Periodic Review Report

251 HOMER STREET REDEVELOPMENT SITE
NYSDEC SITE NUMBER C905037
OLEAN, NEW YORK

May 2020
Revised July 2020

0362-019-001

Prepared For:

Olean Solar Land LLC
&
Homeridae LLC

Prepared By:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York 14218 | phone: (716) 856-0599 | fax: (716) 856-0583

PERIODIC REVIEW REPORT

251 HOMER STREET REDEVELOPMENT SITE
BCP SITE NO. C905037

OLEAN, NEW YORK

May 2020
Revised July 2020

0362-019-001

Prepared for:

Olean Solar Land LLC
&
Homeridae LLC

Prepared By:

Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0599

:

PERIODIC REVIEW REPORT

251 Homer Street Redevelopment Site

Table of Contents

PERIODIC REVIEW REPORT
251 Homer Street Redevelopment Site
Table of Contents

FIGURES

TABLES

APPENDICIES

1.0 INTRODUCTION

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) on behalf of Olean Solar Land LLC (Owner) and Homeridae LLC (Lessee) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C905037, 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 completed for the Site is included as Appendix A.

This PRR has been completed for the post-remedial activities at the Site for the period from April 16, 2019 to April 16, 2020. The annual Site inspection was completed by Benchmark on March 10, 2020.

1.1 Site Background

The 251 Homer Street Redevelopment Site was formerly part of the Socony-Vacuum Oil Company Refinery. The property and surrounding area operated as an oil refinery under several different entities between the 1880s and 1950s. Vacuum Oil merged with the Standard Oil Company, Inc. and in 1934 changed its name to Socony-Vacuum Oil Company (Socony); Socony operated until approximately 1954. These companies were predecessors of ExxonMobil Oil Corporation. The Socony refinery was divided into three sections and the #3 Works was the area where most of the refining took place. The 115-acre refinery was purchased by Mr. CJ Simpson in 1954 and ultimately became the Swan Finch Oil Company Olean Industries, which used the refinery tanks for storage of grain. In 1958, Swan Finch declared bankruptcy and in 1964 sold the facility to Felmont Oil, who subsequently removed the old refinery tanks and buildings. Felmont Oil sold the property to the County of Cattaraugus IDA in 1981, who in turn sold it to Benson Construction and Development, LLC (Benson) in 2005.

Benson entered into a Brownfield Cleanup Agreement (BCA) (BCP Site No. C905037) with the NYSDEC on April 20, 2010 to investigate and remediate the approximate 16.68-acre property comprised of one tax parcel identified as 251 Homer Street (SBL#94.032-1-2.11) located in the City of Olean, Cattaraugus County, New York and referred to as the 251 Homer

Street Redevelopment Site (see Figure 1). On July 3, 2014, Homer Street Properties, LLC submitted a BCP application amendment to be added as an additional Applicant (Volunteer) to the existing BCA. On August 30, 2016, Olean Solar Land LLC (as future property owner) and Homeridae LLC (as future lessee) submitted a BCP application amendment to be added as additional applicants (volunteers) to the existing BCA. A 60-day Advance Notification of Change in Ownership was submitted September 1, 2016 to notify the NYSDEC that Olean Solar Land LLC will be the new property owner. Homer Street Properties, LLC/Benson Construction and Development, LLC sold the property to Olean Solar Land LLC on June 28, 2018. A post-transfer of property notice was submitted to NYSDEC on July 12, 2018. Since both parties were named as volunteers on the BCA prior to the sale, no Certificate of Completion (COC) transfer was necessary.

The Site was subdivided per approval by the City of Olean Common Council on December 22, 2015. The subdivision lot lines were amended as approved by the Common Council on November 22, 2016. The Site parcel was divided on the tax maps after the sale took place in June 2018. The original parcel had tax map ID (94.032-1-2.11) was split into two parcels (94.032-1-2.11 and 94.032-1-2.12); however, the overall Site boundaries did not change. Figure 2 shows the two parcels addressed as 231 and 251 Homer Street. The May 2019 PRR includes documentation pertaining to subdivision of the Site.

