55	NJ	ug/l			1
Cyclopentane, 1,1,3-trimethyl-	8.21	NJ	ug/l			1
Unknown Cyclopentane	3.21	J	ug/l			1
Unknown Cyclohexane	5.16	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	98		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 15:40
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	13		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	74.5	J	ug/l			1
Cyclopentane, 1,1,3-trimethyl-	7.46	NJ	ug/l			1
Pentane, 2,3-dimethyl-	8.15	NJ	ug/l			1
Unknown Cyclohexane	6.83	J	ug/l			1
Butane, 2,3-Dimethyl-	11.6	NJ	ug/l			1
Butane, 2,2-dimethyl-	5.76	NJ	ug/l			1
Unknown Alkane	4.19	J	ug/l			1
Unknown Cyclohexane	5.65	J	ug/l			1
Cyclopentane, 1,1-dimethyl-	8.31	NJ	ug/l			1
Unknown Cyclohexane	7.95	J	ug/l			1
Unknown Cyclohexane	8.56	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	95		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 16:18
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-06**Date Collected:** 07/02/19 12:00**Client ID:** MW-6**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	13		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	2.4	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	28		ug/l	10	0.40	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	115	J	ug/l	1
Unknown Cyclohexane	7.27	J	ug/l	1
Unknown Cyclopentane	10.1	J	ug/l	1
Pentane, 2,3-dimethyl-	7.82	NJ	ug/l	1
Unknown Cyclohexane	21.6	J	ug/l	1
Cyclopentane, 1,1-dimethyl-	13.5	NJ	ug/l	1
Unknown Cyclopentane	10.2	J	ug/l	1
Butane, 2,2-dimethyl-	6.37	NJ	ug/l	1
Butane, 2-Methyl-	15.9	NJ	ug/l	1
Butane, 2,3-Dimethyl-	13.6	NJ	ug/l	1
Cyclopentane, 1,1,3-trimethyl-	8.27	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	96		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-07
Client ID: MW-3
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 13:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 16:56
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-07**Date Collected:** 07/02/19 13:45**Client ID:** MW-3**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	11		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.98	J	ug/l	10	0.40	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-07
Client ID: MW-3
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 13:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	31.3	J	ug/l	1
Unknown Cyclohexane	3.88	J	ug/l	1
Butane, 2,2-dimethyl-	2.69	NJ	ug/l	1
Unknown Cyclohexane	1.49	J	ug/l	1
Cyclohexane, 1,1,3-trimethyl-	3.44	NJ	ug/l	1
Unknown Cyclohexane	1.76	J	ug/l	1
Unknown Cyclopentane	2.52	J	ug/l	1
Pentane, 2,4-dimethyl-	1.83	NJ	ug/l	1
Pentane, 2,3-dimethyl-	3.89	NJ	ug/l	1
Butane, 2,3-Dimethyl-	5.04	NJ	ug/l	1
Cyclopentane, 1,1,3-trimethyl-	4.77	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-08
Client ID: BLIND DUP
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/10/19 17:34
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS**

Lab ID: L1929034-08
 Client ID: BLIND DUP
 Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:30
 Date Received: 07/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	10		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	1.58	J	ug/l	1
iso-Propyl Alcohol	1.58	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	100		70-130

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/10/19 08:46
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1258025-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/10/19 08:46
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1258025-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/10/19 08:46
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1258025-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1258025-3 WG1258025-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	86		88		62-150	2		20
1,2-Dichloroethane	97		99		70-130	2		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		120		70-130	9		20
Bromoform	92		90		54-136	2		20
1,1,2,2-Tetrachloroethane	97		97		67-130	0		20
Benzene	100		110		70-130	10		20
Toluene	98		100		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	84		77		64-130	9		20
Bromomethane	55		47		39-139	16		20
Vinyl chloride	91		97		55-140	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1258025-3 WG1258025-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	98		100		61-145	2		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	96		99		70-130	3		20
1,3-Dichlorobenzene	95		97		70-130	2		20
1,4-Dichlorobenzene	96		97		70-130	1		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	105		110		70-130	5		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	78		80		36-147	3		20
Acetone	93		90		58-148	3		20
Carbon disulfide	94		99		51-130	5		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	94		100		59-130	6		20
2-Hexanone	96		98		57-130	2		20
Bromochloromethane	110		120		70-130	9		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	99		98		41-144	1		20
Isopropylbenzene	94		96		70-130	2		20
1,2,3-Trichlorobenzene	91		99		70-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1258025-3 WG1258025-4								
1,2,4-Trichlorobenzene	97		100		70-130	3		20
Methyl Acetate	100		100		70-130	0		20
Cyclohexane	97		100		70-130	3		20
1,4-Dioxane	112		112		56-162	0		20
Freon-113	99		100		70-130	1		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		93		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	93		92		70-130
Dibromofluoromethane	98		101		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1258025-6 WG1258025-7 QC Sample: L1929034-02 Client ID: MW-1												
Methylene chloride	ND	10	11	110		10	100		70-130	10		20
1,1-Dichloroethane	ND	10	10	100		9.9	99		70-130	1		20
Chloroform	ND	10	9.6	96		9.4	94		70-130	2		20
Carbon tetrachloride	ND	10	10	100		10	100		63-132	0		20
1,2-Dichloropropane	ND	10	10	100		9.9	99		70-130	1		20
Dibromochloromethane	ND	10	8.8	88		11	110		63-130	22	Q	20
1,1,2-Trichloroethane	ND	10	10	100		11	110		70-130	10		20
Tetrachloroethene	ND	10	9.9	99		11	110		70-130	11		20
Chlorobenzene	ND	10	9.6	96		11	110		75-130	14		20
Trichlorofluoromethane	ND	10	9.0	90		8.5	85		62-150	6		20
1,2-Dichloroethane	ND	10	9.7	97		9.3	93		70-130	4		20
1,1,1-Trichloroethane	ND	10	10	100		9.7	97		67-130	3		20
Bromodichloromethane	ND	10	9.3	93		9.3	93		67-130	0		20
trans-1,3-Dichloropropene	ND	10	8.2	82		10	100		70-130	20		20
cis-1,3-Dichloropropene	ND	10	9.8	98		10	100		70-130	2		20
Bromoform	ND	10	7.6	76		9.8	98		54-136	25	Q	20
1,1,2,2-Tetrachloroethane	ND	10	9.4	94		12	120		67-130	24	Q	20
Benzene	ND	10	10	100		9.6	96		70-130	4		20
Toluene	ND	10	9.4	94		11	110		70-130	16		20
Ethylbenzene	ND	10	9.5	95		11	110		70-130	15		20
Chloromethane	ND	10	7.1	71		7.2	72		64-130	1		20
Bromomethane	ND	10	2.1J	21	Q	3.2	32	Q	39-139	42	Q	20
Vinyl chloride	ND	10	9.4	94		9.2	92		55-140	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1258025-6 WG1258025-7 QC Sample: L1929034-02 Client ID: MW-1												
Chloroethane	ND	10	11	110		10	100		55-138	10		20
1,1-Dichloroethene	ND	10	10	100		9.4	94		61-145	6		20
trans-1,2-Dichloroethene	ND	10	10	100		9.7	97		70-130	3		20
Trichloroethene	ND	10	10	100		9.7	97		70-130	3		20
1,2-Dichlorobenzene	ND	10	8.8	88		12	120		70-130	31	Q	20
1,3-Dichlorobenzene	ND	10	8.6	86		11	110		70-130	24	Q	20
1,4-Dichlorobenzene	ND	10	8.6	86		11	110		70-130	24	Q	20
Methyl tert butyl ether	ND	10	11	110		10	100		63-130	10		20
p/m-Xylene	ND	20	20	100		23	115		70-130	14		20
o-Xylene	ND	20	20	100		23	115		70-130	14		20
cis-1,2-Dichloroethene	ND	10	10	100		9.8	98		70-130	2		20
Styrene	ND	20	20	100		24	120		70-130	18		20
Dichlorodifluoromethane	ND	10	7.8	78		8.1	81		36-147	4		20
Acetone	15	10	23	80		17	20	Q	58-148	30	Q	20
Carbon disulfide	ND	10	10	100		9.6	96		51-130	4		20
2-Butanone	ND	10	12	120		11	110		63-138	9		20
4-Methyl-2-pentanone	ND	10	10	100		11	110		59-130	10		20
2-Hexanone	ND	10	9.7	97		12	120		57-130	21	Q	20
Bromochloromethane	ND	10	11	110		10	100		70-130	10		20
1,2-Dibromoethane	ND	10	9.9	99		11	110		70-130	11		20
1,2-Dibromo-3-chloropropane	ND	10	9.3	93		12	120		41-144	25	Q	20
Isopropylbenzene	ND	10	8.8	88		11	110		70-130	22	Q	20
1,2,3-Trichlorobenzene	ND	10	9.3	93		11	110		70-130	17		20

Matrix Spike Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1258025-6 WG1258025-7 QC Sample: L1929034-02 Client ID: MW-1												
1,2,4-Trichlorobenzene	ND	10	9.0	90		11	110		70-130	20		20
Methyl Acetate	ND	10	10	100		9.5	95		70-130	5		20
Cyclohexane	ND	10	11	110		9.8J	98		70-130	12		20
1,4-Dioxane	ND	500	530	106		560	112		56-162	6		20
Freon-113	ND	10	10	100		10	100		70-130	0		20
Methyl cyclohexane	ND	10	11	110		10	100		70-130	10		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		96		70-130
4-Bromofluorobenzene	91		93		70-130
Dibromofluoromethane	100		95		70-130
Toluene-d8	96		103		70-130

SEMIVOLATILES

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 12:55
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.0		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	68.4	J	ug/l	1
Unknown	1.49	J	ug/l	1
Unknown	1.74	J	ug/l	1
Unknown	2.91	J	ug/l	1
Unknown	4.04	J	ug/l	1
Unknown	2.22	J	ug/l	1
Unknown	1.82	J	ug/l	1
Unknown	2.22	J	ug/l	1
Unknown	2.87	J	ug/l	1
Unknown	4.04	J	ug/l	1
Aldol Condensates	32.0	J	ug/l	1
Unknown	2.11	J	ug/l	1
Unknown Alcohol	1.56	J	ug/l	1
Unknown	3.96	J	ug/l	1
Unknown	5.45	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	44		10-120
4-Terphenyl-d14	116		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 18:54
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-01
Client ID: MW-4
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 10:50
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	112		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-02
Client ID: MW-1
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:20
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 13:20
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.6	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-02
Client ID: MW-1
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:20
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	35.2	J	ug/l	1
Unknown	1.71	J	ug/l	1
Unknown	1.67	J	ug/l	1
Aldol Condensates	27.4	J	ug/l	1
Unknown	2.14	J	ug/l	1
Unknown	2.29	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	83		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-02
Client ID: MW-1
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:20
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 18:37
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-02
Client ID: MW-1
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:20
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	93		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 13:45
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.2		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-03**Date Collected:** 07/01/19 14:30**Client ID:** MW-5**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	92.1	J	ug/l			1
Aldol Condensates	36.5	J	ug/l			1
Unknown Naphthalene	5.67	J	ug/l			1
Unknown	3.24	J	ug/l			1
Unknown	5.71	J	ug/l			1
Unknown Benzene	7.71	J	ug/l			1
Unknown Ketone	3.24	J	ug/l			1
Unknown Naphthalene	3.13	J	ug/l			1
Unknown	2.62	J	ug/l			1
Unknown Organic Acid	6.36	J	ug/l			1
Unknown Indene	2.87	J	ug/l			1
Unknown Ketone	2.29	J	ug/l			1
Unknown	2.73	J	ug/l			1
Unknown Benzene	3.49	J	ug/l			1
Unknown	2.91	J	ug/l			1
Unknown Cyclohexane	3.67	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	94		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 19:10
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.09	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.26		ug/l	0.10	0.01	1
Phenanthrene	0.09	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-03
Client ID: MW-5
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 14:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	100		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 14:10
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.1	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	64.8	J	ug/l			1
Unknown	3.09	J	ug/l			1
Unknown Alkane	5.09	J	ug/l			1
Unknown Ketone	3.56	J	ug/l			1
Aldol Condensates	28.4	J	ug/l			1
Unknown Benzene	1.93	J	ug/l			1
Unknown	1.89	J	ug/l			1
Unknown	2.62	J	ug/l			1
Unknown Alkane	2.29	J	ug/l			1
Unknown Cyclohexane	3.42	J	ug/l			1
Unknown	1.93	J	ug/l			1
Unknown	2.33	J	ug/l			1
Unknown	3.02	J	ug/l			1
Unknown	1.82	J	ug/l			1
Unknown Cyclohexane	1.74	J	ug/l			1
Unknown Naphthalene	1.71	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	77		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 19:27
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.07	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.09	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-04
Client ID: MW-7
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 15:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	80		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 21:06
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.1		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-05**Date Collected:** 07/02/19 10:00**Client ID:** MW-2**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	266	J	ug/l	1
Aldol Condensates	43.3	J	ug/l	1
Unknown Ketone	5.27	J	ug/l	1
Unknown	3.16	J	ug/l	1
Unknown	3.56	J	ug/l	1
Unknown	4.54	J	ug/l	1
Unknown	4.04	J	ug/l	1
Unknown	6.04	J	ug/l	1
Unknown Organic Acid	8.36	J	ug/l	1
Unknown Ketone	11.0	J	ug/l	1
Unknown	5.71	J	ug/l	1
Aldol Condensates	132	J	ug/l	1
Unknown Ketone	9.49	J	ug/l	1
Unknown	5.60	J	ug/l	1
Unknown	19.1	J	ug/l	1
Unknown Indole	4.44	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	88		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 20:50
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	JB	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	JB	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-05
Client ID: MW-2
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 10:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	103		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 21:34
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	2.6	J	ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-06**Date Collected:** 07/02/19 12:00**Client ID:** MW-6**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	155	J	ug/l			1
Aldol Condensates	91.5	J	ug/l			1
Unknown Benzene	3.20	J	ug/l			1
Unknown	1.71	J	ug/l			1
Unknown	2.25	J	ug/l			1
Unknown Benzene	2.00	J	ug/l			1
Unknown Alkane	1.67	J	ug/l			1
Unknown Alkene	3.05	J	ug/l			1
Unknown	1.56	J	ug/l			1
Unknown	3.09	J	ug/l			1
Unknown	1.74	J	ug/l			1
Unknown Alkane	4.33	J	ug/l			1
Unknown Alkane	6.76	J	ug/l			1
Aldol Condensates	27.8	J	ug/l			1
Unknown	2.29	J	ug/l			1
Unknown	2.33	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	79		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 21:07
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	JB	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.05	JB	ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-06
Client ID: MW-6
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 12:00
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	86		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-07
Client ID: MW-3
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 13:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 22:02
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.6	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-07**Date Collected:** 07/02/19 13:45**Client ID:** MW-3**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	197	J	ug/l	1
Unknown	1.53	J	ug/l	1
Aldol Condensates	145	J	ug/l	1
Unknown Siloxane	1.64	J	ug/l	1
Aldol Condensates	48.9	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	64		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-07
Client ID: MW-3
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 13:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 21:24
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-07
Client ID: MW-3
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/02/19 13:45
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	71		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-08
Client ID: BLIND DUP
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/10/19 14:35
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 18:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.1	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19**SAMPLE RESULTS****Lab ID:** L1929034-08**Date Collected:** 07/01/19 13:30**Client ID:** BLIND DUP**Date Received:** 07/02/19**Sample Location:** 229 HOMER ST., OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	46.7	J	ug/l	1
Aldol Condensates	40.8	J	ug/l	1
Unknown	1.93	J	ug/l	1
Unknown Siloxane	1.64	J	ug/l	1
Unknown	2.29	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	77		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-08
Client ID: BLIND DUP
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 19:44
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 18:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

SAMPLE RESULTS

Lab ID: L1929034-08
Client ID: BLIND DUP
Sample Location: 229 HOMER ST., OLEAN, NY

Date Collected: 07/01/19 13:30
Date Received: 07/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	80		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 15:33
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04,08 Batch: WG1256809-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 07/10/19 15:33
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/07/19 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04,08 Batch: WG1256809-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	88		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/10/19 07:29
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,08 Batch: WG1256811-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/10/19 07:29
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,08 Batch: WG1256811-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Tentatively Identified Compounds

Total TIC Compounds	31.5	J	ug/l
Aldol Condensates	26.1	J	ug/l
Unknown	1.64	J	ug/l
Unknown	1.53	J	ug/l
Unknown Alcohol	2.25	J	ug/l

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 07/10/19 07:29
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 07/07/19 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,08 Batch: WG1256811-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	78		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/10/19 14:37
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG1257196-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/10/19 14:37
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG1257196-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Tentatively Identified Compounds

Total TIC Compounds	31.5	J	ug/l
Aldol Condensates	31.5	J	ug/l

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 07/10/19 14:37
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG1257196-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	45		15-120
2,4,6-Tribromophenol	28		10-120
4-Terphenyl-d14	45		41-149

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/10/19 20:00
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05-07 Batch: WG1257198-1					
Acenaphthene	0.14		ug/l	0.10	0.01
2-Chloronaphthalene	0.03	J	ug/l	0.20	0.02
Fluoranthene	0.05	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	1.0		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	0.04	J	ug/l	0.10	0.01
Anthracene	0.03	J	ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	0.14		ug/l	0.10	0.01
Phenanthrene	0.29		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.39		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 07/10/19 20:00
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/08/19 16:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05-07 Batch: WG1257198-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	46		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	59		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,08 Batch: WG1256809-2 WG1256809-3								
Acenaphthene	80		98		40-140	20		40
2-Chloronaphthalene	77		92		40-140	18		40
Fluoranthene	84		101		40-140	18		40
Hexachlorobutadiene	66		79		40-140	18		40
Naphthalene	76		92		40-140	19		40
Benzo(a)anthracene	81		101		40-140	22		40
Benzo(a)pyrene	86		105		40-140	20		40
Benzo(b)fluoranthene	85		102		40-140	18		40
Benzo(k)fluoranthene	88		107		40-140	19		40
Chrysene	81		100		40-140	21		40
Acenaphthylene	79		95		40-140	18		40
Anthracene	84		104		40-140	21		40
Benzo(ghi)perylene	86		107		40-140	22		40
Fluorene	81		99		40-140	20		40
Phenanthrene	83		100		40-140	19		40
Dibenzo(a,h)anthracene	93		114		40-140	20		40
Indeno(1,2,3-cd)pyrene	90		109		40-140	19		40
Pyrene	84		102		40-140	19		40
2-Methylnaphthalene	77		92		40-140	18		40
Pentachlorophenol	89		105		40-140	16		40
Hexachlorobenzene	84		103		40-140	20		40
Hexachloroethane	70		87		40-140	22		40

Lab Control Sample Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,08 Batch: WG1256809-2 WG1256809-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		73		21-120
Phenol-d6	50		60		10-120
Nitrobenzene-d5	77		94		23-120
2-Fluorobiphenyl	71		86		15-120
2,4,6-Tribromophenol	81		106		10-120
4-Terphenyl-d14	86		104		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 Batch: WG1256811-2 WG1256811-3								
Bis(2-chloroethyl)ether	66		68		40-140	3		30
3,3'-Dichlorobenzidine	64		62		40-140	3		30
2,4-Dinitrotoluene	66		70		48-143	6		30
2,6-Dinitrotoluene	89		91		40-140	2		30
4-Chlorophenyl phenyl ether	76		82		40-140	8		30
4-Bromophenyl phenyl ether	81		87		40-140	7		30
Bis(2-chloroisopropyl)ether	65		67		40-140	3		30
Bis(2-chloroethoxy)methane	72		75		40-140	4		30
Hexachlorocyclopentadiene	83		87		40-140	5		30
Isophorone	71		75		40-140	5		30
Nitrobenzene	78		79		40-140	1		30
NDPA/DPA	79		86		40-140	8		30
n-Nitrosodi-n-propylamine	76		80		29-132	5		30
Bis(2-ethylhexyl)phthalate	80		77		40-140	4		30
Butyl benzyl phthalate	85		83		40-140	2		30
Di-n-butylphthalate	80		83		40-140	4		30
Di-n-octylphthalate	76		74		40-140	3		30
Diethyl phthalate	84		89		40-140	6		30
Dimethyl phthalate	84		85		40-140	1		30
Biphenyl	65		68		40-140	5		30
4-Chloroaniline	70		68		40-140	3		30
2-Nitroaniline	79		85		52-143	7		30
3-Nitroaniline	71		74		25-145	4		30

Lab Control Sample Analysis Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 Batch: WG1256811-2 WG1256811-3								
4-Nitroaniline	80		80		51-143	0		30
Dibenzofuran	74		80		40-140	8		30
1,2,4,5-Tetrachlorobenzene	64		65		2-134	2		30
Acetophenone	64		66		39-129	3		30
2,4,6-Trichlorophenol	83		87		30-130	5		30
p-Chloro-m-cresol	85		87		23-97	2		30
2-Chlorophenol	73		76		27-123	4		30
2,4-Dichlorophenol	83		86		30-130	4		30
2,4-Dimethylphenol	58		52		30-130	11		30
2-Nitrophenol	85		88		30-130	3		30
4-Nitrophenol	116	Q	121	Q	10-80	4		30
2,4-Dinitrophenol	95		105		20-130	10		30
4,6-Dinitro-o-cresol	122		124		20-164	2		30
Phenol	56		56		12-110	0		30
3-Methylphenol/4-Methylphenol	74		75		30-130	1		30
2,4,5-Trichlorophenol	83		86		30-130	4		30
Carbazole	81		82		55-144	1		30
Atrazine	92		93		40-140	1		30
Benzaldehyde	67		70		40-140	4		30
Caprolactam	40		41		10-130	2		30
2,3,4,6-Tetrachlorophenol	79		85		40-140	7		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 Batch: WG1256811-2 WG1256811-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		61		21-120
Phenol-d6	52		55		10-120
Nitrobenzene-d5	77		81		23-120
2-Fluorobiphenyl	73		77		15-120
2,4,6-Tribromophenol	90		93		10-120
4-Terphenyl-d14	83		83		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG1257196-2 WG1257196-3								
Bis(2-chloroethyl)ether	68		55		40-140	21		30
3,3'-Dichlorobenzidine	57		67		40-140	16		30
2,4-Dinitrotoluene	70		82		48-143	16		30
2,6-Dinitrotoluene	72		81		40-140	12		30
4-Chlorophenyl phenyl ether	68		67		40-140	1		30
4-Bromophenyl phenyl ether	60		65		40-140	8		30
Bis(2-chloroisopropyl)ether	58		48		40-140	19		30
Bis(2-chloroethoxy)methane	73		66		40-140	10		30
Hexachlorocyclopentadiene	46		44		40-140	4		30
Isophorone	73		65		40-140	12		30
Nitrobenzene	72		61		40-140	17		30
NDPA/DPA	66		67		40-140	2		30
n-Nitrosodi-n-propylamine	78		66		29-132	17		30
Bis(2-ethylhexyl)phthalate	66		84		40-140	24		30
Butyl benzyl phthalate	70		97		40-140	32	Q	30
Di-n-butylphthalate	70		88		40-140	23		30
Di-n-octylphthalate	69		91		40-140	28		30
Diethyl phthalate	73		83		40-140	13		30
Dimethyl phthalate	75		81		40-140	8		30
Biphenyl	60		58		40-140	3		30
4-Chloroaniline	56		52		40-140	7		30
2-Nitroaniline	69		74		52-143	7		30
3-Nitroaniline	53		67		25-145	23		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG1257196-2 WG1257196-3								
4-Nitroaniline	61		76		51-143	22		30
Dibenzofuran	69		66		40-140	4		30
1,2,4,5-Tetrachlorobenzene	55		48		2-134	14		30
Acetophenone	64		53		39-129	19		30
2,4,6-Trichlorophenol	65		70		30-130	7		30
p-Chloro-m-cresol	73		78		23-97	7		30
2-Chlorophenol	72		60		27-123	18		30
2,4-Dichlorophenol	69		69		30-130	0		30
2,4-Dimethylphenol	43		66		30-130	42	Q	30
2-Nitrophenol	70		60		30-130	15		30
4-Nitrophenol	49		62		10-80	23		30
2,4-Dinitrophenol	51		64		20-130	23		30
4,6-Dinitro-o-cresol	79		88		20-164	11		30
Phenol	53		47		12-110	12		30
3-Methylphenol/4-Methylphenol	70		68		30-130	3		30
2,4,5-Trichlorophenol	65		74		30-130	13		30
Carbazole	77		84		55-144	9		30
Atrazine	85		101		40-140	17		30
Benzaldehyde	66		51		40-140	26		30
Caprolactam	34		41		10-130	19		30
2,3,4,6-Tetrachlorophenol	56		67		40-140	18		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG1257196-2 WG1257196-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		49		21-120
Phenol-d6	53		46		10-120
Nitrobenzene-d5	77		62		23-120
2-Fluorobiphenyl	67		61		15-120
2,4,6-Tribromophenol	51		61		10-120
4-Terphenyl-d14	64		81		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: HOMER ST. REDEVELOPMENT