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 16.68-acre 251 Homer Street Redevelopment Site is bounded by residential properties across Homer Street to the northwest; the Southern Tier Expressway I-86 to the southeast; and industrial/commercial properties to the northeast and southwest. The Site was undeveloped until construction began in August 2018.

The owner of the Site at the time of SMP approval was Benson Construction and Development, LLC and Homer Street Properties, LLC. Currently, Olean Solar Land LLC and Homeridae LLC retain the status and rights as COC holders.

An interim remedial measure (IRM) was performed in accordance with the NYSDEC-approved IRM Work Plan (Ref. 2) between October 2012 and February 2013. An additional IRM was performed in accordance with the NYSDEC-approved Additional IRM Work Plan (Ref. 3) between September 2014 and March 2015. Additional test excavations were completed in the vicinity of Two Mile Creek between January and October 2015, followed by submittal of a Supplemental IRM Work Plan to NYSDEC on November 19, 2015 (Ref. 4). The NYSDEC approved the Supplemental IRM Work Plan on February 23, 2016 and the remedial work was completed in March and April 2016. The Site was remediated to NYSDEC Part 375 Track 4 Commercial soil cleanup objectives (CSCOs) and site-specific action limits (SSALs) for use in a commercial redevelopment capacity. The Site Management Plan (SMP; Ref. 5) and Final Engineering Report (FER; Ref. 6) were approved by the Department in November 2, 2016 and December 16, 2016. The COC was recorded on December 20, 2016. Figure 2 is an aerial view of the Site following remediation. Remedial activities are described in the following sections.

2.1 2012/2013 Interim Remedial Measures (IRM)

During the RI and Supplemental RI, abandoned subsurface piping was observed in several test pits and test trenches across the Site. Certain pipes were tapped and sampled; piping contents consisted of water with traces of oil or heavier oil product. Waste characterization samples were collected from water, pipe scale, and oil within certain pipes.

In accordance with the NYSDEC-approved IRM Work Plan, IRM field activities were conducted October 29, 2012 through February 7, 2013. The IRM activities are fully described in the February 26, 2013 IRM Closeout Report (Ref. 7) and summarized below:

- Approximately 10,644 linear feet of piping ranging in diameter from 2" to 12" was removed and recycled as scrap (approximately 97 tons) at Gateway Materials in Cheektowaga, NY.
- A total of 51, 55-gallon drums containing oil, sludge, and scale from within the pipes were disposed at CWM Chemical Services in Model City, NY.
- Approximately 21,000 gallons of water from within the pipes and perched water encountered during trench excavation was treated with a bag filter and granular activated carbon then discharged to the Olean Publicly Owned Treatment Works (POTW) under a temporary discharge permit issued by the City of Olean Wastewater Treatment Plant.
- Piping that extended to a property boundary was drained to the extent practicable, cut, and capped at the property boundary.

2.2 2014/2015 Additional IRM

An Additional IRM Work Plan was submitted to the NYSDEC in July 2014 (Ref. 3) to excavate and dispose off-site the grossly contaminated soil (GCS) present within the areas described below. The following excavation work was conducted between September 29, 2014 and March 12, 2015:

- **GCS Area 1**: Excavation within the central portion of the Site measured approximately 3.79 acres with depths ranging from 5 to 14 feet below ground surface (fbgs). Approximately 45,775 tons of GCS were removed and disposed at the Chaffee Landfill. During the IRM piping removal in 2012/2013, GCS was identified near groundwater monitoring well MW-12. Excavation of the "MW-12 GCS Area" extended to the property boundary; a total of 270 tons of GCS were removed and disposed at the Chaffee Landfill. Therefore, approximately 46,045 tons of GCS was removed from these areas.
- **GCS Area 2**: Excavation in September/October 2014 proximate to monitoring well MW-8 measured approximately 11,600 square feet with depths ranging from 6 to 11 fbgs. A total of 3,263 tons of GCS was removed and disposed at the Chaffee Landfill. A small seam (6- to 12-inches thick) of GCS remained along the eastern border of Area 2 due to the proximity of the Two Mile Creek bank. On January 20, 2015, the extent of remaining GCS was further evaluated by excavating two test pits (TP-A & TP-C) between the eastern boundary of Area 2 and Two Mile Creek; no GCS was observed in those test pits. Therefore, the small seam of GCS previously left along the eastern border of Area 2 was removed in January and February 2015.

- **GCS Area 3**: During the IRM piping removal in 2012/2013, GCS was identified along the northeastern property boundary south of test pit TP-60. The excavation extended partially off-site and measured approximately 1,800 square feet with depths ranging from 4 to 5 fbgs. A total of 361 tons of GCS was removed and disposed at the Chaffee Landfill.

The areas were backfilled with clean imported Beneficial Use Determination (BUD)-approved soil or soil meeting the requirements of 6NYCRR Part 375 USCOs over the demarcation layer. Approximately 250,000 gallons of water encountered during IRM excavation activities were treated on-site and discharged under a temporary discharge permit issued by the City of Olean Wastewater Treatment Plant. The on-site drainage ditch was converted to a closed 30-inch subsurface drainage pipe as discussed with NYSDEC.

2.3 Additional Test Pit Excavations

On January 20, 2015, two test pits west (TP-A and TP-C) and three test pits east (TP-B, TP-D, & TP-E) of Two Mile Creek were excavated and samples were collected for analytical testing to evaluate the potential for Site soil/fill to impact the creek. All results were below CSCOs and no GCS was observed in any of the test pits.

On March 27, 2015, at the request of the NYSDEC, one test pit (TP-RR01) was excavated near switch gear/signal boxes for the railroad tracks to determine if other electrical equipment (e.g., transformers) may have been historically located nearby. Arsenic was the only constituent detected at a concentration (22.1 mg/kg) slightly above its CSCO.

In October 2015, at the request of NYSDEC and with NYSDEC personnel present, nine additional test pits (TP-F through TP-N) were excavated along the lower approximate 350-foot segment of Two Mile Creek near the culvert under Interstate Route I-86 to evaluate whether impacted soil was present along the creek banks based on field observations and/or analytical data. Four near-surface soil samples were also collected from 0-1 fbgs along the creek banks. As summarized on Table 14 of the RI/IRM/AA Report, the vast majority of soil results from test pits TP-A through TP-N and the near-surface samples were below Commercial and Protection of Ecological Resources (PER) SCOs, with minor exception of two PAHs and certain metals above their respective PER and/or CSCOs. Only two test pits (TP-F and TP-I) and one near-surface sample (SS-CA1) slightly exceeded the CSCOs. The only PAHs slightly above CSCOs were benzo(a)pyrene (1.9 mg/kg; CSCO=1.0 mg/kg) and dibenz(a,h)anthracene (0.62 mg/kg; CSCO=0.56 mg/kg). Arsenic (17 and 20 mg/kg) was the

only metal to exceed its CSCO (16 mg/kg). Field evidence of impact within the test pits completed in the lower (southern) approximate 200 feet of Two Mile Creek included sheen on water and/or strong petroleum-like odors.

2.4 2016 Supplemental IRM – Two Mile Creek (Area 5)

Upon completion of the additional test pits and sampling adjacent to Two Mile Creek, TurnKey and Homer Street Properties representatives met with NYSDEC on November 5, 2015 to discuss the results and a proposed remedy to address apparent petroleum impacts near Two Mile Creek.

2.4.1 On-Site Work

A Supplemental IRM Work Plan was submitted to NYSDEC on November 19, 2015 to supplement previously completed IRMs and immediately address known environmental impacts adjacent to the lower approximate 200-foot segment of Two Mile Creek. Based on comments received from NYSDEC, TurnKey revised and resubmitted the Work Plan on February 4, 2016; NYSDEC approved the Work Plan on February 23, 2016.

As part of the Work Plan, a Joint Application Form was submitted for the United States Army Corps of Engineers (USACE) Nationwide Permit 38 and NYSDEC 401 Water Quality Certification. In a letter dated December 8, 2015, NYSDEC indicated that no Department permit was identified for the proposed remedial work and affirmed that the Department grants the Section 401 Water Quality Certification to Homer Street Properties. On March 16, 2016, Homer Street Properties, LLC received the Nationwide Permit 38 from USACE. The following remedial work was conducted on-site March 30 to April 20, 2016:

- Earthen dams supported by metal plates were constructed upstream and downstream of the work area. Two trash pumps (6" and 8") were used to convey water upstream of the dam around the excavation area for discharge downstream of the second dam.
- Approximately 3,099 tons of material were excavated from the Creek bed and banks and disposed at the Waste Management Chaffee Landfill. Excavation proceeded to native clay, with an average depth of 6.5 fbgs.
- Filter fabric was placed on the excavated face and serves as demarcation material.
- A total of 593 tons of gravel aggregate (3"-4") was placed in a 12-inch layer along the Creek bed and up each bank to the ordinary high-water mark (OHWM).