Project Number: 0311-018-001

Lab Number: L1929034

Report Date: 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-07 Batch: WG1257198-2 WG1257198-3								
Acenaphthene	63		85		40-140	30		40
2-Chloronaphthalene	60		80		40-140	29		40
Fluoranthene	86		86		40-140	0		40
Hexachlorobutadiene	47		72		40-140	42	Q	40
Naphthalene	55		86		40-140	44	Q	40
Benzo(a)anthracene	81		86		40-140	6		40
Benzo(a)pyrene	82		89		40-140	8		40
Benzo(b)fluoranthene	80		86		40-140	7		40
Benzo(k)fluoranthene	83		91		40-140	9		40
Chrysene	81		89		40-140	9		40
Acenaphthylene	62		82		40-140	28		40
Anthracene	86		91		40-140	6		40
Benzo(ghi)perylene	82		94		40-140	14		40
Fluorene	71		85		40-140	18		40
Phenanthrene	94		89		40-140	5		40
Dibenzo(a,h)anthracene	87		99		40-140	13		40
Indeno(1,2,3-cd)pyrene	84		94		40-140	11		40
Pyrene	85		86		40-140	1		40
2-Methylnaphthalene	57		82		40-140	36		40
Pentachlorophenol	87		77		40-140	12		40
Hexachlorobenzene	87		90		40-140	3		40
Hexachloroethane	49		80		40-140	48	Q	40

Lab Control Sample Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-07 Batch: WG1257198-2 WG1257198-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		67		21-120
Phenol-d6	37		55		10-120
Nitrobenzene-d5	55		86		23-120
2-Fluorobiphenyl	53		75		15-120
2,4,6-Tribromophenol	79		85		10-120
4-Terphenyl-d14	85		87		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Client ID: MW-1												
Associated sample(s): 01-04,08 QC Batch ID: WG1256809-4 WG1256809-5 QC Sample: L1929034-02												
Acenaphthene	ND	18.2	13	72		14	77		40-140	7		40
2-Chloronaphthalene	ND	18.2	12	66		14	77		40-140	15		40
Fluoranthene	ND	18.2	15	83		14	77		40-140	7		40
Hexachlorobutadiene	ND	18.2	8.7	48		12	66		40-140	32		40
Naphthalene	ND	18.2	10	55		13	72		40-140	26		40
Benzo(a)anthracene	ND	18.2	15	83		15	83		40-140	0		40
Benzo(a)pyrene	ND	18.2	16	88		16	88		40-140	0		40
Benzo(b)fluoranthene	ND	18.2	15	83		15	83		40-140	0		40
Benzo(k)fluoranthene	ND	18.2	16	88		16	88		40-140	0		40
Chrysene	ND	18.2	14	77		15	83		40-140	7		40
Acenaphthylene	ND	18.2	13	72		14	77		40-140	7		40
Anthracene	ND	18.2	14	77		16	88		40-140	13		40
Benzo(ghi)perylene	ND	18.2	15	83		15	83		40-140	0		40
Fluorene	ND	18.2	13	72		15	83		40-140	14		40
Phenanthrene	ND	18.2	14	77		14	77		40-140	0		40
Dibenzo(a,h)anthracene	ND	18.2	17	94		17	94		40-140	0		40
Indeno(1,2,3-cd)pyrene	ND	18.2	16	88		16	88		40-140	0		40
Pyrene	ND	18.2	15	83		14	77		40-140	7		40
2-Methylnaphthalene	ND	18.2	11	61		14	77		40-140	24		40
Pentachlorophenol	ND	18.2	16	88		18	99		40-140	12		40
Hexachlorobenzene	ND	18.2	14	77		16	88		40-140	13		40
Hexachloroethane	ND	18.2	8.5	47		13	72		40-140	42	Q	40

Matrix Spike Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,08 QC Batch ID: WG1256809-4 WG1256809-5 QC Sample: L1929034-02
 Client ID: MW-1

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	92		96		10-120
2-Fluorobiphenyl	64		75		15-120
2-Fluorophenol	50		65		21-120
4-Terphenyl-d14	90		84		41-149
Nitrobenzene-d5	62		80		23-120
Phenol-d6	47		56		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 QC Batch ID: WG1256811-4 WG1256811-5 QC Sample: L1929034-02 Client ID: MW-1												
Bis(2-chloroethyl)ether	ND	18.2	9.4	52		13	72		40-140	32	Q	30
3,3'-Dichlorobenzidine	ND	18.2	9.8	54		6.9	38	Q	40-140	35	Q	30
2,4-Dinitrotoluene	ND	18.2	12	66		13	72		48-143	8		30
2,6-Dinitrotoluene	ND	18.2	15	83		16	88		40-140	6		30
4-Chlorophenyl phenyl ether	ND	18.2	13	72		15	83		40-140	14		30
4-Bromophenyl phenyl ether	ND	18.2	14	77		16	88		40-140	13		30
Bis(2-chloroisopropyl)ether	ND	18.2	9.7	53		12	66		40-140	21		30
Bis(2-chloroethoxy)methane	ND	18.2	12	66		14	77		40-140	15		30
Hexachlorocyclopentadiene	ND	18.2	14.J	77		18.J	99		40-140	25		30
Isophorone	ND	18.2	12	66		14	77		40-140	15		30
Nitrobenzene	ND	18.2	11	61		15	83		40-140	31	Q	30
NDPA/DPA	ND	18.2	14	77		15	83		40-140	7		30
n-Nitrosodi-n-propylamine	ND	18.2	12	66		15	83		29-132	22		30
Bis(2-ethylhexyl)phthalate	2.6J	18.2	18	99		17	94		40-140	6		30
Butyl benzyl phthalate	ND	18.2	18	99		18	99		40-140	0		30
Di-n-butylphthalate	ND	18.2	17	94		18	99		40-140	6		30
Di-n-octylphthalate	ND	18.2	19	100		18	99		40-140	5		30
Diethyl phthalate	ND	18.2	15	83		16	88		40-140	6		30
Dimethyl phthalate	ND	18.2	14	77		15	83		40-140	7		30
Biphenyl	ND	18.2	11	61		13	72		40-140	17		30
4-Chloroaniline	ND	18.2	10	55		10	55		40-140	0		30
2-Nitroaniline	ND	18.2	15	83		16	88		52-143	6		30
3-Nitroaniline	ND	18.2	13	72		12	66		25-145	8		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Project Number:** 0311-018-001**Lab Number:** L1929034**Report Date:** 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 QC Batch ID: WG1256811-4 WG1256811-5 QC Sample: L1929034-02 Client ID: MW-1												
4-Nitroaniline	ND	18.2	14	77		15	83		51-143	7		30
Dibenzofuran	ND	18.2	12	66		14	77		40-140	15		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	10	55		12	66		2-134	18		30
Acetophenone	ND	18.2	9.7	53		12	66		39-129	21		30
2,4,6-Trichlorophenol	ND	18.2	14	77		16	88		30-130	13		30
p-Chloro-m-cresol	ND	18.2	15	83		17	94		23-97	13		30
2-Chlorophenol	ND	18.2	12	66		14	77		27-123	15		30
2,4-Dichlorophenol	ND	18.2	14	77		16	88		30-130	13		30
2,4-Dimethylphenol	ND	18.2	5.2	29	Q	7.7	42		30-130	39	Q	30
2-Nitrophenol	ND	18.2	14	77		17	94		30-130	19		30
4-Nitrophenol	ND	18.2	20	110	Q	19	100	Q	10-80	5		30
2,4-Dinitrophenol	ND	18.2	20	110		22	120		20-130	10		30
4,6-Dinitro-o-cresol	ND	18.2	22	120		24	130		20-164	9		30
Phenol	ND	18.2	9.1	50		11	61		12-110	19		30
3-Methylphenol/4-Methylphenol	ND	18.2	12	66		14	77		30-130	15		30
2,4,5-Trichlorophenol	ND	18.2	14	77		16	88		30-130	13		30
Carbazole	ND	18.2	15	83		16	88		55-144	6		30
Atrazine	ND	18.2	17	94		18	99		40-140	6		30
Benzaldehyde	ND	18.2	9.4	52		13	72		40-140	32	Q	30
Caprolactam	ND	18.2	7.6J	42		8.1J	45		10-130	6		30
2,3,4,6-Tetrachlorophenol	ND	18.2	14	77		16	88		40-140	13		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,08 QC Batch ID: WG1256811-4 WG1256811-5 QC Sample: L1929034-02
 Client ID: MW-1

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	89		99		10-120
2-Fluorobiphenyl	68		80		15-120
2-Fluorophenol	51		67		21-120
4-Terphenyl-d14	86		89		41-149
Nitrobenzene-d5	65		84		23-120
Phenol-d6	49		60		10-120

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Serial_No:07111915:27
Lab Number: L1929034
Report Date: 07/11/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1929034-01A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-01B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-01C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-01D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-01E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-02A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02A1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02B1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02C1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-02D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-02D2	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-02E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-02E1	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-03A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-03B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-03C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-03D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-03E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-04A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-04B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-04C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Serial_No:07111915:27
Lab Number: L1929034
Report Date: 07/11/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1929034-04D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-04E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-05A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-05B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-05C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-05D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-05E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-06A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-06B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-06C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-06D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-06E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-07A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-07B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-07C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-07D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-07E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-08A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-08B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-08C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L1929034-08D	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-08E	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1929034-09A	Vial HCl preserved	A	NA		3.8	Y	Absent		HOLD-8260(14)
L1929034-09B	Vial HCl preserved	A	NA		3.8	Y	Absent		HOLD-8260(14)

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name: HOMER ST. REDEVELOPMENT**Lab Number:** L1929034**Project Number:** 0311-018-001**Report Date:** 07/11/19

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

Terms

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 12

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Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.** **EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

[illegible]



GROUNDWATER FIELD FORM

Project Name: 229 Homer St - Homer Street Redevelopment, LLC

Date: 12-4-19

Location: Olean, NY

Project No.: T0311-018-001

Field Team: CFD

Well No. MW - 1		Diameter (inches): 2"				Sample Date / Time: 12-4-19			
Product Depth (fbTOR): -		Water Column (ft): 7.47				DTW when sampled: 11.58			
DTW (static) (fbTOR): 10.80		One Well Volume (gal): 1.025				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): 18.27		Total Volume Purged (gal): 5.5 mL				Purge Method: Typhoon Pump			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1220	Initial	0	6.92	10.1	631.7	238	3.14	-35	Brown - Grey Turbid
1230	11.20	1.5	6.76	10.4	576.8	208	3.03	13	Light Odor
1235	11.34	1.0	6.75	10.8	569.5	117	2.55	23	
1240	11.61	1.75	6.73	10.8	576.6	79	2.54	27	
1250	11.59	2.5	6.72	11.0	579.2	58	2.34	27	Clear / Little Pore
1300	11.58	3.0	6.73	11.1	574.7	44		27	
1310	1	3.5	6.71	11.4	573.9	37		26	
1320	1	4.0	6.70	11.5	563.2	31			
Sample Information:									
1330	S1 11.58	4.5	6.70	11.4	561.4	29	2.12	27	Clear / Little Pore
	S2 11.58	5.0	6.71	11.5	560.7	19	2.14	26	

Well No. MW - 2		Diameter (inches): 2"				Sample Date / Time: 12-3-19 1045			
Product Depth (fbTOR): -		Water Column (ft): 7.11				DTW when sampled: 12.24			
DTW (static) (fbTOR): 12.09		One Well Volume (gal): 1.016 gal				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): 19.20		Total Volume Purged (gal): 4.5 gal				Purge Method: Typhoon			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0930	Initial	0	6.47	11.0	899	454	7.10	-113	Cloudy Grey Turbid
0940	12.20	1.25	6.49	13.0	911	213	7.72	-101	Pore Odor
0950	12.21	2.0	6.52	13.1	915	105	3.87	-94	Clear Light Turbid
1000	12.23	2.5	6.56	13.2	914.6	68.6	3.62	-90	Light Pore
1010	12.24	3.5	6.59	13.1	908	47.7	3.14	-91	
1020	12.24	3.75	6.59	13.2	902.8	45.3	2.98	-91	
1030	12.24	4.0	6.60	13.3	907	44	2.72	-88	Clear / Pore
Sample Information:									
1043	S1 12.24	4.2	6.67	13.2	906.7	40.4	2.68	-87	Clear
1045	S2 12.24	4.5	6.69	13.3	905.6	32.4	2.20	-80	Pore Odor

REMARKS:

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV



GROUNDWATER FIELD FORM

Project Name: 229 Homer St - Homer Street Redevelopment, LLC

Date:

Location: Olean, NY

Project No.: T0311-018-001

Field Team: CFD

Well No. MW - 3		Diameter (inches): 2"		Sample Date / Time: 12-4-19 / 1030					
Product Depth (ftTOR): -		Water Column (ft): 7.77'		DTW when sampled: 12.21					
DTW (static) (ftTOR): 11.40		One Well Volume (gal): 1.25 gal		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (ftTOR): 19.17		Total Volume Purged (gal): 5.25		Purge Method: Typhoon Pump					
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0920	Initial	0	6.31	11.9	344.1	36.2	5.84	-31	Cloudy
0930	11.52	1.5	6.55	12.8	344.5	26.8	5.35	-41	no odor
0940	11.98	1	6.58	13.1	333.3	17.4	4.02	-54	Gray "thick" Turbid
0950	12.15	2	6.61	13.3	328.6	12.4	3.77	-62	Clear / Light Pstro
1000	12.20	3	6.56	13.4	343.2	7.6	2.78	-65	
1010	12.24	4	6.52	13.6	349.8	48.9	2.17	-67	
1020	12.21	4.5	6.51	12.6	306.6	46.4	2.02	-69	
7									
8									
9									
10									
Sample Information:									
1030	S1	12.21	5	6.52	13.6	376	1.74	-71	Clear / Light odor
	S2	12.21	5.25	6.53	12.5	411	2.8	-71	

Well No. MW - 4		Diameter (inches): 2"		Sample Date / Time: 12/3/19 1330						
Product Depth (ftTOR): -		Water Column (ft): 8.01		DTW when sampled: 11.75						
DTW (static) (ftTOR): 11.11		One Well Volume (gal): 1.35 gal		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample						
Total Depth (ftTOR): 19.12		Total Volume Purged (gal): 5.55 gal		Purge Method: Typhoon Pump						
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
1220	Initial	0	7.34	11.1	231.2	NA	11.42	16	Brown Turbid	
1225	11.34	1	7.16	11.9	202.1	88.8	12.52	32	"	
1235	11.58	2.25	7.02	12.5	210.8	439	12.27	49	Light Brown / Gray	
1245	11.59	3.0	6.96	12.4	217.5	349	10.57	54	Turbid	
1255	11.61	3.5	6.92	12.6	224.3	250	9.68	52	Light Pstro	
1306	11.72	4	6.85	12.6	226.9	189	9.1	48		
1310	11.75	4.5	6.87	12.7	230.5	73	8.79	44		
7										
8										
9										
10										
Sample Information:										
1320	S1	11.75	5.0	6.85	12.7	230.1	48	6.72	39	Gray - Light odor
1330	S2	11.75	5.5	6.85	12.5	229	42	5.89	37	

REMARKS:

~~At~~ MW-3 - MS / MSD **

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Note: All measurements are in feet, distance from top of riser.

PREPARED BY:



GROUNDWATER FIELD FORM

Project Name: 229 Homer St - Homer Street Redevelopment, LLC

Date: 12-3-19

Location: Olean, NY

Project No.: T0311-018-001

Field Team: CFD

Well No. MW - 5		Diameter (inches): 2"				Sample Date / Time: 12-3-19 / 1205			
Product Depth (ftTOR): -		Water Column (ft): 5.99'				DTW when sampled: 13.04'			
DTW (static) (ftTOR): 12.98		One Well Volume (gal): 1.0				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR): 18.97		Total Volume Purged (gal): 5 gal				Purge Method: Typhoon Pump			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1106	0 Initial	0	6.59	12.5	984	488	4.12	-75	Grey Turbid
1105	1 12.90	.5	6.50	13.4	1007	168	3.58	-82	Potro
1115	2 13.00	1.5	6.52	13.8	1030	71.5	3.14	-77	1
1125	3 13.04	2	6.53	13.5	1024	52.4	3.03	-40	1
1135	4 13.04	2.5	6.59	12.6	1022	47.5	2.88	-84	Clear, Potro
1145	5 13.06	3.25	6.59	13.0	1030	28.5	2.28	-77	1
1150	6 13.05	4	6.58	13.2	1030	28		-77	1
7									
8									
9									
10									
Sample Information:									
1205	S1 13.04	4.5	6.56	13.4	1030	27	2.08	-77	Clear, Potro
	S2 13.04	5	6.57	13.5	1035	13.3	2.04	-73	

Well No. MW - 6		Diameter (inches): 2"				Sample Date / Time: 12-3-19 / 1500			
Product Depth (ftTOR): -		Water Column (ft): 7.41				DTW when sampled: 12.00'			
DTW (static) (ftTOR): 11.21		One Well Volume (gal): 1.16				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (ftTOR): 18.32		Total Volume Purged (gal): 5 gal				Purge Method: Typhoon Pump			
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1350	0 Initial	0	5.28	10.7	887	428	3.14	-84	Grey / Light
1400	1 11.19	.50	5.88	11.6	873	862	3.05	-81	1
1410	2 11.25	1.25	6.05	11.6	871	181	3.03	-82	1
1420	3 11.63	2	6.10	11.7	874	148	3.01	-82	Clear / Light
1430	4 11.94	2.5	6.18	12.2	885	98	2.52	-83	1
1440	5 12.04	3.25	6.29	12.3	899	74	2.44	-86	1
1450	6 12.00	4	6.34	12.4	901	43	3.36	-85	1
7									
8									
9									
10									
Sample Information:									
1500	S1 12.00	4.5	6.47	12.5	906	41	2.92	-85	Potro
	S2 12.00	5	6.5	12.5	910	37	3.01	-83	Clear / Light

REMARKS:

* MW-5 - BLIND DUP MW6 - LIGHT SILEN ON TOP OF WATER

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

CFD



GROUNDWATER FIELD FORM

Project Name: 229 Homer St - Homer Street Redevelopment, LLC

Date: 12-4-19

Location: Olean, NY

Project No.: T0311-018-001

Field Team: CFD

Well No. MW - 7			Diameter (inches): 2"			Sample Date / Time: 12-4-19 / 1230			
Product Depth (fbTOR): -			Water Column (ft): 7.09			DTW when sampled: 12.5			
DTW (static) (fbTOR): 12.08			One Well Volume (gal): 1.15			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): 19.17			Total Volume Purged (gal): 552L			Purge Method: Typhoon Pump			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1120	0 Initial	0	6.32	11.9	962.1	731	3.16	-80	Grassy Cloudy Turbid
1125	1 12.22	.50	6.51	11.9	965.2	522	2.47	-89	Strawberry Pitted
1130	2 12.49	1.25	6.52	12.0	963.4	485	2.02	-92	
1145	3 12.50	2	6.54	12.4	964.1	125	1.79	-94	
1150	4 12.50	3	6.56	12.5	964.2	63	1.66	-96	Cloudy / Pitted
1200	5 12.50	3.5	6.58	12.6	964.2	47	1.37	-97	
1210	6 12.51	4	6.62	12.8	962.1	41	1.11	-74	
	7								
	8								
	9								
	10								
Sample Information:									
1225	S1 12.50	4.5	6.68	12.7	961.7	38	1.07	-97	Clear
1230	S2 12.50	5	6.68	12.7	961.5	35	1.04	-76	More OOOO

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

Stabilization Criteria

REMARKS:

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:



ANALYTICAL REPORT

Lab Number:	L1957918
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	229 HOMER ST
Project Number:	T0311-018-001
Report Date:	12/11/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1957918-01	MW-2	WATER	OLEAN, NY	12/03/19 10:45	12/04/19
L1957918-02	MW-5	WATER	OLEAN, NY	12/03/19 12:15	12/04/19
L1957918-03	MW-4	WATER	OLEAN, NY	12/03/19 13:30	12/04/19
L1957918-04	MW-6	WATER	OLEAN, NY	12/03/19 15:00	12/04/19
L1957918-05	MW-3	WATER	OLEAN, NY	12/04/19 10:30	12/04/19
L1957918-06	MW-7	WATER	OLEAN, NY	12/04/19 12:30	12/04/19
L1957918-07	MW-1	WATER	OLEAN, NY	12/04/19 13:30	12/04/19
L1957918-08	BLIND DUP	WATER	OLEAN, NY	12/03/19 12:45	12/04/19
L1957918-09	TRIP BLANK	WATER	OLEAN, NY	12/03/19 00:00	12/04/19

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Case Narrative

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

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

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

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

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

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

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1957918-09: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

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

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 12/11/19

ORGANICS

VOLATILES

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 19:23
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.8	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	3.4	J	ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	57.4	J	ug/l	1
Unknown Cyclohexane	4.55	J	ug/l	1
Unknown	3.89	J	ug/l	1
Pentane, 2,3-dimethyl-	6.85	NJ	ug/l	1
3-Phenylbut-1-ene	3.31	NJ	ug/l	1
Unknown	3.88	J	ug/l	1
Butane, 2,2-dimethyl-	4.76	NJ	ug/l	1
Cyclohexane, 1,1-dimethyl-	10.1	NJ	ug/l	1
Unknown Cyclohexane	5.90	J	ug/l	1
Cyclopentane, 1,2,4-trimethyl-	4.52	NJ	ug/l	1
Butane, 2,3-Dimethyl-	9.68	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	105		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 19:46
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	3.6	J	ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	47.7	J	ug/l			1
Unknown Naphthalene	3.25	J	ug/l			1
Unknown Aromatic	3.87	J	ug/l			1
Unknown	3.27	J	ug/l			1
Pentane, 2,3-dimethyl-	6.10	NJ	ug/l			1
Unknown Aromatic	3.59	J	ug/l			1
Unknown Cyclohexane	5.81	J	ug/l			1
Unknown Aromatic	4.81	J	ug/l			1
Unknown Cyclohexane	3.49	J	ug/l			1
Cyclopentane, 1,2,4-trimethyl-	4.80	NJ	ug/l			1
Cyclohexane, 1,1-dimethyl-	8.71	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	104		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 20:09
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.9	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	2.93	J	ug/l	1
Sulfur Dioxide	2.93	NJ	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	103		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 20:33
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST**Lab Number:** L1957918**Project Number:** T0311-018-001**Report Date:** 12/11/19**SAMPLE RESULTS****Lab ID:** L1957918-04**Date Collected:** 12/03/19 15:00**Client ID:** MW-6**Date Received:** 12/04/19**Sample Location:** OLEAN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.4	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	11		ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	66.4	J	ug/l			1
Butane, 2,3-Dimethyl-	13.7	NJ	ug/l			1
Cyclopentane, 1,2,4-trimethyl-	4.59	NJ	ug/l			1
Unknown	6.72	J	ug/l			1
Butane, 2,2-dimethyl-	6.35	NJ	ug/l			1
Cyclohexane, 1,1-dimethyl-	5.84	NJ	ug/l			1
Pentane, 2,4-dimethyl-	4.12	NJ	ug/l			1
Unknown Cyclohexane	8.14	J	ug/l			1
Pentane, 2,3-dimethyl-	7.97	NJ	ug/l			1
Unknown Cyclohexane	4.17	J	ug/l			1
Unknown Cycloalkane	4.77	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	99		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 22:28
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.9	J	ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	24.2	J	ug/l			1
Cyclopentane, 1,2,4-trimethyl-	2.26	NJ	ug/l			1
Pentane, 2,4-dimethyl-	2.02	NJ	ug/l			1
Cyclohexane, 1,1-dimethyl-	2.91	NJ	ug/l			1
Cyclohexane, 1,1,3-trimethyl-	1.18	NJ	ug/l			1
Unknown Cyclohexane	1.35	J	ug/l			1
Butane, 2,3-Dimethyl-	5.45	NJ	ug/l			1
Unknown	1.38	J	ug/l			1
Unknown	2.65	J	ug/l			1
Unknown	1.41	J	ug/l			1
Pentane, 2,3-dimethyl-	3.61	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	99		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 20:56
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.0	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	23		ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	113	J	ug/l			1
Butane, 2,2-dimethyl-	9.60	NJ	ug/l			1
Cyclohexane, 1,1-dimethyl-	12.1	NJ	ug/l			1
Unknown Cycloalkane	12.1	J	ug/l			1
Unknown Cyclohexane	11.2	J	ug/l			1
Unknown Benzene	9.63	J	ug/l			1
Unknown Cycloalkane	9.11	J	ug/l			1
Cyclopentane, 1,2,4-trimethyl-	6.47	NJ	ug/l			1
Unknown Cyclohexane	9.17	J	ug/l			1
Pentane, 2,3-dimethyl-	12.3	NJ	ug/l			1
Butane, 2,3-Dimethyl-	21.4	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	100		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 21:19
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	4.15	J	ug/l	1
Unknown	4.15	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	101		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 21:42
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	3.4	J	ug/l	10	0.40	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	47.0	J	ug/l	1
Unknown Aromatic	4.79	J	ug/l	1
Unknown Aromatic	3.31	J	ug/l	1
Cyclohexane, 1,1-dimethyl-	8.51	NJ	ug/l	1
Unknown Cyclohexane	5.84	J	ug/l	1
Pentane, 2,3-dimethyl-	5.93	NJ	ug/l	1
Unknown Aromatic	3.30	J	ug/l	1
Unknown Naphthalene	3.25	J	ug/l	1
Unknown Cyclohexane	3.55	J	ug/l	1
Cyclopentane, 1,2,4-trimethyl-	4.64	NJ	ug/l	1
Unknown Aromatic	3.87	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	101		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-09
Client ID: TRIP BLANK
Sample Location: OLEAN, NY

Date Collected: 12/03/19 00:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/08/19 22:05
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-09
Client ID: TRIP BLANK
Sample Location: OLEAN, NY

Date Collected: 12/03/19 00:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.0	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	4.27	J	ug/l	1
Unknown	4.27	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/08/19 17:05
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1318621-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/08/19 17:05
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1318621-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/08/19 17:05
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1318621-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1318621-3 WG1318621-4								
Methylene chloride	94		95		70-130	1		20
1,1-Dichloroethane	90		92		70-130	2		20
Chloroform	91		92		70-130	1		20
Carbon tetrachloride	85		87		63-132	2		20
1,2-Dichloropropane	96		98		70-130	2		20
Dibromochloromethane	93		96		63-130	3		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	94		93		70-130	1		20
Chlorobenzene	95		97		75-130	2		20
Trichlorofluoromethane	70		70		62-150	0		20
1,2-Dichloroethane	93		92		70-130	1		20
1,1,1-Trichloroethane	87		89		67-130	2		20
Bromodichloromethane	94		93		67-130	1		20
trans-1,3-Dichloropropene	85		82		70-130	4		20
cis-1,3-Dichloropropene	89		89		70-130	0		20
Bromoform	93		96		54-136	3		20
1,1,2,2-Tetrachloroethane	110		120		67-130	9		20
Benzene	92		93		70-130	1		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	62	Q	64		64-130	3		20
Bromomethane	76		76		39-139	0		20
Vinyl chloride	72		72		55-140	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1318621-3 WG1318621-4								
Chloroethane	83		86		55-138	4		20
1,1-Dichloroethene	88		88		61-145	0		20
trans-1,2-Dichloroethene	90		92		70-130	2		20
Trichloroethene	84		84		70-130	0		20
1,2-Dichlorobenzene	96		100		70-130	4		20
1,3-Dichlorobenzene	98		100		70-130	2		20
1,4-Dichlorobenzene	94		98		70-130	4		20
Methyl tert butyl ether	100		98		63-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	96		94		70-130	2		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	44		45		36-147	2		20
Acetone	100		110		58-148	10		20
Carbon disulfide	79		80		51-130	1		20
2-Butanone	100		94		63-138	6		20
4-Methyl-2-pentanone	110		100		59-130	10		20
2-Hexanone	92		94		57-130	2		20
Bromochloromethane	97		100		70-130	3		20
1,2-Dibromoethane	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	91		99		41-144	8		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	81		98		70-130	19		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1318621-3 WG1318621-4								
1,2,4-Trichlorobenzene	88		97		70-130	10		20
Methyl Acetate	100		100		70-130	0		20
Cyclohexane	94		92		70-130	2		20
1,4-Dioxane	86		96		56-162	11		20
Freon-113	84		84		70-130	0		20
Methyl cyclohexane	89		89		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		102		70-130
Toluene-d8	112		112		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	102		103		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1318621-6 WG1318621-7 QC Sample: L1957918-05 Client ID: MW-3												
Methylene chloride	ND	10	10	100		11	110		70-130	10		20
1,1-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
Chloroform	ND	10	9.8	98		10	100		70-130	2		20
Carbon tetrachloride	ND	10	9.3	93		10	100		63-132	7		20
1,2-Dichloropropane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	9.7	97		10	100		63-130	3		20
1,1,2-Trichloroethane	ND	10	12	120		12	120		70-130	0		20
Tetrachloroethene	ND	10	10	100		11	110		70-130	10		20
Chlorobenzene	ND	10	10	100		11	110		75-130	10		20
Trichlorofluoromethane	ND	10	7.8	78		8.3	83		62-150	6		20
1,2-Dichloroethane	ND	10	9.4	94		9.8	98		70-130	4		20
1,1,1-Trichloroethane	ND	10	9.8	98		10	100		67-130	2		20
Bromodichloromethane	ND	10	9.7	97		10	100		67-130	3		20
trans-1,3-Dichloropropene	ND	10	7.9	79		8.3	83		70-130	5		20
cis-1,3-Dichloropropene	ND	10	9.0	90		9.8	98		70-130	9		20
Bromoform	ND	10	9.2	92		9.8	98		54-136	6		20
1,1,2,2-Tetrachloroethane	ND	10	12	120		12	120		67-130	0		20
Benzene	ND	10	10	100		11	110		70-130	10		20
Toluene	ND	10	11	110		12	120		70-130	9		20
Ethylbenzene	ND	10	11	110		12	120		70-130	9		20
Chloromethane	ND	10	7.4	74		8.0	80		64-130	8		20
Bromomethane	ND	10	5.9	59		6.6	66		39-139	11		20
Vinyl chloride	ND	10	9.0	90		9.5	95		55-140	5		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1318621-6 WG1318621-7 QC Sample: L1957918-05 Client ID: MW-3												
Chloroethane	ND	10	9.7	97		10	100		55-138	3		20
1,1-Dichloroethene	ND	10	10	100		11	110		61-145	10		20
trans-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Trichloroethene	ND	10	9.5	95		10	100		70-130	5		20
1,2-Dichlorobenzene	ND	10	10	100		11	110		70-130	10		20
1,3-Dichlorobenzene	ND	10	10	100		11	110		70-130	10		20
1,4-Dichlorobenzene	ND	10	9.9	99		11	110		70-130	11		20
Methyl tert butyl ether	ND	10	8.9	89		9.4	94		63-130	5		20
p/m-Xylene	ND	20	21	105		23	115		70-130	9		20
o-Xylene	ND	20	22	110		24	120		70-130	9		20
cis-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Styrene	ND	20	23	115		24	120		70-130	4		20
Dichlorodifluoromethane	ND	10	5.1	51		5.2	52		36-147	2		20
Acetone	3.1J	10	10	100		10	100		58-148	0		20
Carbon disulfide	ND	10	9.1	91		9.9	99		51-130	8		20
2-Butanone	ND	10	20	200	Q	21	210	Q	63-138	5		20
4-Methyl-2-pentanone	ND	10	11	110		12	120		59-130	9		20
2-Hexanone	ND	10	9.5	95		10	100		57-130	5		20
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromoethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	9.6	96		11	110		41-144	14		20
Isopropylbenzene	ND	10	11	110		12	120		70-130	9		20
1,2,3-Trichlorobenzene	ND	10	8.7	87		10	100		70-130	14		20

Matrix Spike Analysis**Batch Quality Control****Project Name:** 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L1957918**Report Date:** 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1318621-6 WG1318621-7 QC Sample: L1957918-05 Client ID: MW-3												
1,2,4-Trichlorobenzene	ND	10	9.9	99		11	110		70-130	11		20
Methyl Acetate	ND	10	10	100		10	100		70-130	0		20
Cyclohexane	ND	10	10	100		11	110		70-130	10		20
1,4-Dioxane	ND	500	500	100		520	104		56-162	4		20
Freon-113	ND	10	9.3	93		10	100		70-130	7		20
Methyl cyclohexane	1.9J	10	12	120		13	130		70-130	8		20

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	100		101		70-130
Toluene-d8	111		111		70-130

SEMIVOLATILES

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 05:16
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.8	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	214	J	ug/l			1
Unknown	17.7	J	ug/l			1
Unknown	8.62	J	ug/l			1
Unknown	8.69	J	ug/l			1
Unknown	8.94	J	ug/l			1
Unknown	11.8	J	ug/l			1
Unknown	9.85	J	ug/l			1
Unknown	16.3	J	ug/l			1
Aldol Condensates (A)	39.4	J	ug/l			1
Unknown	8.65	J	ug/l			1
Unknown	9.31	J	ug/l			1
Unknown Organic Acid	11.8	J	ug/l			1
Unknown	15.5	J	ug/l			1
Unknown Ketone	18.9	J	ug/l			1
Unknown	14.2	J	ug/l			1
Unknown	14.6	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	92		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	81		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 20:37
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.05	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.11		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.13		ug/l	0.10	0.01	1
Phenanthrene	0.08	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	0.18	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-01
Client ID: MW-2
Sample Location: OLEAN, NY

Date Collected: 12/03/19 10:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		21-120
Phenol-d6	78		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	100		15-120
2,4,6-Tribromophenol	150	Q	10-120
4-Terphenyl-d14	121		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 05:42
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	87.6	J	ug/l			1
Unknown	2.69	J	ug/l			1
Unknown	2.84	J	ug/l			1
Unknown Naphthalene	3.78	J	ug/l			1
Unknown Ketone	4.29	J	ug/l			1
Unknown	2.44	J	ug/l			1
Unknown Benzene	3.38	J	ug/l			1
Unknown	3.67	J	ug/l			1
Unknown Naphthalene	2.54	J	ug/l			1
Aldol Condensates (A)	8.73	J	ug/l			1
Naphthalene, 1-methyl-	2.62	NJ	ug/l			1
Unknown	2.62	J	ug/l			1
Unknown	2.73	J	ug/l			1
Aldol Condensates (A)	38.2	J	ug/l			1
Unknown	3.78	J	ug/l			1
Unknown Naphthalene	3.27	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	58		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 20:53
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.18		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.33		ug/l	0.10	0.01	1
Phenanthrene	0.11		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-02
Client ID: MW-5
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:15
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	101		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 06:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	56.7	J	ug/l	1
Unknown	1.74	J	ug/l	1
Aldol Condensates (A)	4.80	J	ug/l	1
Unknown	2.62	J	ug/l	1
Unknown	3.74	J	ug/l	1
Aldol Condensates (A)	43.8	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	63		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 21:09
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	0.02	J	ug/l	0.20	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.06	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.07	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.06	J	ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.06	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	0.04	J	ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-03
Client ID: MW-4
Sample Location: OLEAN, NY

Date Collected: 12/03/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	68		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	108		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 06:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	111	J	ug/l			1
Unknown Benzene	1.67	J	ug/l			1
Unknown Alkane	2.65	J	ug/l			1
Aldol Condensates (A)	42.2	J	ug/l			1
Unknown Benzene	3.42	J	ug/l			1
Unknown Cyclohexane	1.67	J	ug/l			1
Unknown Alkane	1.49	J	ug/l			1
Aldol Condensates (A)	6.04	J	ug/l			1
Unknown Benzene	1.53	J	ug/l			1
Unknown Naphthalene	1.89	J	ug/l			1
Unknown Alkane	2.87	J	ug/l			1
Cyclic Octaatomic Sulfur	34.0	NJ	ug/l			1
Unknown	2.04	J	ug/l			1
Unknown Alkane	4.94	J	ug/l			1
Unknown	1.78	J	ug/l			1
Unknown	2.44	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	56		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 21:25
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.06	J	ug/l	0.10	0.01	1
Phenanthrene	0.07	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-04
Client ID: MW-6
Sample Location: OLEAN, NY

Date Collected: 12/03/19 15:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	90		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 16:04
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	79.8	J	ug/l	1
Unknown	2.44	J	ug/l	1
Unknown	3.53	J	ug/l	1
Aldol Condensates (A)	4.84	J	ug/l	1
Unknown Siloxane	2.47	J	ug/l	1
Unknown	1.64	J	ug/l	1
Unknown	2.91	J	ug/l	1
Unknown	1.45	J	ug/l	1
Unknown	6.69	J	ug/l	1
Unknown	2.36	J	ug/l	1
Unknown	1.56	J	ug/l	1
Aldol Condensates (A)	47.5	J	ug/l	1
Unknown Alcohol	2.44	J	ug/l	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	85		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 21:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.04	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.10		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.17	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-05
Client ID: MW-3
Sample Location: OLEAN, NY

Date Collected: 12/04/19 10:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	94		21-120
Phenol-d6	83		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	131	Q	10-120
4-Terphenyl-d14	115		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 16:29
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	124	J	ug/l			1
Unknown Naphthalene	5.89	J	ug/l			1
Unknown Organic Acid	26.5	J	ug/l			1
Unknown	2.84	J	ug/l			1
Aldol Condensates (A)	5.56	J	ug/l			1
Unknown	3.13	J	ug/l			1
Aldol Condensates (A)	42.4	J	ug/l			1
Unknown Organic Acid	4.47	J	ug/l			1
Unknown	3.67	J	ug/l			1
Unknown	4.36	J	ug/l			1
Unknown Benzene	3.96	J	ug/l			1
Unknown Benzene	8.07	J	ug/l			1
Unknown Naphthalene	3.20	J	ug/l			1
Unknown Naphthalene	3.49	J	ug/l			1
Unknown	3.45	J	ug/l			1
Unknown Organic Acid	2.73	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	121	Q	10-120
4-Terphenyl-d14	85		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 21:56
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.06	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	0.30		ug/l	0.10	0.01	1
Phenanthrene	0.20		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02	1
Pentachlorophenol	0.18	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-06
Client ID: MW-7
Sample Location: OLEAN, NY

Date Collected: 12/04/19 12:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	135	Q	10-120
4-Terphenyl-d14	116		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 16:55
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Tentatively Identified Compounds

Total TIC Compounds	50.5	J	ug/l	1
Aldol Condensates (A)	40.7	J	ug/l	1
Unknown Alcohol	2.62	J	ug/l	1
Unknown Alcohol	1.53	J	ug/l	1
Aldol Condensates (A)	4.00	J	ug/l	1
Unknown Organic Acid	1.67	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	73		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 22:12
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.07	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.06	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.06	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-07
Client ID: MW-1
Sample Location: OLEAN, NY

Date Collected: 12/04/19 13:30
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	101		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/10/19 08:21
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	96.6	J	ug/l			1
Unknown Naphthalene	4.33	J	ug/l			1
Unknown	3.09	J	ug/l			1
Unknown	2.91	J	ug/l			1
Unknown Benzene	4.25	J	ug/l			1
Unknown	3.20	J	ug/l			1
Unknown Ketone	4.87	J	ug/l			1
Unknown Naphthalene	3.45	J	ug/l			1
Naphthalene, 1-methyl-	3.02	NJ	ug/l			1
Unknown Naphthalene	3.20	J	ug/l			1
Unknown Naphthalene	3.96	J	ug/l			1
Unknown	3.31	J	ug/l			1
Unknown	4.76	J	ug/l			1
Unknown Naphthalene	3.38	J	ug/l			1
Aldol Condensates (A)	6.54	J	ug/l			1
Aldol Condensates (A)	42.3	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	68		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/08/19 22:28
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 13:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.23		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.07	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Anthracene	0.06	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.40		ug/l	0.10	0.01	1
Phenanthrene	0.14		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

SAMPLE RESULTS

Lab ID: L1957918-08
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 12/03/19 12:45
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		21-120
Phenol-d6	78		10-120
Nitrobenzene-d5	116		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	122	Q	10-120
4-Terphenyl-d14	119		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/09/19 14:36
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 06:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1317936-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/09/19 14:36
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 06:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1317936-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Tentatively Identified Compounds

Total TIC Compounds	40.6	J	ug/l
Unknown Organic Acid	1.53	J	ug/l
Aldol Condensates (A)	3.85	J	ug/l
Aldol Condensates (A)	33.4	J	ug/l
Unknown	1.82	J	ug/l

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/09/19 14:36
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 12/07/19 06:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1317936-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	47		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	50		41-149

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/07/19 19:59
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 12/07/19 06:04

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-08 Batch: WG1317937-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.02	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	0.01	J	ug/l	0.10	0.01
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01
Pyrene	0.02	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 12/07/19 19:59
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 12/07/19 06:04

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-08 Batch: WG1317937-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	143	Q	10-120
4-Terphenyl-d14	96		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1317936-2 WG1317936-3								
Bis(2-chloroethyl)ether	80		79		40-140	1		30
3,3'-Dichlorobenzidine	53		70		40-140	28		30
2,4-Dinitrotoluene	82		85		48-143	4		30
2,6-Dinitrotoluene	81		82		40-140	1		30
4-Chlorophenyl phenyl ether	78		79		40-140	1		30
4-Bromophenyl phenyl ether	88		83		40-140	6		30
Bis(2-chloroisopropyl)ether	76		73		40-140	4		30
Bis(2-chloroethoxy)methane	82		81		40-140	1		30
Hexachlorocyclopentadiene	60		66		40-140	10		30
Isophorone	88		88		40-140	0		30
Nitrobenzene	77		76		40-140	1		30
NDPA/DPA	83		86		40-140	4		30
n-Nitrosodi-n-propylamine	88		82		29-132	7		30
Bis(2-ethylhexyl)phthalate	84		88		40-140	5		30
Butyl benzyl phthalate	79		84		40-140	6		30
Di-n-butylphthalate	78		84		40-140	7		30
Di-n-octylphthalate	84		88		40-140	5		30
Diethyl phthalate	84		84		40-140	0		30
Dimethyl phthalate	81		80		40-140	1		30
Biphenyl	82		82		40-140	0		30
4-Chloroaniline	52		60		40-140	14		30
2-Nitroaniline	74		79		52-143	7		30
3-Nitroaniline	54		67		25-145	21		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1317936-2 WG1317936-3								
4-Nitroaniline	72		75		51-143	4		30
Dibenzofuran	78		77		40-140	1		30
1,2,4,5-Tetrachlorobenzene	79		76		2-134	4		30
Acetophenone	86		83		39-129	4		30
2,4,6-Trichlorophenol	76		76		30-130	0		30
p-Chloro-m-cresol	83		86		23-97	4		30
2-Chlorophenol	86		86		27-123	0		30
2,4-Dichlorophenol	92		87		30-130	6		30
2,4-Dimethylphenol	77		75		30-130	3		30
2-Nitrophenol	83		81		30-130	2		30
4-Nitrophenol	77		72		10-80	7		30
2,4-Dinitrophenol	74		75		20-130	1		30
4,6-Dinitro-o-cresol	82		79		20-164	4		30
Phenol	66		67		12-110	2		30
3-Methylphenol/4-Methylphenol	83		84		30-130	1		30
2,4,5-Trichlorophenol	80		76		30-130	5		30
Carbazole	80		83		55-144	4		30
Atrazine	96		92		40-140	4		30
Benzaldehyde	77		81		40-140	5		30
Caprolactam	44		44		10-130	0		30
2,3,4,6-Tetrachlorophenol	82		80		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1317936-2 WG1317936-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	76		78		21-120
Phenol-d6	66		65		10-120
Nitrobenzene-d5	64		61		23-120
2-Fluorobiphenyl	57		59		15-120
2,4,6-Tribromophenol	90		87		10-120
4-Terphenyl-d14	59		61		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-08 Batch: WG1317937-2 WG1317937-3								
Acenaphthene	76		81		40-140	6		40
2-Chloronaphthalene	71		77		40-140	8		40
Fluoranthene	92		96		40-140	4		40
Hexachlorobutadiene	69		76		40-140	10		40
Naphthalene	70		77		40-140	10		40
Benzo(a)anthracene	82		84		40-140	2		40
Benzo(a)pyrene	96		98		40-140	2		40
Benzo(b)fluoranthene	95		103		40-140	8		40
Benzo(k)fluoranthene	89		89		40-140	0		40
Chrysene	76		80		40-140	5		40
Acenaphthylene	71		76		40-140	7		40
Anthracene	81		86		40-140	6		40
Benzo(ghi)perylene	95		99		40-140	4		40
Fluorene	80		84		40-140	5		40
Phenanthrene	77		82		40-140	6		40
Dibenzo(a,h)anthracene	112		107		40-140	5		40
Indeno(1,2,3-cd)pyrene	101		104		40-140	3		40
Pyrene	93		98		40-140	5		40
2-Methylnaphthalene	72		79		40-140	9		40
Pentachlorophenol	105		117		40-140	11		40
Hexachlorobenzene	73		79		40-140	8		40
Hexachloroethane	71		76		40-140	7		40

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-08 Batch: WG1317937-2 WG1317937-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		80		21-120
Phenol-d6	66		72		10-120
Nitrobenzene-d5	74		80		23-120
2-Fluorobiphenyl	70		76		15-120
2,4,6-Tribromophenol	147	Q	153	Q	10-120
4-Terphenyl-d14	102		105		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1317936-4 WG1317936-5 QC Sample: L1957918-05 Client ID: MW-3												
Bis(2-chloroethyl)ether	ND	18.2	13	72		12	66		40-140	8		30
3,3'-Dichlorobenzidine	ND	18.2	3.8J	21	Q	5.3	29	Q	40-140	33	Q	30
2,4-Dinitrotoluene	ND	18.2	14	77		16	88		48-143	13		30
2,6-Dinitrotoluene	ND	18.2	15	83		15	83		40-140	0		30
4-Chlorophenyl phenyl ether	ND	18.2	13	72		14	77		40-140	7		30
4-Bromophenyl phenyl ether	ND	18.2	14	77		14	77		40-140	0		30
Bis(2-chloroisopropyl)ether	ND	18.2	12	66		12	66		40-140	0		30
Bis(2-chloroethoxy)methane	ND	18.2	14	77		13	72		40-140	7		30
Hexachlorocyclopentadiene	ND	18.2	11.J	61		12.J	66		40-140	9		30
Isophorone	ND	18.2	15	83		15	83		40-140	0		30
Nitrobenzene	ND	18.2	14	77		13	72		40-140	7		30
NDPA/DPA	ND	18.2	14	77		15	83		40-140	7		30
n-Nitrosodi-n-propylamine	ND	18.2	15	83		13	72		29-132	14		30
Bis(2-ethylhexyl)phthalate	ND	18.2	15	83		15	83		40-140	0		30
Butyl benzyl phthalate	ND	18.2	15	83		15	83		40-140	0		30
Di-n-butylphthalate	ND	18.2	14	77		14	77		40-140	0		30
Di-n-octylphthalate	ND	18.2	15	83		15	83		40-140	0		30
Diethyl phthalate	ND	18.2	14	77		15	83		40-140	7		30
Dimethyl phthalate	ND	18.2	14	77		15	83		40-140	7		30
Biphenyl	ND	18.2	14	77		14	77		40-140	0		30
4-Chloroaniline	ND	18.2	7.9	43		12	66		40-140	41	Q	30
2-Nitroaniline	ND	18.2	16	88		17	94		52-143	6		30
3-Nitroaniline	ND	18.2	8.9	49		9.3	51		25-145	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1317936-4 WG1317936-5 QC Sample: L1957918-05 Client ID: MW-3												
4-Nitroaniline	ND	18.2	12	66		13	72		51-143	8		30
Dibenzofuran	ND	18.2	14	77		14	77		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	13	72		13	72		2-134	0		30
Acetophenone	ND	18.2	15	83		14	77		39-129	7		30
2,4,6-Trichlorophenol	ND	18.2	14	77		15	83		30-130	7		30
p-Chloro-m-cresol	ND	18.2	16	88		16	88		23-97	0		30
2-Chlorophenol	ND	18.2	14	77		14	77		27-123	0		30
2,4-Dichlorophenol	ND	18.2	16	88		15	83		30-130	6		30
2,4-Dimethylphenol	ND	18.2	9.9	54		8.5	47		30-130	15		30
2-Nitrophenol	ND	18.2	14	77		13	72		30-130	7		30
4-Nitrophenol	ND	18.2	16	88	Q	17	94	Q	10-80	6		30
2,4-Dinitrophenol	ND	18.2	17.J	94		17.J	94		20-130	0		30
4,6-Dinitro-o-cresol	ND	18.2	15	83		16	88		20-164	6		30
Phenol	ND	18.2	13	72		11	61		12-110	17		30
3-Methylphenol/4-Methylphenol	ND	18.2	15	83		14	77		30-130	7		30
2,4,5-Trichlorophenol	ND	18.2	15	83		16	88		30-130	6		30
Carbazole	ND	18.2	14	77		14	77		55-144	0		30
Atrazine	ND	18.2	20	110		17	94		40-140	16		30
Benzaldehyde	ND	18.2	13	72		13	72		40-140	0		30
Caprolactam	ND	18.2	14	77		11	61		10-130	24		30
2,3,4,6-Tetrachlorophenol	ND	18.2	15	83		16	88		40-140	6		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** 229 HOMER ST**Lab Number:** L1957918**Project Number:** T0311-018-001**Report Date:** 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1317936-4 WG1317936-5 QC Sample: L1957918-05 Client ID: MW-3												

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	90		84		10-120
2-Fluorobiphenyl	56		57		15-120
2-Fluorophenol	77		67		21-120
4-Terphenyl-d14	56		58		41-149
Nitrobenzene-d5	59		56		23-120
Phenol-d6	68		57		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1957918

Report Date: 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1317937-4 WG1317937-5 QC Sample: L1957918-05 Client ID: MW-3												
Acenaphthene	0.04J	18.2	15	83		17	94		40-140	13		40
2-Chloronaphthalene	ND	18.2	14	77		15	83		40-140	7		40
Fluoranthene	0.03J	18.2	17	94		18	99		40-140	6		40
Hexachlorobutadiene	ND	18.2	13	72		14	77		40-140	7		40
Naphthalene	ND	18.2	14	77		16	88		40-140	13		40
Benzo(a)anthracene	0.03J	18.2	16	88		18	99		40-140	12		40
Benzo(a)pyrene	0.02J	18.2	19	100		21	120		40-140	10		40
Benzo(b)fluoranthene	0.02J	18.2	20	110		21	120		40-140	5		40
Benzo(k)fluoranthene	0.02J	18.2	18	99		18	99		40-140	0		40
Chrysene	0.02J	18.2	15	83		16	88		40-140	6		40
Acenaphthylene	ND	18.2	15	83		16	88		40-140	6		40
Anthracene	0.03J	18.2	16	88		18	99		40-140	12		40
Benzo(ghi)perylene	0.02J	18.2	18	99		20	110		40-140	11		40
Fluorene	0.10	18.2	16	88		17	94		40-140	6		40
Phenanthrene	0.03J	18.2	15	83		16	88		40-140	6		40
Dibenzo(a,h)anthracene	ND	18.2	20	110		22	120		40-140	10		40
Indeno(1,2,3-cd)pyrene	0.02J	18.2	21	120		23	130		40-140	9		40
Pyrene	0.03J	18.2	17	94		18	99		40-140	6		40
2-Methylnaphthalene	ND	18.2	15	83		16	88		40-140	6		40
Pentachlorophenol	0.17J	18.2	22	120		23	130		40-140	4		40
Hexachlorobenzene	ND	18.2	14	77		15	83		40-140	7		40
Hexachloroethane	ND	18.2	15	83		16	88		40-140	6		40

Matrix Spike Analysis**Batch Quality Control****Project Name:** 229 HOMER ST**Lab Number:** L1957918**Project Number:** T0311-018-001**Report Date:** 12/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1317937-4 WG1317937-5 QC Sample: L1957918-05
 Client ID: MW-3

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	118		126	Q	10-120
2-Fluorobiphenyl	76		81		15-120
2-Fluorophenol	89		92		21-120
4-Terphenyl-d14	97		101		41-149
Nitrobenzene-d5	91		100		23-120
Phenol-d6	86		83		10-120

Project Name: 229 HOMER ST**Lab Number:** L1957918**Project Number:** T0311-018-001**Report Date:** 12/11/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1957918-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-01D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-01E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-02D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-02E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-03A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-03B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-03C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-03D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-03E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-04A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-04B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-04C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-04D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-04E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-05A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-05A1	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-05B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Serial_No:12111912:35
Lab Number: L1957918
Report Date: 12/11/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1957918-05B1	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-05C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-05C1	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-05D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-05D1	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-05D2	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-05D3	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-06A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-06B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-06C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-06D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-06E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-07A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-07B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-07C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-07D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-07E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-08A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-08B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-08C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-08D	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-08E	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1957918-09A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1957918-09B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

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

Terms

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

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Data Qualifiers

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 15

Department: **Quality Assurance**

Published Date: 8/15/2019 9:53:42 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,


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

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 12/5/19		ALPHA Job # L1957918																																																																																																																																																																													
		Project Information Project Name: <u>229 HOMER ST</u> Project Location: <u>CLARK, NY</u> Project # <u>T0311-018-001</u> (Use Project name as Project #) <input type="checkbox"/> Project Manager: <u>MIKE LESAKOWSKI</u> ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #																																																																																																																																																																															
Client Information Client: <u>TURNKEY FOUNDATION</u> Address: <u>2558 HAMBURG TRL</u> <u>BFLD, NY 14015</u> Phone: <u>(716) 856-0635</u> Fax: Email: <u>C.Deubell@bm-ny.com</u>		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																																																	
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Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th colspan="10">ANALYSIS</th> <th rowspan="2">Sample Specific Comments</th> <th rowspan="2">Total Bottles</th> </tr> <tr> <th>Date</th> <th>Time</th> <th>TEL VOCs (mg)</th> <th>TEL SVOCs (mg)</th> <th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th> </tr> </thead> <tbody> <tr> <td>57918-01</td> <td>MW-2</td> <td>12-3-19</td> <td>1045</td> <td>GW</td> <td>CFD</td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-02</td> <td>MW-5</td> <td>12-3-19</td> <td>1215</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-03</td> <td>MW-4</td> <td>12-3-19</td> <td>1330</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-04</td> <td>MW-6</td> <td>12-3-19</td> <td>1500</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-05</td> <td>MW-3</td> <td>12-4-19</td> <td>1030</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-06</td> <td>MW-7</td> <td>12-4-19</td> <td>1230</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-07</td> <td>MW-1</td> <td>12-4-19</td> <td>1330</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>-08</td> <td>BLIND Dup</td> <td>12-3-19</td> <td>1245</td> <td></td> <td></td> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS										Sample Specific Comments	Total Bottles	Date	Time	TEL VOCs (mg)	TEL SVOCs (mg)											57918-01	MW-2	12-3-19	1045	GW	CFD	X	X											-02	MW-5	12-3-19	1215			X	X											-03	MW-4	12-3-19	1330			X	X											-04	MW-6	12-3-19	1500			X	X											-05	MW-3	12-4-19	1030			X	X											-06	MW-7	12-4-19	1230			X	X											-07	MW-1	12-4-19	1330			X	X											-08	BLIND Dup	12-3-19	1245			X	X											* MS/MSD	
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																																													
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <u>[Signature]</u> <u>Rudney Tilly #16</u>		Date/Time <u>12/4/19 1545</u> <u>12/4/19 16:00</u>		Received By: <u>[Signature]</u> <u>Rudney Tilly #16</u>		Date/Time <u>12/4/19 15:45</u> <u>12/4/19 16:40</u>																																																																																																																																																																													

Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, NY 12853

Phone (518) 251-4429

harry@frontiernet.net

March 5, 2020; Revised May 20, 2020

Charlotte Clark
Turnkey Environmental Restoration
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: Validation of the 229 Homer Street Site Analytical Laboratory Data
Alpha Analytical SDG Nos. L1929034 and L1957918
Data Usability Summary Report (DUSR)

Dear Ms. Clark:

Review has been completed for the data packages generated by Alpha Analytical that pertain to samples collected between 07/01/19 and 12/04/19 the 229 Homer Street site. Seven aqueous samples and a field duplicate in each of two sampling events were processed for TCL volatiles and TCL semivolatiles and Tentatively Identified Compounds (TICs). Analytical methodologies utilized are USEPA SW846.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

- * Data Completeness
- * Case Narrative
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Method/ Preparation Blanks
- * Matrix Spike Recoveries/Duplicate Correlations
- * Blind Field Duplicate Correlations
- * Laboratory Control Sample (LCS)
- * Instrumental Tunes
- * Initial and Continuing Calibration Standards
- * Method Compliance
- * Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

In summary, results for the samples are usable either as reported or with minor qualification or Edit, with the exception of those for 1,4-dioxane. The results for 1,4-dioxane are rejected due to poor responses inherent in the methodology.

Data completeness, representativeness, reproducibility, sensitivity, comparability, and accuracy and precision are acceptable.

Validation qualifier definitions and the client sample identification summaries are attached to this text. Also submitted are Alpha EQuIS EDDs with recommended qualifiers/edits applied in red.

Blind Field Duplicate Correlations

The field duplicate evaluations were performed on MW-1 (July) and MW-5 (December), and show correlations within validation guidelines.

TCL Volatile Analyses by EPA 8260C

The detected results for acetone in samples collected in December are considered external contamination and edited to reflect non-detection due to presence in the associated trip blank. No trip blank was processed with the samples collected in July.

Matrix spikes of MW-1 (July) and MW-3 (December) are within validation guidelines, with the following exceptions, results for which are qualified as estimated in the indicated parent sample:

<u>Parent Sample</u>	<u>Analyte</u>	<u>Outlying % Recoveries</u>	<u>Outlying %RPD</u>
MW-1 (July)	bromomethane	21,32	42
	acetone	20	30

Results for 1,4-dioxane in the samples and trip blank are rejected due to low responses in the calibration standards. Other calibration standard responses meet validation guidelines, with the exception of the following, results for which have been qualified as estimated in the indicated associated samples:

- Bromomethane (43%D) in samples reported in SDG L1929034
- Bromomethane, dichlorodifluoromethane, and vinyl chloride (23%D to 56%D) in the samples reported in SDG L1957918

Holding times were met. Surrogate and internal standard responses are acceptable.

A trip blank that was received and processed in December had not been entered onto the custody form.

TCL Semivolatile Analyses by EPA 8270D

The detected results for bis(2-ethylhexyl)phthalate in the samples collected in July are considered external contamination and edited to reflect non-detection due to presence in the associated method blank.

The method blanks also show numerous low level detections of PAHs that are also present in the associated samples. Those associated sample detections are considered external contamination and edited to reflect non-detection. All sample PAH detections for nine analytes in the December event except one value are considered external contamination due to the method blank. The laboratory should have flagged the affected results for the samples collected in December as “B”.

Holding times were met. Surrogate and internal standard responses are acceptable.

Matrix spikes of MW-1 (July) and MW-3 (December) are within validation guidelines, with the following exceptions, results for which are qualified as estimated in the indicated parent samples:

<u>Parent Sample</u>	<u>Analyte</u>	<u>Outlying % Recoveries</u>	<u>Outlying %RPD</u>
MW-1(July)	3,3'-dichlorobenzidine	38	35
	2,4-dimethylphenol	29	39
MW-3 (Dec)	3,3'-dichlorobenzidine	21,29	33

Results for 4-nitrophenol in the samples MW-1, MW-4, MW-5, MW-7, and BLIND DUP (all collected in July) have been qualified as estimated due to low recovery in the associated LCS.

Calibration standard responses meet validation guidelines, with the exception of the following, results for which have been qualified as estimated in the indicated associated samples: 2,4-dimethylphenol (42%D) in MW-2, MW-4, MW-5, and MW-6.

Holding times were met. Surrogate and internal standard responses are acceptable.

Results for TICs that are identified as aldol condensates are extraction artifacts and have been removed from consideration as sample components. Several additional TICs that were also detected in associated method blanks have been similarly edited. Those detections should have been flagged as “B” by the laboratory.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

Attachments: Validation Qualifier Definitions
 Sample Identifications
 Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Summaries

Project Name: HOMER ST. REDEVELOPMENT
Project Number: 0311-018-001

Lab Number: L1929034
Report Date: 07/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1929034-01	MW-4	WATER	229 HOMER ST., OLEAN, NY	07/01/19 10:50	07/02/19
L1929034-02	MW-1	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:20	07/02/19
L1929034-03	MW-5	WATER	229 HOMER ST., OLEAN, NY	07/01/19 14:30	07/02/19
L1929034-04	MW-7	WATER	229 HOMER ST., OLEAN, NY	07/01/19 15:45	07/02/19
L1929034-05	MW-2	WATER	229 HOMER ST., OLEAN, NY	07/02/19 10:00	07/02/19
L1929034-06	MW-6	WATER	229 HOMER ST., OLEAN, NY	07/02/19 12:00	07/02/19
L1929034-07	MW-3	WATER	229 HOMER ST., OLEAN, NY	07/02/19 13:45	07/02/19
L1929034-08	BLIND DUP	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:30	07/02/19
L1929034-09	TRIP-BLANK	WATER	229 HOMER ST., OLEAN, NY	07/01/19 13:30	07/02/19

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1957918
Report Date: 12/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1957918-01	MW-2	WATER	OLEAN, NY	12/03/19 10:45	12/04/19
L1957918-02	MW-5	WATER	OLEAN, NY	12/03/19 12:15	12/04/19
L1957918-03	MW-4	WATER	OLEAN, NY	12/03/19 13:30	12/04/19
L1957918-04	MW-6	WATER	OLEAN, NY	12/03/19 15:00	12/04/19
L1957918-05	MW-3	WATER	OLEAN, NY	12/04/19 10:30	12/04/19
L1957918-06	MW-7	WATER	OLEAN, NY	12/04/19 12:30	12/04/19
L1957918-07	MW-1	WATER	OLEAN, NY	12/04/19 13:30	12/04/19
L1957918-08	BLIND DUP	WATER	OLEAN, NY	12/03/19 12:45	12/04/19
L1957918-09	TRIP BLANK	WATER	OLEAN, NY	12/03/19 00:00	12/04/19

APPENDIX D

AS / SVE OM&M DOCUMENTATION

APPENDIX D1

SVE PERIODIC INSPECTION LOG



Table 1 - Summary of SVE System VOC Mass Removal
Site Management Plan
229 Homer Street Site
NYSDEC BCP Site No. C905044
Olean, New York

Date	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Flow Rate		Volume of Air Processed Since Previous Reading		Rate of VOC Removal		VOCs Removed Since Last Monitoring Period		Total VOC Removal to Date		Notes
						(ACFM)	(SCFM)	(CF)	(m ³)	(kg/day)	(lb/day)	(kg)	(lb)	(kg)	(lb)	
09/13/18	0.0	86	1.4	1237	52.0	490	401	0	0.00E+00	0.0	0.0	0.0	0.0	0.0	0	
09/13/18	0	105	28	1511	52.0	490	401	0	0.00E+00	0.0	0.0	0.0	0.0	0.0	0	
09/13/18	0	119	35	1712	51.0	495	405	8095	2.29E+02	28.3	62.3	0.2	0.4	0.2	0	
09/13/18	0	118	122	1698	51.0	495	405	8095	2.29E+02	28.0	61.8	0.4	0.9	0.6	1	
09/13/18	0	175	146	2518	52.0	490	401	10017	2.84E+02	41.1	90.7	0.6	1.3	1.2	3	
09/13/18	0	180	65	2590	50.0	500	409	6133	1.74E+02	43.2	95.2	0.4	1.0	1.6	4	
09/13/18	0	182	25	2619	52.0	490	401	24041	6.81E+02	42.8	94.3	1.8	3.9	3.4	8	
09/13/18	0	192	11	2762	52.0	490	401	12020	3.40E+02	45.1	99.5	0.9	2.0	4.3	10	
09/13/18	0	185	13	2662	52.0	490	401	10017	2.84E+02	43.5	95.9	0.8	1.7	5.1	11	
09/13/18	0	215	14	3093	52.0	490	401	14024	3.97E+02	50.5	111.4	1.1	2.5	6.2	14	
09/13/18	0	209	17	3007	51.0	495	405	20238	5.73E+02	49.6	109.4	1.7	3.8	8.0	18	
09/14/18	1	294	69	4230	50.0	500	409	433384	1.23E+04	70.5	155.5	44.2	97.5	52.2	115	
09/14/18	1	350	17	5036	48.0	510	417	25022	7.09E+02	85.6	188.8	3.3	7.2	55.5	122	
09/14/18	1	312	9	4489	51.0	495	405	16191	4.58E+02	74.1	163.4	2.2	4.9	57.7	127	
09/14/18	1	347	28	4993	51.0	495	405	16191	4.58E+02	82.4	181.7	2.2	4.8	59.9	132	
09/14/18	1	236	15	3396	50.0	500	409	53151	1.51E+03	56.6	124.8	6.3	13.8	66.1	146	
09/14/18	1	352	11	5064	49.0	505	413	12388	3.51E+02	85.3	188.0	1.5	3.3	67.6	149	
09/14/18	1	374	17	5381	50.0	500	409	12266	3.47E+02	89.7	197.8	1.8	4.0	69.4	153	
09/14/18	1	351	18	5050	49.0	505	413	12388	3.51E+02	85.0	187.5	1.8	4.0	71.2	157	
09/17/18	4	401	14	5769	49.0	505	413	1668282	4.72E+04	97.1	214.2	255.6	563.5	326.8	721	
09/17/18	4	382	13	5496	50.0	500	409	28620	8.10E+02	91.6	202.0	4.6	10.1	331.4	731	
09/17/18	4	356	23	5122	49.0	505	413	24776	7.02E+02	86.2	190.2	3.7	8.2	335.1	739	
09/17/18	4	400	37	5755	48.0	510	417	25022	7.09E+02	97.9	215.8	3.8	8.5	338.9	747	
09/17/18	4	388	21	5582	49.0	505	413	37165	1.05E+03	94.0	207.3	6.0	13.2	344.9	761	
09/18/18	5	389	11	5597	50.0	500	409	453826	1.29E+04	93.3	205.7	72.2	159.2	417.1	920	
09/18/18	5	380	14	5467	49.0	505	413	86718	2.46E+03	92.1	203.0	13.5	29.8	430.6	950	
09/18/18	5	400	21	5755	50.0	500	409	24531	6.95E+02	95.9	211.6	3.9	8.6	434.6	958	
09/18/18	5	384	14	5525	50.0	500	409	12286	3.47E+02	92.1	203.1	2.0	4.3	436.5	963	
09/18/18	5	392	18	5640	50.0	500	409	12266	3.47E+02	94.0	207.3	1.9	4.3	438.5	967	
09/20/18	7	450	17	6474	50.0	500	409	1018043	2.88E+04	107.9	238.0	174.6	385.0	613.1	1,352	
09/20/18	7	575	20	8273	38.0	560	458	162560	4.60E+03	154.5	340.6	32.3	71.3	645.4	1,423	
09/20/18	7	517	19	7438	40.0	550	450	13492	3.82E+02	136.4	300.8	3.0	6.7	648.4	1,430	
09/21/18	8	326	21	4695	42.0	540	442	505587	1.43E+04	84.5	186.4	87.8	193.7	736.3	1,624	
10/01/18	18	450	3.9	6474	51.0	495	405	5816459	1.65E+05	106.9	235.6	955.0	2105.8	1691.3	3,729	
10/01/18	18	360	14	5180	49.0	505	413	148659	4.21E+03	87.2	192.3	24.3	53.5	1715.5	3,783	
10/02/18	19	337	8	4849	50.0	500	409	466092	1.32E+04	80.8	178.2	66.5	146.7	1782.1	3,929	
10/02/18	19	177	3	2547	52.0	490	401	120203	3.40E+03	41.6	91.7	12.8	28.1	1794.8	3,958	
10/03/18	20	198	4	2849	52.0	490	401	384648	1.09E+04	46.5	102.6	29.4	64.8	1824.2	4,022	
10/10/18	27	165	NM	2374	52.0	490	401	4110931	1.16E+05	38.8	85.5	304.0	670.3	2128.2	4,693	
10/11/18	28	173	4	2489	52.0	490	401	534902	1.51E+04	40.7	89.7	36.8	81.2	2165.0	4,774	
10/11/18	28	152	4	2187	45.0	525	429	64394	1.82E+03	38.3	84.4	4.1	9.1	2169.1	4,783	Remove water blockage in vapor piping from SVE wells SVE-6, 10, 12 and -14
10/11/18	28	124	3	1784	46.0	520	425	19134	5.42E+02	30.9	68.2	1.1	2.4	2170.2	4,785	
10/16/18	33	116	NM	1669	46.0	520	425	3112513	8.81E+04	28.9	63.8	152.2	335.5	2322.4	5,121	
10/24/18	41	137	ND	1971	54.0	480	392	4403832	1.25E+05	31.5	69.6	235.6	519.6	2558.0	5,640	Measure PID on individual SVE wells
10/24/18	41	199	ND	2863	47.0	515	421	44217	1.25E+03	49.2	108.4	2.9	6.5	2561.0	5,647	Turn off wells 1, 2, 11 & 14
10/24/18	41	119	ND	1712	49.0	505	413	18582	5.26E+02	28.8	63.6	1.2	2.7	2562.2	5,650	Air sparge on, 1 hour each Zones 1 and 2
10/24/18	41	197	ND	2834	49.0	505	413	37165	1.05E+03	47.7	105.2	2.4	5.3	2564.6	5,655	Shut sparge off at 12:30
10/24/18	41	185	ND	2662	51.0	495	405	24286	6.88E+02	43.9	96.9	1.9	4.2	2566.5	5,659	Adjust sparge to 15 minutes all wells per day
11/06/18	54	56.5	1	813	53.0	485	397	7340825	2.08E+05	13.1	29.0	366.8	808.9	2933.3	6,468	
11/07/18	55	47	0	676	53.0	485	397	547290	1.55E+04	10.9	24.1	11.5	25.4	2944.9	6,493	
11/07/18	55	68	0	978	50.0	500	409	134921	3.82E+03	16.3	36.0	3.1	6.9	2948.0	6,500	
11/14/18	62	68	0	978	50.0	500	409	3961781	1.12E+05	16.3	36.0	109.8	242.0	3057.7	6,742	System shut down due to freezing temperatures
11/15/18	62	68	0	978	50.0	500	409	0	0.00E+00	0.0	0.0	0.0	0.0	3057.7	6,742	Restart system
11/21/18	68	68	0	978	50.0	500	409	3630611	1.03E+05	16.3	36.0	50.3	110.9	3108.0	6,853	System shut down due to freezing temperatures
11/24/18	68	68	0	978	50.0	500	409	0	0.00E+00	0.0	0.0	0.0	0.0	3108.0	6,853	Restart system
11/30/18	74	39	0	561	53.0	485	397	3343228	9.47E+04	9.1	20.0	26.6	58.6	3134.6	6,912	
12/04/18	78	34	0	489	33.0	585	478	2855794	8.09E+04	9.5	21.0	38.6	85.1	3173.2	6,997	
12/11/18	85	10	0	144	36.0	570	466	4586344	1.30E+05	2.7	6.0	41.9	92.5	3215.1	7,089	
12/11/18	85	24	0	347	53.0	485	397	154669	4.38E+03	5.6	12.4	1.1	2.5	3216.3	7,092	
12/17/18	91	35	0	501	53.0	485	397	3343228	9.47E+04	8.1	17.9	40.1	88.4	3256.4	7,180	
12/24/18	98	21	0	302	55.0	475	388	3833606	1.09E+05	4.8	10.6	44.1	97.3	3300.5	7,278	System shut down due to freezing temperatures
04/24/19	98	21	0	302	40.0	550	450	0	0.00E+00	0.0	0.0	0.0	0.0	3300.5	7,278	Sparge off
04/24/19	98	21	0	304	45.0	525	429	83713	2.37E+03	5.3	11.7	0.4	0.8	3300.9	7,278	
04/26/19	100	37	0	527	50.0	500	409	1060972	3.00E+04	8.8	19.4	12.7	28.0	3313.6	7,306	
05/06/19	110	28	0	397	52.0	490	401	5871899	1.66E+05	6.5	14.3	77.7	171.3	3391.3	7,478	



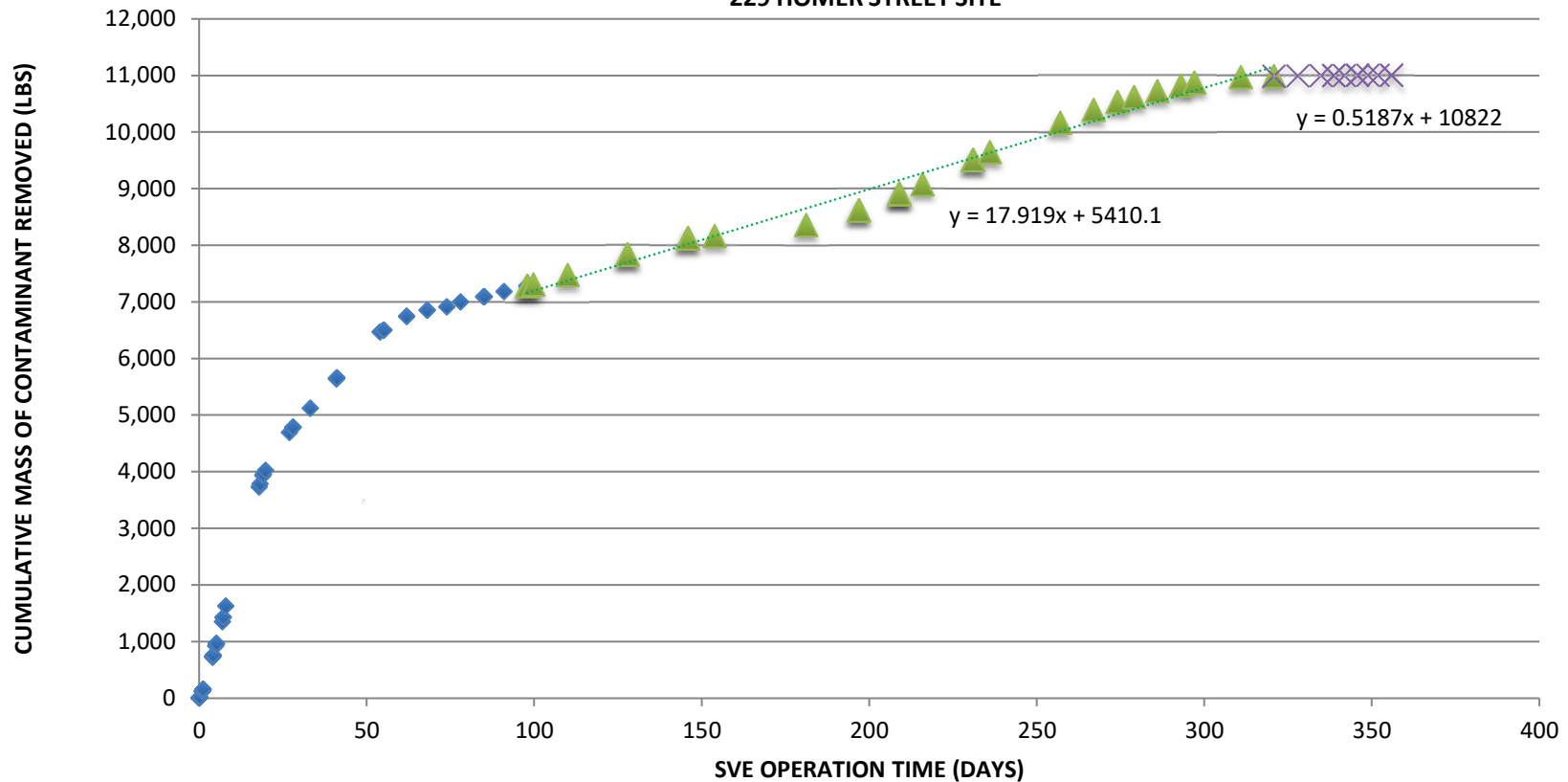
Table 1 - Summary of SVE System VOC Mass Removal
Site Management Plan
229 Homer Street Site
NYSDEC BCP Site No. C905044
Olean, New York

Date	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Flow Rate		Volume of Air Processed Since Previous Reading		Rate of VOC Removal		VOCs Removed Since Last Monitoring Period		Total VOC Removal to Date		Notes
						(ACFM)	(SCFM)	(CF)	(m ³)	(kg/day)	(lb/day)	(kg)	(lb)	(kg)	(lb)	
05/24/19	128	52	0	751	56.0	470	384	9863608	2.79E+05	11.8	26.0	162.7	358.8	3554.0	7,836	
05/24/19	128	49	0	708	54.0	480	392	74575	2.11E+03	11.3	25.0	1.5	3.4	3555.5	7,840	
06/11/19	146	14	0	196	58.0	460	376	9689478	2.74E+05	3.0	6.6	128.2	282.6	3683.7	8,122	
06/11/19	146	14	0	201	54.0	480	392	100087	2.83E+03	3.2	7.1	0.6	1.2	3684.2	8,124	
06/19/19	154	5	0	71	57.0	465	380	4317544	1.22E+05	1.1	2.4	17.0	37.5	3701.2	8,161	
07/16/19	181	24	0	341	56.0	470	384	15092301	4.27E+05	5.3	11.8	87.8	193.5	3789.0	8,355	
08/01/19	197	44	0	626	56.0	470	384	8704879	2.46E+05	9.8	21.6	119.2	262.8	3908.2	8,618	
08/01/19	197	54	0	773	46.0	520	425	38269	1.08E+03	13.4	29.5	0.7	1.6	3908.9	8,619	
08/13/19	209	32	0	456	41.0	545	446	7640657	2.16E+05	8.3	18.3	129.1	284.6	4038.0	8,904	
08/13/19	209	33	0	478	37.0	565	462	76231	2.16E+03	9.0	19.8	1.0	2.2	4039.0	8,906	
08/13/19	209	41	0	588	39.0	555	454	61267	1.73E+03	10.9	24.0	0.9	2.1	4039.9	8,908	
08/20/19	216	48	0	692	51.0	495	405	3964664	1.12E+05	11.4	25.2	75.9	167.3	4115.8	9,075	
09/04/19	231	62	0	888	52.0	490	401	8654591	2.45E+05	14.5	32.0	194.4	428.7	4310.2	9,504	
09/04/19	231	51	0	738	42.0	540	442	105975	3.00E+03	13.3	29.3	2.3	5.1	4312.5	9,509	
09/09/19	236	46	0.4	662	42.0	540	442	3165991	8.97E+04	11.9	26.3	62.8	138.4	4375.3	9,648	
09/30/19	257	44	0.8	633	51.0	495	405	12264350	3.47E+05	10.4	23.0	235.3	518.8	4610.6	10,166	
10/10/19	267	43	0.6	617	50.0	500	409	5862945	1.66E+05	10.3	22.7	103.3	227.7	4713.9	10,394	
10/17/19	274	32	0.7	458	50.0	500	409	4170296	1.18E+05	7.6	16.8	63.5	139.9	4777.3	10,534	System shut down on 10-22-19
11/07/19	279	33	0.3	469	51.0	495	405	2865729	8.11E+04	7.7	17.1	37.8	83.3	4815.1	10,617	System restarted, sparge off
11/14/19	286	25	0.1	355	50.0	500	409	4121234	1.17E+05	5.9	13.1	47.8	105.5	4862.9	10,723	
11/21/19	293	28.5	0.1	410	50.0	500	409	4121234	1.17E+05	6.8	15.1	44.7	98.5	4907.6	10,821	
11/25/19	297	22	0	311	50.0	500	409	2354991	6.67E+04	5.2	11.4	24.0	53.0	4931.6	10,874	
12/09/19	311	5.2	0	75	52.0	490	401	8053577	2.28E+05	1.2	2.7	44.7	98.5	4976.3	10,973	
12/19/19	321	0.8	0	12	56.0	470	384	5441991	1.54E+05	0.2	0.4	6.9	15.2	4983.2	10,988	System off for the winter
03/23/20	321	2.6	0	7	54.0	480	392	23550	6.67E+02	0.1	0.3	0.0	0.0	4983.2	10,988	Sparge off
03/30/20	328	6.9	0	19	55.0	475	388	3938477	1.12E+05	0.3	0.7	1.5	3.3	4984.7	10,991	
04/06/20	335	6.0	0	17	56.0	470	384	3873960	1.10E+05	0.3	0.6	2.0	4.4	4986.7	10,996	
04/10/20	339	6.9	0.2	19	56.0	470	384	2075335	5.88E+04	0.3	0.7	1.1	2.3	4987.7	10,998	
04/10/20	339	7.4	0.1	21	52.0	490	401	48081	1.36E+03	0.3	0.7	0.0	0.1	4987.8	10,998	
04/13/20	342	5.1	0	14	55.0	475	388	1747845	4.95E+04	0.2	0.5	0.9	1.9	4988.6	11,000	
04/17/20	346	3.8	0.1	11	55.0	475	388	2120718	6.01E+04	0.2	0.4	0.7	1.6	4989.4	11,002	
04/17/20	346	4.2	0.1	12	46.0	520	425	127562	3.61E+03	0.2	0.4	0.0	0.1	4989.4	11,002	
04/20/20	349	5.8	0.1	16	55.0	475	388	1701235	4.82E+04	0.3	0.6	0.7	1.5	4990.1	11,003	
04/23/20	352	3.1	0	9	53.0	485	397	1713256	4.85E+04	0.1	0.3	0.6	1.3	4990.7	11,004	
04/27/20	356	3.4	0	9	53.0	485	397	2260546	6.40E+04	0.2	0.3	0.6	1.3	4991.3	11,006	
04/27/20	356	4.2	0	12	53.0	485	397	23795	6.74E+02	0.2	0.4	0.0	0.0	4991.3	11,006	

Notes:

1. The estimated mass of contamination is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading.
2. The ratio for 2018 and 2019 is 14.39 milligrams per cubic meter for each 1 part per million on the PID.
3. The ratio for 2020 is 2.78 milligrams per cubic meter for each 1 part per million on the PID.

CHART 1
CUMULATIVE MASS REMOVAL VERSUS TIME
SVE/AS SYSTEM
229 HOMER STREET SITE



Note: Mass removal is based on a correlation of PID readings and vapor sample analysis for petroleum hydrocarbons in influent air.

- ◆ 2018
- ▲ 2019
- × 2020
- Linear (2019)
- Linear (2020)

APPENDIX D2

SVE ANALYTICAL DATA



ANALYTICAL REPORT

Lab Number:	L1836968
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Ray Laport
Phone:	(716) 856-0599
Project Name:	229 HOMER ST
Project Number:	T0311-018-001
Report Date:	09/27/18

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1836968-01	INITIAL SOIL VAPOR SAMPLE	SOIL_VAPOR	OLEAN, NY	09/13/18 13:48	09/17/18

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

Case Narrative (continued)

Report Submission

This report replaces the one previously issued on September 24, 2018. The report has been revised to add data for APH at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on August 30, 2018. The canister certification results are provided as an addendum.

L1836968-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Petroleum Hydrocarbons in Air

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 09/27/18

AIR

Project Name: 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L1836968**Report Date:** 09/27/18**SAMPLE RESULTS**

Lab ID: L1836968-01 D
 Client ID: INITIAL SOIL VAPOR SAMPLE
 Sample Location: OLEAN, NY

Date Collected: 09/13/18 13:48
 Date Received: 09/17/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 09/22/18 03:57
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	200.	--	ND	989	--		1000
Chloromethane	ND	200.	--	ND	413	--		1000
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	200.	--	ND	1400	--		1000
Vinyl chloride	ND	200.	--	ND	511	--		1000
1,3-Butadiene	ND	200.	--	ND	442	--		1000
Bromomethane	ND	200.	--	ND	777	--		1000
Chloroethane	ND	200.	--	ND	528	--		1000
Ethyl Alcohol	ND	5000	--	ND	9420	--		1000
Vinyl bromide	ND	200.	--	ND	874	--		1000
Acetone	ND	1000	--	ND	2380	--		1000
Trichlorofluoromethane	ND	200.	--	ND	1120	--		1000
iso-Propyl Alcohol	ND	500	--	ND	1230	--		1000
1,1-Dichloroethene	ND	200.	--	ND	793	--		1000
tert-Butyl Alcohol	ND	500.	--	ND	1520	--		1000
Methylene chloride	ND	500.	--	ND	1740	--		1000
3-Chloropropene	ND	200.	--	ND	626	--		1000
Carbon disulfide	ND	200.	--	ND	623	--		1000
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200.	--	ND	1530	--		1000
trans-1,2-Dichloroethene	ND	200.	--	ND	793	--		1000
1,1-Dichloroethane	ND	200.	--	ND	809	--		1000
Methyl tert butyl ether	ND	200.	--	ND	721	--		1000
2-Butanone	ND	500.	--	ND	1470	--		1000
cis-1,2-Dichloroethene	ND	200.	--	ND	793	--		1000



Project Name: 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L1836968**Report Date:** 09/27/18**SAMPLE RESULTS**

Lab ID: L1836968-01 D
 Client ID: INITIAL SOIL VAPOR SAMPLE
 Sample Location: OLEAN, NY

Date Collected: 09/13/18 13:48
 Date Received: 09/17/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	500.	--	ND	1800	--		1000
Chloroform	ND	200.	--	ND	977	--		1000
Tetrahydrofuran	ND	500	--	ND	1470	--		1000
1,2-Dichloroethane	ND	200.	--	ND	809	--		1000
n-Hexane	ND	200.	--	ND	705	--		1000
1,1,1-Trichloroethane	ND	200.	--	ND	1090	--		1000
Benzene	ND	200.	--	ND	639	--		1000
Carbon tetrachloride	ND	200.	--	ND	1260	--		1000
Cyclohexane	16400	200	--	56500	688	--		1000
1,2-Dichloropropane	ND	200.	--	ND	924	--		1000
Bromodichloromethane	ND	200.	--	ND	1340	--		1000
1,4-Dioxane	ND	200.	--	ND	721	--		1000
Trichloroethene	ND	200.	--	ND	1070	--		1000
2,2,4-Trimethylpentane	ND	200.	--	ND	934	--		1000
Heptane	ND	200.	--	ND	820	--		1000
cis-1,3-Dichloropropene	ND	200.	--	ND	908	--		1000
4-Methyl-2-pentanone	ND	500.	--	ND	2050	--		1000
trans-1,3-Dichloropropene	ND	200.	--	ND	908	--		1000
1,1,2-Trichloroethane	ND	200.	--	ND	1090	--		1000
Toluene	ND	200.	--	ND	754	--		1000
2-Hexanone	ND	200.	--	ND	820	--		1000
Dibromochloromethane	ND	200.	--	ND	1700	--		1000
1,2-Dibromoethane	ND	200.	--	ND	1540	--		1000
Tetrachloroethene	ND	200.	--	ND	1360	--		1000
Chlorobenzene	ND	200.	--	ND	921	--		1000
Ethylbenzene	ND	200.	--	ND	869	--		1000



Project Name: 229 HOMER ST**Lab Number:** L1836968**Project Number:** T0311-018-001**Report Date:** 09/27/18**SAMPLE RESULTS**

Lab ID: L1836968-01 D
 Client ID: INITIAL SOIL VAPOR SAMPLE
 Sample Location: OLEAN, NY

Date Collected: 09/13/18 13:48
 Date Received: 09/17/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	400.	--	ND	1740	--		1000
Bromoform	ND	200.	--	ND	2070	--		1000
Styrene	ND	200.	--	ND	852	--		1000
1,1,2,2-Tetrachloroethane	ND	200.	--	ND	1370	--		1000
o-Xylene	ND	200.	--	ND	869	--		1000
4-Ethyltoluene	ND	200.	--	ND	983	--		1000
1,3,5-Trimethylbenzene	ND	200.	--	ND	983	--		1000
1,2,4-Trimethylbenzene	ND	200.	--	ND	983	--		1000
Benzyl chloride	ND	200.	--	ND	1040	--		1000
1,3-Dichlorobenzene	ND	200.	--	ND	1200	--		1000
1,4-Dichlorobenzene	ND	200.	--	ND	1200	--		1000
1,2-Dichlorobenzene	ND	200.	--	ND	1200	--		1000
1,2,4-Trichlorobenzene	ND	200.	--	ND	1480	--		1000
Hexachlorobutadiene	ND	200.	--	ND	2130	--		1000

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	96		60-140



Project Name: 229 HOMER ST

Lab Number: L1836968

Project Number: T0311-018-001

Report Date: 09/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/21/18 18:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1159536-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1



Project Name: 229 HOMER ST

Lab Number: L1836968

Project Number: T0311-018-001

Report Date: 09/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/21/18 18:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1159536-4								
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1



Project Name: 229 HOMER ST

Lab Number: L1836968

Project Number: T0311-018-001

Report Date: 09/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/21/18 18:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1159536-4								
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1



Project Name: 229 HOMER ST

Lab Number: L1836968

Project Number: T0311-018-001

Report Date: 09/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/21/18 18:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1159536-4								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159536-3								
Chlorodifluoromethane	75		-		70-130	-		
Propylene	79		-		70-130	-		
Propane	71		-		70-130	-		
Dichlorodifluoromethane	77		-		70-130	-		
Chloromethane	72		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	84		-		70-130	-		
Vinyl chloride	81		-		70-130	-		
1,3-Butadiene	90		-		70-130	-		
Bromomethane	80		-		70-130	-		
Chloroethane	76		-		70-130	-		
Ethyl Alcohol	73		-		70-130	-		
Vinyl bromide	77		-		70-130	-		
Acrolein	78		-		70-130	-		
Acetone	72		-		70-130	-		
Acetonitrile	70		-		70-130	-		
Trichlorofluoromethane	71		-		70-130	-		
iso-Propyl Alcohol	71		-		70-130	-		
Acrylonitrile	77		-		70-130	-		
Pentane	78		-		70-130	-		
1,1-Dichloroethene	81		-		70-130	-		
tert-Butyl Alcohol	79		-		70-130	-		
Methylene chloride	75		-		70-130	-		
3-Chloropropene	80		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159536-3								
Carbon disulfide	76		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	78		-		70-130	-		
trans-1,2-Dichloroethene	80		-		70-130	-		
1,1-Dichloroethane	78		-		70-130	-		
Methyl tert butyl ether	72		-		70-130	-		
Vinyl acetate	75		-		70-130	-		
2-Butanone	70		-		70-130	-		
cis-1,2-Dichloroethene	95		-		70-130	-		
Ethyl Acetate	77		-		70-130	-		
Chloroform	83		-		70-130	-		
Tetrahydrofuran	72		-		70-130	-		
2,2-Dichloropropane	75		-		70-130	-		
1,2-Dichloroethane	74		-		70-130	-		
n-Hexane	111		-		70-130	-		
Isopropyl Ether	92		-		70-130	-		
Ethyl-Tert-Butyl-Ether	88		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
1,1-Dichloropropene	99		-		70-130	-		
Benzene	102		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	102		-		70-130	-		
Tertiary-Amyl Methyl Ether	94		-		70-130	-		
Dibromomethane	92		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159536-3								
1,2-Dichloropropane	95		-		70-130	-		
Bromodichloromethane	106		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Methyl Methacrylate	86		-		70-130	-		
Heptane	101		-		70-130	-		
cis-1,3-Dichloropropene	110		-		70-130	-		
4-Methyl-2-pentanone	101		-		70-130	-		
trans-1,3-Dichloropropene	96		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	90		-		70-130	-		
1,3-Dichloropropane	90		-		70-130	-		
2-Hexanone	90		-		70-130	-		
Dibromochloromethane	101		-		70-130	-		
1,2-Dibromoethane	95		-		70-130	-		
Butyl Acetate	87		-		70-130	-		
Octane	86		-		70-130	-		
Tetrachloroethene	90		-		70-130	-		
1,1,1,2-Tetrachloroethane	88		-		70-130	-		
Chlorobenzene	92		-		70-130	-		
Ethylbenzene	94		-		70-130	-		
p/m-Xylene	95		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159536-3								
Bromoform	103		-		70-130	-		
Styrene	96		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	99		-		70-130	-		
1,2,3-Trichloropropane	92		-		70-130	-		
Nonane (C9)	86		-		70-130	-		
Isopropylbenzene	93		-		70-130	-		
Bromobenzene	91		-		70-130	-		
o-Chlorotoluene	86		-		70-130	-		
n-Propylbenzene	86		-		70-130	-		
p-Chlorotoluene	86		-		70-130	-		
4-Ethyltoluene	117		-		70-130	-		
1,3,5-Trimethylbenzene	81		-		70-130	-		
tert-Butylbenzene	90		-		70-130	-		
1,2,4-Trimethylbenzene	103		-		70-130	-		
Decane (C10)	91		-		70-130	-		
Benzyl chloride	104		-		70-130	-		
1,3-Dichlorobenzene	99		-		70-130	-		
1,4-Dichlorobenzene	95		-		70-130	-		
sec-Butylbenzene	92		-		70-130	-		
p-Isopropyltoluene	86		-		70-130	-		
1,2-Dichlorobenzene	97		-		70-130	-		
n-Butylbenzene	93		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159536-3								
1,2-Dibromo-3-chloropropane	96		-		70-130	-		
Undecane	98		-		70-130	-		
Dodecane (C12)	101		-		70-130	-		
1,2,4-Trichlorobenzene	100		-		70-130	-		
Naphthalene	88		-		70-130	-		
1,2,3-Trichlorobenzene	88		-		70-130	-		
Hexachlorobutadiene	98		-		70-130	-		

Lab Duplicate Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1159536-5 QC Sample: L1836966-02 Client ID: DUP Sample						
Propylene	ND	ND	ppbV	NC		25
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	ND	ND	ppbV	NC		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1159536-5 QC Sample: L1836966-02 Client ID: DUP Sample						
Vinyl acetate	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	12.3	12.2	ppbV	1		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	803	792	ppbV	1		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1159536-5 QC Sample: L1836966-02 Client ID: DUP Sample						
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	ND	ND	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	8.56	8.46	ppbV	1		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1159536-5 QC Sample: L1836966-02 Client ID: DUP Sample						
Naphthalene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: 229 HOMER ST**Lab Number:** L1836968**Project Number:** T0311-018-001**Report Date:** 09/27/18**SAMPLE RESULTS**

Lab ID: L1836968-01 D
 Client ID: INITIAL SOIL VAPOR SAMPLE
 Sample Location: OLEAN, NY

Date Collected: 09/13/18 13:48
 Date Received: 09/17/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 96,APH
 Analytical Date: 09/22/18 03:57
 Analyst: MB

Quality Control Information

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	500	--	1000
Methyl tert butyl ether	ND		ug/m3	700	--	1000
Benzene	ND		ug/m3	600	--	1000
C5-C8 Aliphatics, Adjusted	2500000		ug/m3	10000	--	1000
Toluene	ND		ug/m3	900	--	1000
Ethylbenzene	ND		ug/m3	900	--	1000
p/m-Xylene	ND		ug/m3	900	--	1000
o-Xylene	ND		ug/m3	900	--	1000
Naphthalene	ND		ug/m3	1100	--	1000
C9-C12 Aliphatics, Adjusted	320000		ug/m3	10000	--	1000
C9-C10 Aromatics Total	ND		ug/m3	10000	--	1000

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		50-200
Bromochloromethane	99		50-200
Chlorobenzene-d5	88		50-200

Project Name: 229 HOMER ST

Lab Number: L1836968

Project Number: T0311-018-001

Report Date: 09/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 96,APH

Analytical Date: 09/21/18 18:02

Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbons in Air - Mansfield Lab for sample(s): 01 Batch: WG1159535-4					
1,3-Butadiene	ND		ug/m3	0.50	--
Methyl tert butyl ether	ND		ug/m3	0.70	--
Benzene	ND		ug/m3	0.60	--
C5-C8 Aliphatics, Adjusted	ND		ug/m3	10	--
Toluene	ND		ug/m3	0.90	--
Ethylbenzene	ND		ug/m3	0.90	--
p/m-Xylene	ND		ug/m3	0.90	--
o-Xylene	ND		ug/m3	0.90	--
Naphthalene	ND		ug/m3	1.1	--
C9-C12 Aliphatics, Adjusted	ND		ug/m3	10	--
C9-C10 Aromatics Total	ND		ug/m3	10	--

Lab Control Sample Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1159535-3								
1,3-Butadiene	101		-		70-130	-		
Methyl tert butyl ether	84		-		70-130	-		
Benzene	118		-		70-130	-		
C5-C8 Aliphatics, Adjusted	120		-		70-130	-		
Toluene	97		-		70-130	-		
Ethylbenzene	100		-		70-130	-		
p/m-Xylene	96		-		70-130	-		
o-Xylene	102		-		70-130	-		
Naphthalene	117		-		50-150	-		
C9-C12 Aliphatics, Adjusted	102		-		70-130	-		
C9-C10 Aromatics Total	91		-		70-130	-		

Lab Duplicate Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1836968

Report Date: 09/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1159535-5 QC Sample: L1836966-02 Client ID: DUP Sample						
1,3-Butadiene	ND	ND	ug/m3	NC		30
Methyl tert butyl ether	ND	ND	ug/m3	NC		30
Benzene	ND	ND	ug/m3	NC		30
C5-C8 Aliphatics, Adjusted	130	150	ug/m3	14		30
Toluene	ND	ND	ug/m3	NC		30
Ethylbenzene	ND	ND	ug/m3	NC		30
p/m-Xylene	ND	ND	ug/m3	NC		30
o-Xylene	ND	ND	ug/m3	NC		30
Naphthalene	ND	ND	ug/m3	NC		30
C9-C12 Aliphatics, Adjusted	ND	ND	ug/m3	NC		30
C9-C10 Aromatics Total	ND	ND	ug/m3	NC		30

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Serial_No:09271816:58
Lab Number: L1836968

Report Date: 09/27/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1836968-01	INITIAL SOIL VAPOR SAMPLE	2072	2.7L Can	09/13/18	274332	L1835365-01	Pass	-28.8	-2.2	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 09/07/18 18:23
Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
 Client ID: CAN 209 SHELF 2
 Sample Location:

Date Collected: 09/06/18 16:00
 Date Received: 09/07/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 09/07/18 18:23
Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1835365
Report Date: 09/27/18

Air Canister Certification Results

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location:

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1835365**Project Number:** CANISTER QC BAT**Report Date:** 09/27/18**Air Canister Certification Results**

Lab ID: L1835365-01

Date Collected: 09/06/18 16:00

Client ID: CAN 209 SHELF 2

Date Received: 09/07/18

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140



AIR Petro Can Certification

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1835365**Project Number:** CANISTER QC BAT**Report Date:** 09/27/18**AIR CAN CERTIFICATION RESULTS**

Lab ID: L1835365-01
Client ID: CAN 209 SHELF 2
Sample Location: Not Specified
Matrix: Air
Analytical Method: 96,APH
Analytical Date: 09/07/18 18:23
Analyst: MB

Date Collected: 09/06/18 16:00
Date Received: 09/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air						
1,3-Butadiene	ND		ug/m3	0.50	--	1
Methyl tert butyl ether	ND		ug/m3	0.70	--	1
Benzene	ND		ug/m3	0.60	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	10	--	1
Toluene	ND		ug/m3	0.90	--	1
Ethylbenzene	ND		ug/m3	0.90	--	1
p/m-Xylene	ND		ug/m3	0.90	--	1
o-Xylene	ND		ug/m3	0.90	--	1
Naphthalene	ND		ug/m3	1.1	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	10	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Serial_No:09271816:58
Lab Number: L1836968
Report Date: 09/27/18

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1836968-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		APH-10(30),TO15-LL(30)

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Report Format: Data Usability Report



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1836968
Report Date: 09/27/18

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 96 Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), MassDEP, December 2009, Revision 1 with QC Requirements & Performance Standards for the Analysis of APH by GC/MS under the Massachusetts Contingency Plan, WSC-CAM-IXA, July 2010.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

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

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

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

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

Mansfield Facility

SM 2540D: TSS

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

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

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

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

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

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

Non-Potable Water

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

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

SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

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

Mansfield Facility:

Drinking Water

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

EPA 522.

Non-Potable Water

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

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

EPA 245.1 Hg.

SM2340B

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



ANALYTICAL REPORT

Lab Number:	L2016038
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Brock Greene
Phone:	(716) 856-0599
Project Name:	229 HOMER ST
Project Number:	T0311-018-001
Report Date:	04/23/20

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

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2016038-01	HOMER ST.- SVE	SOIL_VAPOR	OLEAN, NY	04/15/20 14:46	04/16/20

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

Case Narrative

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

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

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

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

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

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

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on April 10, 2020. The canister certification results are provided as an addendum.

L2016038-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

The continuing calibration standard, associated with L2016038-01, is outside the %D criteria for 1,3-Butadiene (33%D); however, it is within overall acceptance criteria.

Petroleum Hydrocarbons in Air

L2016038-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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

Authorized Signature:

 Christopher J. Anderson

Title: Technical Director/Representative

Date: 04/23/20

AIR

Project Name: 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L2016038**Report Date:** 04/23/20**SAMPLE RESULTS**

Lab ID: L2016038-01 D
 Client ID: HOMER ST.- SVE
 Sample Location: OLEAN, NY

Date Collected: 04/15/20 14:46
 Date Received: 04/16/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 04/21/20 06:02
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.769	--	ND	3.80	--		3.846
Chloromethane	ND	0.769	--	ND	1.59	--		3.846
Freon-114	ND	0.769	--	ND	5.38	--		3.846
Vinyl chloride	ND	0.769	--	ND	1.97	--		3.846
1,3-Butadiene	ND	0.769	--	ND	1.70	--		3.846
Bromomethane	ND	0.769	--	ND	2.99	--		3.846
Chloroethane	ND	0.769	--	ND	2.03	--		3.846
Ethanol	ND	19.2	--	ND	36.2	--		3.846
Vinyl bromide	ND	0.769	--	ND	3.36	--		3.846
Acetone	ND	3.85	--	ND	9.15	--		3.846
Trichlorofluoromethane	ND	0.769	--	ND	4.32	--		3.846
Isopropanol	ND	1.92	--	ND	4.72	--		3.846
1,1-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846
Tertiary butyl Alcohol	ND	1.92	--	ND	5.82	--		3.846
Methylene chloride	ND	1.92	--	ND	6.67	--		3.846
3-Chloropropene	ND	0.769	--	ND	2.41	--		3.846
Carbon disulfide	ND	0.769	--	ND	2.39	--		3.846
Freon-113	ND	0.769	--	ND	5.89	--		3.846
trans-1,2-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846
1,1-Dichloroethane	ND	0.769	--	ND	3.11	--		3.846
Methyl tert butyl ether	ND	0.769	--	ND	2.77	--		3.846
2-Butanone	ND	1.92	--	ND	5.66	--		3.846
cis-1,2-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846



Project Name: 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L2016038**Report Date:** 04/23/20**SAMPLE RESULTS**

Lab ID: L2016038-01 D
 Client ID: HOMER ST.- SVE
 Sample Location: OLEAN, NY

Date Collected: 04/15/20 14:46
 Date Received: 04/16/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.92	--	ND	6.92	--		3.846
Chloroform	ND	0.769	--	ND	3.76	--		3.846
Tetrahydrofuran	ND	1.92	--	ND	5.66	--		3.846
1,2-Dichloroethane	ND	0.769	--	ND	3.11	--		3.846
n-Hexane	ND	0.769	--	ND	2.71	--		3.846
1,1,1-Trichloroethane	ND	0.769	--	ND	4.20	--		3.846
Benzene	ND	0.769	--	ND	2.46	--		3.846
Carbon tetrachloride	ND	0.769	--	ND	4.84	--		3.846
Cyclohexane	27.9	0.769	--	96.0	2.65	--		3.846
1,2-Dichloropropane	ND	0.769	--	ND	3.55	--		3.846
Bromodichloromethane	ND	0.769	--	ND	5.15	--		3.846
1,4-Dioxane	ND	0.769	--	ND	2.77	--		3.846
Trichloroethene	ND	0.769	--	ND	4.13	--		3.846
2,2,4-Trimethylpentane	ND	0.769	--	ND	3.59	--		3.846
Heptane	ND	0.769	--	ND	3.15	--		3.846
cis-1,3-Dichloropropene	ND	0.769	--	ND	3.49	--		3.846
4-Methyl-2-pentanone	6.84	1.92	--	28.0	7.87	--		3.846
trans-1,3-Dichloropropene	ND	0.769	--	ND	3.49	--		3.846
1,1,2-Trichloroethane	ND	0.769	--	ND	4.20	--		3.846
Toluene	ND	0.769	--	ND	2.90	--		3.846
2-Hexanone	ND	0.769	--	ND	3.15	--		3.846
Dibromochloromethane	ND	0.769	--	ND	6.55	--		3.846
1,2-Dibromoethane	ND	0.769	--	ND	5.91	--		3.846
Tetrachloroethene	ND	0.769	--	ND	5.21	--		3.846
Chlorobenzene	ND	0.769	--	ND	3.54	--		3.846
Ethylbenzene	ND	0.769	--	ND	3.34	--		3.846



Project Name: 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L2016038**Report Date:** 04/23/20**SAMPLE RESULTS**

Lab ID: L2016038-01 D
 Client ID: HOMER ST.- SVE
 Sample Location: OLEAN, NY

Date Collected: 04/15/20 14:46
 Date Received: 04/16/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	1.54	--	ND	6.69	--		3.846
Bromoform	ND	0.769	--	ND	7.95	--		3.846
Styrene	ND	0.769	--	ND	3.27	--		3.846
1,1,2,2-Tetrachloroethane	ND	0.769	--	ND	5.28	--		3.846
o-Xylene	ND	0.769	--	ND	3.34	--		3.846
4-Ethyltoluene	ND	0.769	--	ND	3.78	--		3.846
1,3,5-Trimethylbenzene	1.29	0.769	--	6.34	3.78	--		3.846
1,2,4-Trimethylbenzene	ND	0.769	--	ND	3.78	--		3.846
Benzyl chloride	ND	0.769	--	ND	3.98	--		3.846
1,3-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,4-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,2-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,2,4-Trichlorobenzene	ND	0.769	--	ND	5.71	--		3.846
Hexachlorobutadiene	ND	0.769	--	ND	8.20	--		3.846

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Hexane, 2,5-dimethyl-	49	NJ	ppbV		3.846
Pentane, 2,2-dimethyl-	80	NJ	ppbV		3.846
unknown cycloalkane	95	J	ppbV		3.846
unknown cycloalkane	55	J	ppbV		3.846
Cyclopentane, 1,1-dimethyl-	82	NJ	ppbV		3.846
Hexane, 2,4-dimethyl-	97	NJ	ppbV		3.846
Pentane, 2,4-dimethyl-	110	NJ	ppbV		3.846
unknown cycloalkane	62	J	ppbV		3.846
Cyclohexane, methyl-	270	NJ	ppbV		3.846



Project Name: 229 HOMER ST**Lab Number:** L2016038**Project Number:** T0311-018-001**Report Date:** 04/23/20**SAMPLE RESULTS**

Lab ID: L2016038-01 D
 Client ID: HOMER ST.- SVE
 Sample Location: OLEAN, NY

Date Collected: 04/15/20 14:46
 Date Received: 04/16/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
unknown cycloalkane	100	J	ppbV		3.846
Pentane, 2,3-dimethyl-	93	NJ	ppbV		3.846
Butane, 2-Methyl-	47	NJ	ppbV		3.846
unknown alkane	56	J	ppbV		3.846
unknown alkane	110	J	ppbV		3.846

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	103		60-140
chlorobenzene-d5	114		60-140



Project Name: 229 HOMER ST

Lab Number: L2016038

Project Number: T0311-018-001

Report Date: 04/23/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/20/20 14:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1362750-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 229 HOMER ST

Lab Number: L2016038

Project Number: T0311-018-001

Report Date: 04/23/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/20/20 14:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1362750-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: 229 HOMER ST

Lab Number: L2016038

Project Number: T0311-018-001

Report Date: 04/23/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/20/20 14:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1362750-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Lab Control Sample Analysis **Batch Quality Control**

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L2016038

Report Date: 04/23/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1362750-3								
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	104		-		70-130	-		
Freon-114	110		-		70-130	-		
Vinyl chloride	102		-		70-130	-		
1,3-Butadiene	116		-		70-130	-		
Bromomethane	100		-		70-130	-		
Chloroethane	106		-		70-130	-		
Ethanol	78		-		40-160	-		
Vinyl bromide	99		-		70-130	-		
Acetone	82		-		40-160	-		
Trichlorofluoromethane	116		-		70-130	-		
Isopropanol	80		-		40-160	-		
1,1-Dichloroethene	111		-		70-130	-		
Tertiary butyl Alcohol	92		-		70-130	-		
Methylene chloride	101		-		70-130	-		
3-Chloropropene	123		-		70-130	-		
Carbon disulfide	99		-		70-130	-		
Freon-113	103		-		70-130	-		
trans-1,2-Dichloroethene	105		-		70-130	-		
1,1-Dichloroethane	110		-		70-130	-		
Methyl tert butyl ether	102		-		70-130	-		
2-Butanone	106		-		70-130	-		
cis-1,2-Dichloroethene	108		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L2016038

Report Date: 04/23/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1362750-3								
Ethyl Acetate	115		-		70-130	-		
Chloroform	102		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
1,2-Dichloroethane	107		-		70-130	-		
n-Hexane	103		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	110		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	108		-		70-130	-		
Bromodichloromethane	104		-		70-130	-		
1,4-Dioxane	102		-		70-130	-		
Trichloroethene	101		-		70-130	-		
2,2,4-Trimethylpentane	105		-		70-130	-		
Heptane	107		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	110		-		70-130	-		
trans-1,3-Dichloropropene	90		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	106		-		70-130	-		
2-Hexanone	111		-		70-130	-		
Dibromochloromethane	112		-		70-130	-		
1,2-Dibromoethane	101		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L2016038

Report Date: 04/23/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1362750-3								
Tetrachloroethene	106		-		70-130	-		
Chlorobenzene	108		-		70-130	-		
Ethylbenzene	108		-		70-130	-		
p/m-Xylene	107		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	110		-		70-130	-		
o-Xylene	106		-		70-130	-		
4-Ethyltoluene	99		-		70-130	-		
1,3,5-Trimethylbenzene	102		-		70-130	-		
1,2,4-Trimethylbenzene	101		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	102		-		70-130	-		
1,4-Dichlorobenzene	107		-		70-130	-		
1,2-Dichlorobenzene	102		-		70-130	-		
1,2,4-Trichlorobenzene	108		-		70-130	-		
Hexachlorobutadiene	101		-		70-130	-		

Project Name: 229 HOMER ST**Lab Number:** L2016038**Project Number:** T0311-018-001**Report Date:** 04/23/20**SAMPLE RESULTS**

Lab ID: L2016038-01 D

Client ID: HOMER ST.- SVE

Sample Location: OLEAN, NY

Date Collected: 04/15/20 14:46

Date Received: 04/16/20

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 96,APH

Analytical Date: 04/21/20 23:31

Analyst: RY

Quality Control Information

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	1.9	--	3.8
Methyl tert butyl ether	ND		ug/m3	2.7	--	3.8
Benzene	ND		ug/m3	2.3	--	3.8
C5-C8 Aliphatics, Adjusted	16000		ug/m3	38	--	3.8
Toluene	ND		ug/m3	3.4	--	3.8
Ethylbenzene	ND		ug/m3	3.4	--	3.8
p/m-Xylene	ND		ug/m3	3.4	--	3.8
o-Xylene	ND		ug/m3	3.4	--	3.8
Naphthalene	ND		ug/m3	4.2	--	3.8
C9-C12 Aliphatics, Adjusted	5400		ug/m3	38	--	3.8
C9-C10 Aromatics Total	ND		ug/m3	38	--	3.8

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		50-200
Bromochloromethane	86		50-200
Chlorobenzene-d5	97		50-200

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 96,APH
 Analytical Date: 04/21/20 14:31
 Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbons in Air - Mansfield Lab for sample(s): 01 Batch: WG1363095-4					
1,3-Butadiene	ND		ug/m3	0.50	--
Methyl tert butyl ether	ND		ug/m3	0.70	--
Benzene	ND		ug/m3	0.60	--
C5-C8 Aliphatics, Adjusted	ND		ug/m3	10	--
Toluene	ND		ug/m3	0.90	--
Ethylbenzene	ND		ug/m3	0.90	--
p/m-Xylene	ND		ug/m3	0.90	--
o-Xylene	ND		ug/m3	0.90	--
Naphthalene	ND		ug/m3	1.1	--
C9-C12 Aliphatics, Adjusted	ND		ug/m3	10	--
C9-C10 Aromatics Total	ND		ug/m3	10	--

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L2016038

Report Date: 04/23/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1363095-3								
1,3-Butadiene	71		-		70-130	-		
Methyl tert butyl ether	86		-		70-130	-		
Benzene	94		-		70-130	-		
C5-C8 Aliphatics, Adjusted	105		-		70-130	-		
Toluene	112		-		70-130	-		
Ethylbenzene	125		-		70-130	-		
p/m-Xylene	116		-		70-130	-		
o-Xylene	120		-		70-130	-		
Naphthalene	128		-		50-150	-		
C9-C12 Aliphatics, Adjusted	109		-		70-130	-		
C9-C10 Aromatics Total	98		-		70-130	-		

Lab Duplicate Analysis Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L2016038

Report Date: 04/23/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1363095-5 QC Sample: L2016500-02 Client ID: DUP Sample						
1,3-Butadiene	ND	ND	ug/m3	NC		30
Methyl tert butyl ether	ND	ND	ug/m3	NC		30
Benzene	ND	ND	ug/m3	NC		30
C5-C8 Aliphatics, Adjusted	190	190	ug/m3	0		30
Toluene	ND	ND	ug/m3	NC		30
Ethylbenzene	ND	ND	ug/m3	NC		30
p/m-Xylene	ND	ND	ug/m3	NC		30
o-Xylene	ND	ND	ug/m3	NC		30
Naphthalene	ND	ND	ug/m3	NC		30
C9-C12 Aliphatics, Adjusted	23	19	ug/m3	19		30
C9-C10 Aromatics Total	ND	ND	ug/m3	NC		30

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Serial_No:04232013:02
Lab Number: L2016038

Report Date: 04/23/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2016038-01	HOMER ST.- SVE	119	2.7L Can	04/10/20	318846	L2011727-01	Pass	-28.9	0.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/21/20 17:31
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2011727**Project Number:** CANISTER QC BAT**Report Date:** 04/23/20**Air Canister Certification Results**

Lab ID: L2011727-01

Date Collected: 03/19/20 16:00

Client ID: CAN 502 SHELF 3

Date Received: 03/20/20

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	88		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/21/20 17:31
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2011727
Report Date: 04/23/20

Air Canister Certification Results

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location:

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	88		60-140



AIR Petro Can Certification

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2011727**Project Number:** CANISTER QC BAT**Report Date:** 04/23/20**AIR CAN CERTIFICATION RESULTS**

Lab ID: L2011727-01
Client ID: CAN 502 SHELF 3
Sample Location: Not Specified
Matrix: Air
Analytical Method: 96,APH
Analytical Date: 03/21/20 17:31
Analyst: RY

Date Collected: 03/19/20 16:00
Date Received: 03/20/20
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air						
1,3-Butadiene	ND		ug/m3	0.50	--	1
Methyl tert butyl ether	ND		ug/m3	0.70	--	1
Benzene	ND		ug/m3	0.60	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	10	--	1
Toluene	ND		ug/m3	0.90	--	1
Ethylbenzene	ND		ug/m3	0.90	--	1
p/m-Xylene	ND		ug/m3	0.90	--	1
o-Xylene	ND		ug/m3	0.90	--	1
Naphthalene	ND		ug/m3	1.1	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	10	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Project Name: 229 HOMER ST**Lab Number:** L2016038**Project Number:** T0311-018-001**Report Date:** 04/23/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

NA Absent

Container Information**Container ID** **Container Type**

L2016038-01A Canister - 2.7 Liter

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
NA	NA			Y	Absent		APH-10(30),TO15-LL(30)

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

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

Terms

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

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less

Report Format: Data Usability Report



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

Data Qualifiers

than 5x the RL. (Metals only.)

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L2016038
Report Date: 04/23/20

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 96 Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), MassDEP, December 2009, Revision 1 with QC Requirements & Performance Standards for the Analysis of APH by GC/MS under the Massachusetts Contingency Plan, WSC-CAM-IXA, July 2010.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 16

Published Date: 2/17/2020 10:46:05 AM

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Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

APPENDIX E

TEMPORARY DISCHARGE PERMIT & ANALYTICAL DATA

PERMIT NO. Temporary 10-18-BC

City of Olean

Industrial Pretreatment Program

WASTEWATER DISCHARGE PERMIT

In accordance with all terms and conditions of the City Code of Ordinances, Chapter 27, et. seq., and with any applicable provisions of Federal or State law or regulation, permission for the contribution of wastewaters containing regulated pollutants into the City of Olean sewage system is hereby granted to:

Homer Street Properties, LLC

**229 Homer Street Site
Olean, NY 14760**

Responsible Person: Michael Lesakowski

Title: Corporate Official

Telephone: 716-818-3954

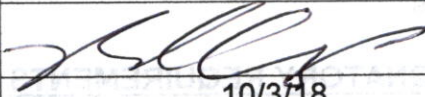
E-mail: mlesakowski@turnkeyllc.com

STANDARD INDUSTRIAL CLASSIFICATION CODE: **NA**

This permit is granted in accordance with the application filed in 2018 and in conformity with any plans, specifications and other data submitted in support of the above application, all of which are filed with and considered a part of this permit. In addition, the following general and special conditions are a part of this permit. Any part of this permit, may be modified at any time during the period it is in force.

Effective: **October 4, 2018**

Expires : **October 4, 2019**

Approved by:	Mayor, City of Olean	OR	WWTP Chief Operator
Name:	William Aiello		Brad Camp
Signature:			
Date:			10/3/18

GENERAL PROVISIONS

G-1. CORRESPONDENCE

All submittals and correspondence should be addressed to :

**Wastewater Treatment Plant Chief Operator
City of Olean Wastewater Treatment Plant
174 S. 19th Street
Olean, New York 14760**

G-2. SPILL PREVENTION CONTROL PROGRAM

The industrial user shall take all reasonable precautions to prevent accidental spills in order to eliminate or minimize the accidental or slug discharge of pollutants into the sewer system.

The industrial user shall notify the City immediately upon any accidental or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within 5 days of the occurrence.

G-3. DILUTION

No industrial user shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

G-4. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of sludges and spent chemicals generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act and any other applicable statutes or regulations pertaining to disposal of sludges and spent chemicals.

All industrial users must notify in writing the POTW, the New York State Department of Environmental Conservation and the United States Environmental Protection Agency of any discharge that would be considered a hazardous waste if disposed of in a different manner.

G-5. PROHIBITIONS

No industrial user may discharge any pollutant that may create an explosive hazard including but not limited to wastestreams with a closed cup flash point of less than 140° F or 60° C using testing methods specified in 40 CFR 261.21.

No industrial user shall discharge petroleum oil, non- biodegradable cutting oil, products of mineral oil origin in amounts that will cause interference or pass through.

No industrial user shall discharge any pollutant that may result in the presence of toxic gases, vapors or fumes in a quantity that may cause acute worker health and/or safety problems.

G-6. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the user, or his designee. Electronic submittal of permit applications, reports and other correspondence shall be documented in a letter bearing an appropriate signature.

G-7. CHANGE IN DISCHARGE

The industrial user shall promptly and as soon as possible notify the City in advance of the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the public sewers from the user's industrial processes including listed or characteristic hazardous wastes. The notification shall be in conformance with 40CFR Part 122.41(l)(i) and 40CFR 403.12(p). Formal written notification shall follow within 30 days of such introduction.

G-8. FAILURE TO REAPPLY

The City may seek temporary restraining orders, plug or disconnect service or permanent injunctions if there is an imminent danger to health, safety or property when after inspection, monitoring or analysis it is determined that the discharge or wastewater to the sanitary sewer is in violation of Federal, State or local laws, ordinances or regulations.

G-9. LIMITATION OF PERMIT TRANSFER

Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of the City. Sale of a user shall obligate the purchaser to seek prior written approval of the City for continued discharge to the sewage system.

G-10. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subjected to civil penalties and relief.

G-11. MODIFICATION OR REVISION OF THE PERMIT

- a) The terms and conditions of this permit may be subject to modification by the City at any time as limitations or requirements as identified by the City's Ordinance, are modified or other just cause exists.
- b) This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.
- b) The terms and conditions may be modified as a result of EPA promulgating a new Federal pretreatment standard.

G-12. DUTY TO REAPPLY

Within ninety (90) days of the notification, the user shall reapply for reissuance of the permit on a form provided by the City.

G-13. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

SAMPLING and ANALYSES

S-1. SAMPLE METHODS

Wastewater discharge samples and analyses and flow measurements taken as required in this permit shall be representative of the volume and character of the permitted discharge. Sampling and analytical methods shall be in accordance with accepted National Environmental Laboratory Approval Program (NELAP) protocol. Contracted laboratories must be NELAP certified by the New York State Department of Health.

S-2. SAMPLING MANHOLE

The industrial user shall construct a sampling manhole if the Wastewater Treatment Plant Senior Operator, or the Director of Public Works, determines such sampling point is required.

S-3. SAMPLING – NOTIFICATION

The permittee shall notify the Wastewater Treatment Plant Senior Operator, at least one week prior to conducting self-monitoring for the purpose of taking wastewater discharge samples for analysis.

S-4. SAMPLE ANALYSES- REQUIREMENTS

The industrial user is required to monitor the parameters listed for each sample point.

SAMPLE POINT: 7th Street Manhole

PARAMETER	DISCHARGE LIMITS	SAMPLE TYPE
pH	6.0-9.0	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
Oil and Grease	50 mg/l (Avg.DAILY MAXIMUM)	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
1,1,1-Trichloroethane	0.049 mg/l (DAILY MAXIMUM)	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
Trichloroethylene	1.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Chromium (Hex)	1.5mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Copper (Total)	2.1 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Lead (Total)	5.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Nickel (Total)	0.9 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Zinc (Total)	3.5 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Cadmium (Total)	1.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Arsenic (Total)	0.02 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Silver (Total)	5.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Mercury (Total)	0.05 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
BOD ₅	250 mg/l	24 Hour Composite (Flow based)
TSS	250 mg/l	24 Hour Composite (Flow based)
Flow (MGD)	Monitor	24 Hr. Total

*Five (5) day Biochemical Oxygen Demand and Total Suspended Solids discharges greater than 250 mg/l shall be subject to review and approval by the WWTP Chief Operator or the Director of Public Works.

Other pollutants, as specified by the City, shall be sampled on a schedule determined by the City if said additional monitoring is deemed necessary by the City in order to assure compliance with City, State and Federal standards.

S-5 SAMPLE ANALYSES – REPORTING

The industrial user is required to submit to the City a self monitoring report on the analytical results of its sampling **May 15** and **October 15** of each year.

A statement shall be included in all monitoring reports pertaining to the protocols used during the sampling and/or analyses. A proper monitoring report shall contain the following information:

- Exact time and place of sample
- Dates of sample
- Dates analyses were performed
- Person performing sampling and/or analyses
- Analytical techniques or methods used
- Analytical results including proper units
- A map indicating sampling location
- Chain of Custody Log

If sampling by the industrial user indicates a violation, the user must notify the City within 24 hours of becoming aware of the violation. The industrial user must also resample and submit results of this resampling to the City within thirty (30) days.

INSPECTION

I-1. RIGHT OF ENTRY

The industrial user shall, after reasonable notification by the City, allow the City or its representative, exhibiting proper credentials and identification, to enter upon the premises of the user, at all reasonable hours, for the purposes of inspection, sampling, or records inspection. Reasonable hours in the context of inspection and sampling includes any time the industrial user is operating any process which results in a process wastewater discharge to the City's sewage system.

I-2. RECORDS RETENTION

- a) The industrial user shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or in behalf of the user in connection with its discharge.
- c) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City shall be retained and preserved by the industrial user until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

COMPLIANCE

C-1. CITY ORDINANCE

The industrial user shall comply with all the general discharge standards of the City Sewer Use Ordinance (Chapter 27, City Code).

C-2. COMPLIANCE SCHEDULE

In order to meet the wastewater discharge limitations specified elsewhere in this permit, the industrial user may be required to make in-plant process modifications and install a treatment facility. The following construction schedule, if applicable, shall be adhered to and reports on progress shall be submitted to the City, as outlined below:

TASK	COMPLIANCE DATE	APPLICABILITY
Submit baseline monitoring report	NA	Not Applicable at time of issue
Investigate in-plant process modifications and treatment options.	NA	Not Applicable at time of issue
Complete preliminary engineering	NA	Not Applicable at time of issue
Go out to bid	NA	Not Applicable at time of issue
Secure equipment and begin construction	NA	Not Applicable at time of issue
Complete installation	NA	Not Applicable at time of issue
Pretreatment system start-up	NA	Not Applicable at time of issue
Achieve final compliance	NA	Not Applicable at time of issue

C-3. PROGRESS REPORT

Not later than fourteen (14) days following each date in the compliance schedule, the industrial user shall submit a progress report to the City. This report must indicate whether or not the increment of progress was met on the date, the reason(s) for any delay, and what steps are being taken by the user to return to the schedule established. In no event shall more than nine (9) months elapse between such progress reports to the City.

C-4. FINAL COMPLIANCE REPORT

Within 90 days following the final compliance date, the industrial user shall submit a final compliance report. The industrial user will be required to sample its wastewater for the pollutants specified in S-4, and report compliance. Any reasons for not complying and any steps being taken by the user to comply shall be part of the report.

C-5. PRETREATMENT FAILURE

Any upset experienced by the industrial user of its treatment that places it in a temporary state of non-compliance with wastewater discharge limitations contained in this permit or other limitations specified in the City's Ordinance shall be reported to the City within 24 hours of first awareness of the commencement of the upset. A detailed report shall be filed within 5 days. Additionally any violation for any reason, including but not limited to routine monitoring shall be reported within 24 hours of violation detection and the permittee must conduct resampling within 30 days.

C-6. CIVIL AND CRIMINAL PENALTIES

By resolution the Common Council has adopted an Enforcement Response Plan which was previously mailed to permit holders on March 28, 1990 and which is made part of this permit by reference.

Any industrial user who fails to comply with any provisions of the City of Olean sewer use ordinance or this permit may be liable to monetary forfeitures. Fines for significant noncompliance shall be \$1,000.00 per day. The continued violation of any provision shall constitute a separate offense for each and every day such violation shall continue.

The City may hold hearings regarding violations and depending upon the outcome of the

hearings the director may revoke or suspend the industrial user's permit to discharge.

C-7. SIGNIFICANT NONCOMPLIANCE

Significant noncompliance involving discharge violations will be calculated on the basis of "rolling quarters". Significant noncompliance shall be based upon data for the previous six (6) months. Quarters shall end on March 31, June 30, September 30 and December 31 of each calendar year.

Significant noncompliance means any violation or group of violations that meets one or more of the following criteria:

- Chronic violations of wastewater discharge limits, defined here as those in which sixty-six (66) percent or more of all of the measurements taken for the same pollutant parameter during a six (6) month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l);
- Technical Review Criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
- Any other violation of a pretreatment effluent limit (daily maximum or longer-term average, instantaneous limit, or narrative standard) that the City of Olean determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of Wastewater Treatment Plant personnel or the general public);
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the Wastewater Treatment Plant's exercise of its emergency authority to halt or prevent any such discharge;
- Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
- Failure to provide, within thirty (30) days after the due date, required report such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- Failure to accurately report noncompliance;
- Any other violation or group of violations, which may include a violation of Best Management Practices, which the City of Olean determines will adversely affect the operation or implementation of the City's pretreatment program.



ANALYTICAL REPORT

Lab Number:	L1841323
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	229 HOMER ST
Project Number:	T0311-018-001
Report Date:	10/18/18

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1841323-01	DISCHARGE	WATER	OLEAN, NY	10/11/18 11:00	10/11/18
L1841323-02	TRIP BLANK	WATER	OLEAN, NY	10/11/18 00:00	10/11/18

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

Case Narrative (continued)

Report Submission

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

Sample Receipt

The analyses performed were specified by the client.

L1841323-02: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody. This sample was not analyzed.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 10/18/18

ORGANICS

VOLATILES

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

SAMPLE RESULTS

Lab ID: L1841323-01
 Client ID: DISCHARGE
 Sample Location: OLEAN, NY

Date Collected: 10/11/18 11:00
 Date Received: 10/11/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 10/16/18 12:14
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	114		70-130

Project Name: 229 HOMER ST

Lab Number: L1841323

Project Number: T0311-018-001

Report Date: 10/18/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 10/16/18 08:29

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1168677-5					
Trichloroethene	ND		ug/l	0.50	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1168677-3 WG1168677-4								
Trichloroethene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		102		70-130
Toluene-d8	87		87		70-130
4-Bromofluorobenzene	91		91		70-130
Dibromofluoromethane	105		105		70-130

METALS

Project Name: 229 HOMER ST

Lab Number: L1841323

Project Number: T0311-018-001

Report Date: 10/18/18

SAMPLE RESULTS

Lab ID: L1841323-01

Date Collected: 10/11/18 11:00

Client ID: DISCHARGE

Date Received: 10/11/18

Sample Location: OLEAN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.00724		mg/l	0.00050	0.00016	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00027		mg/l	0.00020	0.00005	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Chromium, Total	0.00459		mg/l	0.00100	0.00017	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Copper, Total	0.02608		mg/l	0.00100	0.00038	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Lead, Total	0.04327		mg/l	0.00100	0.00034	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Mercury, Total	0.00007	J	mg/l	0.00020	0.00006	1	10/16/18 16:00	10/17/18 16:27	EPA 7470A	1,7470A	MG
Nickel, Total	0.01338		mg/l	0.00200	0.00055	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.2170		mg/l	0.01000	0.00341	1	10/17/18 13:42	10/18/18 11:02	EPA 3005A	1,6020B	AM



Project Name: 229 HOMER ST

Lab Number: L1841323

Project Number: T0311-018-001

Report Date: 10/18/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1168703-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/16/18 16:00	10/17/18 15:56	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1169150-1										
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/17/18 13:42	10/18/18 09:53	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1168703-2								
Mercury, Total	110		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1169150-2								
Arsenic, Total	102		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Chromium, Total	102		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	105		-		80-120	-		
Silver, Total	104		-		80-120	-		
Zinc, Total	110		-		80-120	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1168703-3 WG1168703-4 QC Sample: L1841367-01 Client ID: MS Sample												
Mercury, Total	0.00109	0.005	0.00626	103		0.00609	100		75-125	3		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1169150-3 QC Sample: L1840676-01 Client ID: MS Sample												
Arsenic, Total	ND	0.12	0.1241	103		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05648	111		-	-		75-125	-		20
Chromium, Total	0.0004J	0.2	0.2018	101		-	-		75-125	-		20
Copper, Total	0.0004J	0.25	0.2525	101		-	-		75-125	-		20
Lead, Total	ND	0.51	0.5878	115		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.5163	103		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05127	102		-	-		75-125	-		20
Zinc, Total	ND	0.5	0.5362	107		-	-		75-125	-		20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** 229 HOMER ST**Project Number:** T0311-018-001**Lab Number:** L1841323**Report Date:** 10/18/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1169150-4 QC Sample: L1840676-01 Client ID: DUP Sample						
Arsenic, Total	ND	0.00018J	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

SAMPLE RESULTS

Lab ID: L1841323-01

Client ID: DISCHARGE

Sample Location: OLEAN, NY

Date Collected: 10/11/18 11:00

Date Received: 10/11/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	10/15/18 14:20	10/16/18 10:25	1,9010C/9012B	LH
Oil & Grease, Hem-Grav	3.0		mg/l	2.0	0.46	1	10/17/18 15:00	10/17/18 18:00	74,1664A	DR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	10/12/18 05:15	10/12/18 05:52	1,7196A	MA



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1167288-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	10/12/18 05:15	10/12/18 05:51	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1168155-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	10/15/18 14:20	10/16/18 10:14	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1169235-1										
Oil & Grease, Hem-Grav	0.53	J	mg/l	2.0	0.46	1	10/17/18 15:00	10/17/18 18:00	74,1664A	DR



Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1167288-2								
Chromium, Hexavalent	93		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1168155-2 WG1168155-3								
Cyanide, Total	92		91		85-115	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1169235-2								
Oil & Grease, Hem-Grav	87		-		78-114	-		18

Matrix Spike Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1167288-4 QC Sample: L1841323-01 Client ID: DISCHARGE												
Chromium, Hexavalent	ND	0.1	0.101	101		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1168155-4 WG1168155-5 QC Sample: L1841367-01 Client ID: MS Sample												
Cyanide, Total	0.003J	0.2	0.179	90		0.180	90		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1169235-3 QC Sample: L1841321-02 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	43.5	19	44	Q	-	-		78-114	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: 229 HOMER ST

Project Number: T0311-018-001

Lab Number: L1841323

Report Date: 10/18/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1167288-3 QC Sample: L1841323-01 Client ID: DISCHARGE						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1169235-4 QC Sample: L1841321-01 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18

Project Name: 229 HOMER ST**Lab Number:** L1841323**Project Number:** T0311-018-001**Report Date:** 10/18/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1841323-01A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260-R2(14)
L1841323-01B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260-R2(14)
L1841323-01C	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260-R2(14)
L1841323-01D	Plastic 250ml NaOH preserved	A	>12	>12	3.4	Y	Absent		TCN-9010(14)
L1841323-01E	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		HEXCR-7196(1)
L1841323-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),AS-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1841323-01G	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		NY-OG-1664-LOW(28)
L1841323-01H	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		NY-OG-1664-LOW(28)
L1841323-02A	Vial HCl preserved	A	N/A	N/A	3.4	Y	Absent		ARCHIVE()
L1841323-02B	Vial HCl preserved	A	N/A	N/A	3.4	Y	Absent		ARCHIVE()

Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER ST
Project Number: T0311-018-001

Lab Number: L1841323
Report Date: 10/18/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information


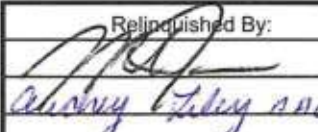
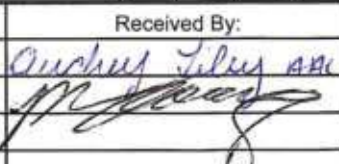
The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH₃-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO₃-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 10/12/18		ALPHA Job # L1841323																																																																																																																																																																																																										
		Project Information Project Name: 229 Homer St Project Location: Olean NY Project # _____ (Use Project name as Project #) <input type="checkbox"/> Project Manager: Alapostol@benchmarkres.com / MLesaKowski@benchmarkres.com ALPHAQuote #: _____ Turn-Around Time _____ Standard <input checked="" type="checkbox"/> Rush (only if pre approved) <input type="checkbox"/> Due Date: _____ # of Days: _____		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other _____		Billing Information <input type="checkbox"/> Same as Client Info PO # _____																																																																																																																																																																																																												
Client Information Client: Benchmark & Turnkey Address: 2558 Hamburg Turnpike Phone: 716 856-0635 Fax: 716 856-0583 Email: _____		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other _____ <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: _____ <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: _____																																																																																																																																																																																																														
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type _____ Preservative _____		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																																																																										
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PERMIT NO. Temporary 11-19-BC
City of Olean
Industrial Pretreatment Program
WASTEWATER DISCHARGE PERMIT

In accordance with all terms and conditions of the City Code of Ordinances, Chapter 27, et. seq., and with any applicable provisions of Federal or State law or regulation, permission for the contribution of wastewaters containing regulated pollutants into the City of Olean sewage system is hereby granted to:

Homer Street Properties, LLC
229 Homer Street Site
Olean, NY 14760

Responsible Person: Michael Lesakowski

Title: Corporate Official

Telephone: 716-818-3954

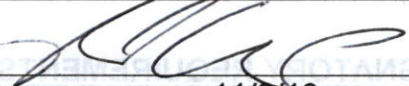
E-mail: mlesakowski@turnkeyllc.com

STANDARD INDUSTRIAL CLASSIFICATION CODE: **NA**

This permit is granted in accordance with the application filed in 2019 and in conformity with any plans, specifications and other data submitted in support of the above application, all of which are filed with and considered a part of this permit. In addition, the following general and special conditions are a part of this permit. Any part of this permit, may be modified at any time during the period it is in force.

Effective: **November 6, 2019**

Expires : **November 6, 2020**

Approved by:	Mayor, City of Olean	OR	WWTP Chief Operator
Name:	William Aiello		Brad Camp
Signature:			
Date:			11/6/19

GENERAL PROVISIONS

G-1. CORRESPONDENCE

All submittals and correspondence should be addressed to :

**Wastewater Treatment Plant Chief Operator
City of Olean Wastewater Treatment Plant
174 S. 19th Street
Olean, New York 14760**

G-2. SPILL PREVENTION CONTROL PROGRAM

The industrial user shall take all reasonable precautions to prevent accidental spills in order to eliminate or minimize the accidental or slug discharge of pollutants into the sewer system.

The industrial user shall notify the City immediately upon any accidental or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within 5 days of the occurrence.

G-3. DILUTION

No industrial user shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

G-4. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of sludges and spent chemicals generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act and any other applicable statutes or regulations pertaining to disposal of sludges and spent chemicals.

All industrial users must notify in writing the POTW, the New York State Department of Environmental Conservation and the United States Environmental Protection Agency of any discharge that would be considered a hazardous waste if disposed of in a different manner.

G-5. PROHIBITIONS

No industrial user may discharge any pollutant that may create an explosive hazard including but not limited to wastestreams with a closed cup flash point of less than 140° F or 60° C using testing methods specified in 40 CFR 261.21.

No industrial user shall discharge petroleum oil, non- biodegradable cutting oil, products of mineral oil origin in amounts that will cause interference or pass through.

No industrial user shall discharge any pollutant that may result in the presence of toxic gases, vapors or fumes in a quantity that may cause acute worker health and/or safety problems.

G-6. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the user, or his designee. Electronic submittal of permit applications, reports and other correspondence shall be documented in a letter bearing an appropriate signature.

G-7. CHANGE IN DISCHARGE

The industrial user shall promptly and as soon as possible notify the City in advance of the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the public sewers from the user's industrial processes including listed or characteristic hazardous wastes. The notification shall be in conformance with 40CFR Part 122.41(l)(i) and 40CFR 403.12(p). Formal written notification shall follow within 30 days of such introduction.

G-8. FAILURE TO REAPPLY

The City may seek temporary restraining orders, plug or disconnect service or permanent injunctions if there is an imminent danger to health, safety or property when after inspection, monitoring or analysis it is determined that the discharge or wastewater to the sanitary sewer is in violation of Federal, State or local laws, ordinances or regulations.

G-9. LIMITATION OF PERMIT TRANSFER

Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of the City. Sale of a user shall obligate the purchaser to seek prior written approval of the City for continued discharge to the sewage system.

G-10. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subjected to civil penalties and relief.

G-11. MODIFICATION OR REVISION OF THE PERMIT

- a) The terms and conditions of this permit may be subject to modification by the City at any time as limitations or requirements as identified by the City's Ordinance, are modified or other just cause exists.
- b) This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.
- b) The terms and conditions may be modified as a result of EPA promulgating a new Federal pretreatment standard.

G-12. DUTY TO REAPPLY

Within ninety (90) days of the notification, the user shall reapply for reissuance of the permit on a form provided by the City.

G-13. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

SAMPLING and ANALYSES

S-1. SAMPLE METHODS

Wastewater discharge samples and analyses and flow measurements taken as required in this permit shall be representative of the volume and character of the permitted discharge. Sampling and analytical methods shall be in accordance with accepted National Environmental Laboratory Approval Program (NELAP) protocol. Contracted laboratories must be NELAP certified by the New York State Department of Health.

S-2. SAMPLING MANHOLE

The industrial user shall construct a sampling manhole if the Wastewater Treatment Plant Senior Operator, or the Director of Public Works, determines such sampling point is required.

S-3. SAMPLING – NOTIFICATION

The permittee shall notify the Wastewater Treatment Plant Senior Operator, at least one week prior to conducting self-monitoring for the purpose of taking wastewater discharge samples for analysis.

S-4. SAMPLE ANALYSES- REQUIREMENTS

The industrial user is required to monitor the parameters listed for each sample point.

SAMPLE POINT: Immediately after treatment

PARAMETER	DISCHARGE LIMITS	SAMPLE TYPE
pH	6.0-9.0	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
Oil and Grease	50 mg/l (Avg.DAILY MAXIMUM)	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
1,1,1-Trichloroethane	0.049 mg/l (DAILY MAXIMUM)	4 Grabs (TAKEN WITHIN 24 HOUR PERIOD)
Trichloroethylene	1.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Chromium (Hex)	1.5mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Copper (Total)	2.1 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Lead (Total)	5.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Nickel (Total)	0.9 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Zinc (Total)	3.5 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Cadmium (Total)	1.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Arsenic (Total)	0.02 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Silver (Total)	5.0 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
Mercury (Total)	0.05 mg/l (DAILY MAXIMUM)	24 Hour Composite (Flow based)
BOD ₅	250 mg/l	24 Hour Composite (Flow based)
TSS	250 mg/l	24 Hour Composite (Flow based)
Flow (GPD)	Monitor	24 Hr. Total

*Five (5) day Biochemical Oxygen Demand and Total Suspended Solids discharges greater than 250 mg/l shall be subject to review and approval by the WWTP Chief Operator or the Director of Public Works.

Other pollutants, as specified by the City, shall be sampled on a schedule determined by the City if said additional monitoring is deemed necessary by the City in order to assure compliance with City, State and Federal standards.

S-5 SAMPLE ANALYSES – REPORTING

The industrial user is required to submit to the City a self monitoring report on the analytical results of its sampling **May 15** and **October 15** of each year.

A statement shall be included in all monitoring reports pertaining to the protocols used during the sampling and/or analyses. A proper monitoring report shall contain the following information:

- Exact time and place of sample
- Dates of sample
- Dates analyses were performed
- Person performing sampling and/or analyses
- Analytical techniques or methods used
- Analytical results including proper units
- A map indicating sampling location
- Chain of Custody Log

If sampling by the industrial user indicates a violation, the user must notify the City within 24 hours of becoming aware of the violation. The industrial user must also resample and submit results of this resampling to the City within thirty (30) days.

INSPECTION

I-1. RIGHT OF ENTRY

The industrial user shall, after reasonable notification by the City, allow the City or its representative, exhibiting proper credentials and identification, to enter upon the premises of the user, at all reasonable hours, for the purposes of inspection, sampling, or records inspection. Reasonable hours in the context of inspection and sampling includes any time the industrial user is operating any process which results in a process wastewater discharge to the City's sewage system.

I-2. RECORDS RETENTION

- a) The industrial user shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or in behalf of the user in connection with its discharge.
- c) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City shall be retained and preserved by the industrial user until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

COMPLIANCE

C-1. CITY ORDINANCE

The industrial user shall comply with all the general discharge standards of the City Sewer Use Ordinance (Chapter 27, City Code).

C-2. COMPLIANCE SCHEDULE

In order to meet the wastewater discharge limitations specified elsewhere in this permit, the industrial user may be required to make in-plant process modifications and install a treatment facility. The following construction schedule, if applicable, shall be adhered to and reports on progress shall be submitted to the City, as outlined below:

TASK	COMPLIANCE DATE	APPLICABILITY
Submit baseline monitoring report	NA	Not Applicable at time of issue
Investigate in-plant process modifications and treatment options.	NA	Not Applicable at time of issue
Complete preliminary engineering	NA	Not Applicable at time of issue
Go out to bid	NA	Not Applicable at time of issue
Secure equipment and begin construction	NA	Not Applicable at time of issue
Complete installation	NA	Not Applicable at time of issue
Pretreatment system start-up	NA	Not Applicable at time of issue
Achieve final compliance	NA	Not Applicable at time of issue

C-3. PROGRESS REPORT

Not later than fourteen (14) days following each date in the compliance schedule, the industrial user shall submit a progress report to the City. This report must indicate whether or not the increment of progress was met on the date, the reason(s) for any delay, and what steps are being taken by the user to return to the schedule established. In no event shall more than nine (9) months elapse between such progress reports to the City.

C-4. FINAL COMPLIANCE REPORT

Within 90 days following the final compliance date, the industrial user shall submit a final compliance report. The industrial user will be required to sample its wastewater for the pollutants specified in S-4, and report compliance. Any reasons for not complying and any steps being taken by the user to comply shall be part of the report.

C-5. PRETREATMENT FAILURE

Any upset experienced by the industrial user of its treatment that places it in a temporary state of non-compliance with wastewater discharge limitations contained in this permit or other limitations specified in the City's Ordinance shall be reported to the City within 24 hours of first awareness of the commencement of the upset. A detailed report shall be filed within 5 days. Additionally any violation for any reason, including but not limited to routine monitoring shall be reported within 24 hours of violation detection and the permittee must conduct resampling within 30 days.

C-6. CIVIL AND CRIMINAL PENALTIES

By resolution the Common Council has adopted an Enforcement Response Plan which was previously mailed to permit holders on March 28, 1990 and which is made part of this permit by reference.

Any industrial user who fails to comply with any provisions of the City of Olean sewer use ordinance or this permit may be liable to monetary forfeitures. Fines for significant noncompliance shall be \$1,000.00 per day. The continued violation of any provision shall constitute a separate offense for each and every day such violation shall continue.

The City may hold hearings regarding violations and depending upon the outcome of the

7
hearings the director may revoke or suspend the industrial user's permit to discharge.

C-7. SIGNIFICANT NONCOMPLIANCE

Significant noncompliance involving discharge violations will be calculated on the basis of "rolling quarters". Significant noncompliance shall be based upon data for the previous six (6) months. Quarters shall end on March 31, June 30, September 30 and December 31 of each calendar year.

Significant noncompliance means any violation or group of violations that meets one or more of the following criteria:

- Chronic violations of wastewater discharge limits, defined here as those in which sixty-six (66) percent or more of all of the measurements taken for the same pollutant parameter during a six (6) month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l);
- Technical Review Criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
- Any other violation of a pretreatment effluent limit (daily maximum or longer-term average, instantaneous limit, or narrative standard) that the City of Olean determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of Wastewater Treatment Plant personnel or the general public);
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the Wastewater Treatment Plant's exercise of its emergency authority to halt or prevent any such discharge;
- Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
- Failure to provide, within thirty (30) days after the due date, required report such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- Failure to accurately report noncompliance;
- Any other violation or group of violations, which may include a violation of Best Management Practices, which the City of Olean determines will adversely affect the operation or implementation of the City's pretreatment program.



ANALYTICAL REPORT

Lab Number:	L1948168
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Ray Laport
Phone:	(716) 856-0599
Project Name:	229 HOMER STREET
Project Number:	T0311-018-001
Report Date:	10/21/19

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1948168-01	DISCHARGE	WATER	Not Specified	10/14/19 15:00	10/15/19

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Case Narrative

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

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

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

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

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

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

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Case Narrative (continued)

Report Submission

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

Sample Receipt

The analyses performed were specified by the client.

Hexavalent Chromium

L1948168-01 was analyzed with the method required holding time exceeded.

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

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 10/21/19

ORGANICS

VOLATILES

Project Name: 229 HOMER STREET**Lab Number:** L1948168**Project Number:** T0311-018-001**Report Date:** 10/21/19**SAMPLE RESULTS**

Lab ID: L1948168-01

Date Collected: 10/14/19 15:00

Client ID: DISCHARGE

Date Received: 10/15/19

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 10/19/19 09:45

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 229 HOMER STREET**Lab Number:** L1948168**Project Number:** T0311-018-001**Report Date:** 10/21/19**SAMPLE RESULTS****Lab ID:** L1948168-01**Date Collected:** 10/14/19 15:00**Client ID:** DISCHARGE**Date Received:** 10/15/19**Sample Location:** Not Specified**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.1		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	102		70-130

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 10/19/19 09:23
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1298691-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 10/19/19 09:23
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1298691-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/19 09:23
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1298691-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1298691-3 WG1298691-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	120		110		70-130	9		20
Chloroform	100		97		70-130	3		20
Carbon tetrachloride	86		79		63-132	8		20
1,2-Dichloropropane	120		100		70-130	18		20
Dibromochloromethane	96		92		63-130	4		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		96		70-130	4		20
Chlorobenzene	100		97		75-130	3		20
Trichlorofluoromethane	85		79		62-150	7		20
1,2-Dichloroethane	99		94		70-130	5		20
1,1,1-Trichloroethane	96		89		67-130	8		20
Bromodichloromethane	95		90		67-130	5		20
trans-1,3-Dichloropropene	93		90		70-130	3		20
cis-1,3-Dichloropropene	94		90		70-130	4		20
Bromoform	98		95		54-136	3		20
1,1,2,2-Tetrachloroethane	110		100		67-130	10		20
Benzene	110		98		70-130	12		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		97		70-130	3		20
Chloromethane	120		110		64-130	9		20
Bromomethane	38	Q	38	Q	39-139	0		20
Vinyl chloride	120		110		55-140	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1298691-3 WG1298691-4								
Chloroethane	110		88		55-138	22	Q	20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Trichloroethene	100		90		70-130	11		20
1,2-Dichlorobenzene	100		97		70-130	3		20
1,3-Dichlorobenzene	110		98		70-130	12		20
1,4-Dichlorobenzene	100		97		70-130	3		20
Methyl tert butyl ether	89		88		63-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		95		70-130	10		20
cis-1,2-Dichloroethene	120		110		70-130	9		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	95		88		36-147	8		20
Acetone	110		120		58-148	9		20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	100		120		63-138	18		20
4-Methyl-2-pentanone	98		100		59-130	2		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		98		70-130	2		20
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Isopropylbenzene	100		95		70-130	5		20
1,2,3-Trichlorobenzene	96		93		70-130	3		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1298691-3 WG1298691-4								
1,2,4-Trichlorobenzene	94		88		70-130	7		20
Methyl Acetate	130		130		70-130	0		20
Cyclohexane	110		100		70-130	10		20
1,4-Dioxane	134		128		56-162	5		20
Freon-113	100		94		70-130	6		20
Methyl cyclohexane	94		89		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	88		93		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	93		91		70-130
Dibromofluoromethane	105		105		70-130

METALS

Project Name: 229 HOMER STREET**Lab Number:** L1948168**Project Number:** T0311-018-001**Report Date:** 10/21/19**SAMPLE RESULTS**

Lab ID: L1948168-01

Date Collected: 10/14/19 15:00

Client ID: DISCHARGE

Date Received: 10/15/19

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.02262		mg/l	0.00050	0.00016	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Calcium, Total	173.		mg/l	0.100	0.0394	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Chromium, Total	0.00616		mg/l	0.00100	0.00017	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Copper, Total	0.1438		mg/l	0.00100	0.00038	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Lead, Total	0.02086		mg/l	0.00100	0.00034	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/18/19 12:18	10/18/19 18:12	EPA 7470A	1,7470A	AL
Nickel, Total	0.04379		mg/l	0.00200	0.00055	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM
Zinc, Total	1.048		mg/l	0.01000	0.00341	1	10/18/19 16:48	10/21/19 12:26	EPA 3005A	1,6020B	AM



Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1297953-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/18/19 12:18	10/18/19 17:58	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1298045-1										
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/18/19 16:48	10/21/19 11:54	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1297953-2								
Mercury, Total	84		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1298045-2								
Arsenic, Total	102		-		80-120	-		
Calcium, Total	102		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	92		-		80-120	-		
Lead, Total	106		-		80-120	-		
Nickel, Total	95		-		80-120	-		
Silver, Total	96		-		80-120	-		
Zinc, Total	100		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1297953-3 WG1297953-4 QC Sample: L1948207-02 Client ID: MS Sample												
Mercury, Total	0.01548	0.005	0.02000	90		0.02200	130	Q	75-125	10		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1298045-3 WG1298045-4 QC Sample: L1948207-02 Client ID: MS Sample												
Arsenic, Total	0.01604	0.12	0.1400	103		0.1499	112		75-125	7		20
Calcium, Total	45.9	10	58.2	123		58.1	122		75-125	0		20
Chromium, Total	0.00203	0.2	0.2056	102		0.2036	101		75-125	1		20
Copper, Total	0.04230	0.25	0.2898	99		0.2926	100		75-125	1		20
Lead, Total	0.03820	0.51	0.6046	111		0.6065	111		75-125	0		20
Nickel, Total	0.01246	0.5	0.5297	103		0.5176	101		75-125	2		20
Silver, Total	ND	0.05	0.04945	99		0.04930	99		75-125	0		20
Zinc, Total	0.04308	0.5	0.5797	107		0.5742	106		75-125	1		20

INORGANICS & MISCELLANEOUS

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

SAMPLE RESULTS

Lab ID: L1948168-01

Client ID: DISCHARGE

Sample Location: Not Specified

Date Collected: 10/14/19 15:00

Date Received: 10/15/19

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	430		mg/l	10	NA	10	-	10/16/19 19:40	121,2540D	CW
Cyanide, Total	ND		mg/l	0.005	0.001	1	10/16/19 13:00	10/16/19 16:31	1,9010C/9012B	JO
pH (H)	7.6		SU	-	NA	1	-	10/16/19 06:40	121,4500H+-B	JA
BOD, 5 day	7.8		mg/l	5.0	NA	2.5	10/16/19 06:30	10/21/19 10:30	121,5210B	TE
Oil & Grease, Hem-Grav	0.93	J	mg/l	2.2	0.51	1.1	10/17/19 11:15	10/17/19 12:00	74,1664A	JO
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	10/16/19 06:00	10/16/19 06:21	121,3500CR-B	JA



Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1296739-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	10/16/19 06:00	10/16/19 06:20	121,3500CR-B	JA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1296776-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	10/16/19 06:30	10/21/19 10:30	121,5210B	TE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1296791-1										
Solids, Total Suspended	ND		mg/l	1.0	NA	1	-	10/16/19 19:40	121,2540D	CW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1296929-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	10/16/19 13:00	10/16/19 16:18	1,9010C/9012B	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1297364-1										
Oil & Grease, Hem-Grav	0.50	J	mg/l	2.0	0.46	1	10/17/19 11:15	10/17/19 12:00	74,1664A	JO



Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1296739-2								
Chromium, Hexavalent	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1296743-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1296776-2								
BOD, 5 day	91		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1296929-2 WG1296929-3								
Cyanide, Total	95		92		85-115	3		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1297364-2								
Oil & Grease, Hem-Grav	84		-		78-114	-		18

Matrix Spike Analysis Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1296739-4 QC Sample: L1948168-01 Client ID: DISCHARGE												
Chromium, Hexavalent	ND	0.1	0.105	105		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1296776-4 QC Sample: L1948168-01 Client ID: DISCHARGE												
BOD, 5 day	7.8	100	110	102		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1296929-4 WG1296929-5 QC Sample: L1948185-01 Client ID: MS Sample												
Cyanide, Total	0.001J	0.2	0.072	36	Q	0.185	92		80-120	87	Q	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1297364-3 QC Sample: L1947810-01 Client ID: MS Sample												
Oil & Grease, Hem-Grav	16	40	37	53	Q	-	-		78-114	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: 229 HOMER STREET

Project Number: T0311-018-001

Lab Number: L1948168

Report Date: 10/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1296739-3	QC Sample: L1948168-01	Client ID: DISCHARGE		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1296743-2	QC Sample: L1948272-01	Client ID: DUP Sample		
pH	8.1	8.0	SU	1		5
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1296776-3	QC Sample: L1948168-01	Client ID: DISCHARGE		
BOD, 5 day	7.8	9.1	mg/l	15		35
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1296791-2	QC Sample: L1947382-01	Client ID: DUP Sample		
Solids, Total Suspended	80.	79	mg/l	1		29
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1297364-4	QC Sample: L1948168-01	Client ID: DISCHARGE		
Oil & Grease, Hem-Grav	0.93J	1.3J	mg/l	NC		18

Project Name: 229 HOMER STREET**Lab Number:** L1948168**Project Number:** T0311-018-001**Report Date:** 10/21/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1948168-01A	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260-R2(14)
L1948168-01B	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260-R2(14)
L1948168-01C	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260-R2(14)
L1948168-01D	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		CA-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),AS-6020T(180),AG-6020T(180),HG-T(28)
L1948168-01E	Plastic 250ml NaOH preserved	A	>12	>12	5.0	Y	Absent		TCN-9010(14)
L1948168-01F	Plastic 950ml unpreserved	A	7	7	5.0	Y	Absent		HEXCR-3500(1),PH-4500(.01),BOD-5210(2)
L1948168-01G	Plastic 950ml unpreserved	A	7	7	5.0	Y	Absent		TSS-2540-LOW(7)
L1948168-01H	Amber 1000ml HCl preserved	A	NA		5.0	Y	Absent		NY-OG-1664-LOW(28)
L1948168-01I	Amber 1000ml HCl preserved	A	NA		5.0	Y	Absent		NY-OG-1664-LOW(28)

Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

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

Terms

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: 229 HOMER STREET
Project Number: T0311-018-001

Lab Number: L1948168
Report Date: 10/21/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 15

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Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

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

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

[illegible]

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