- Approximately 279 tons of clean soil; 1,764 tons of clay soil; and 228 tons of topsoil were used to backfill the Creek bed and banks. A minimum 1-foot thick layer of the clay soil was placed along the outer extent of the Creek area IRM excavation adjacent to the native soil to prevent migration of residual impacts toward the Creek.
- The soil/topsoil bank area was hydroseeded with a "low grow" seed mix.
- A biodegradable straw erosion control blanket manufactured by Tensar International Corporation (BioNet S150BN) was placed, anchored, and staked.

Between April 27 and 28, 2016, a mixture of riparian shrubs (e.g., buttonbush, hybrid poplar, willow, red oak, and white spruce) were planted through the erosion control blanket on 3-foot centers.

2.4.2 Off-Site Work

On March 29, 2016, TurnKey received approval from ExxonMobil to remediate and restore the off-site portion of Two Mile Creek located in the Department of Transportation (DOT) right-of-way. On behalf of Homer Street Properties, TurnKey prepared the DOT Highway Work Permit Application for Non-Utility Work (PERM 33) and submitted the application package on March 31, 2016 to the DOT Cattaraugus County Residency. The DOT permit was received on April 13, 2016 and expired October 31, 2016.

The following off-site remedial work was performed in accordance with the NYSDEC-approved Supplemental IRM Work Plan:

- Approximately 973 tons of material was excavated from the creek bed and banks and disposed at the Chaffee Landfill. Excavation proceeded to native clay, with an average depth of 6.5 fbgs.
- Filter fabric was placed on the excavated face and serves as demarcation material.
- A total of 197 tons of gravel aggregate (3"-4") was placed in a 12-inch layer along the creek bed and up each bank to the ordinary high water mark (OHWM).
- Approximately 588 tons of clay soil and 76 tons of topsoil was used to backfill the creek bed and banks. A minimum one-foot thick layer of the clay soil was placed along the outer extent of the creek area IRM excavation adjacent to the native soil to prevent migration of residual impacts toward the creek.
- The soil/topsoil bank area was hydroseeded with a "low grow" seed mix.

- A biodegradable straw erosion control blanket manufactured by Tensar International Corporation (BioNet S150BN) was placed, anchored, and staked.

Between April 27 and 28, 2016, a mixture of riparian shrubs (e.g., buttonbush, hybrid poplar, willow, red oak, and white spruce) were planted through the erosion control blanket on 3-foot centers.

2.5 Site Redevelopment Activities

The Site remained undeveloped until August 2018 when construction of the on-site solar electric generation facility began. Construction continued through the end of the reporting period. The work was conducted in accordance with the July 18, 2018 Homeridae Solar Facility Development Plan (Ref. 8). The City of Olean issued a building permit for installation of the 4.093 MW ground mounted solar photovoltaic (PV) system on June 25, 2018. NYSDEC issued an Acknowledgement of Notice of Intent under SPDES (NYR11D898) on July 5, 2018. NYS Department of State issued a Certificate of Conformance for the Brownfield Opportunity Area (BOA) on August 27, 2018. The project involved redevelopment of approximately 15.29 acres of the total 16.68 acres. The solar facility includes 11,808 solar modules and associated infrastructure for in-feed to the nearby National Grid commercial electrical systems (grid).

In accordance with the July 2018 Homeridae Solar Facility Development Plan, a soil cover survey was completed in October 2018 to compare subgrade elevations made prior to cover placement. Based on that survey, the area between the billboard and the equipment pad required additional cover soil (see Figure 2).

2.5.1 Current Status

The solar facility became operational the week of May 13, 2019. On August 20, 2019, the Department approved a request to import soil from Peck's Construction Yard in Allegany, NY for the cover system restoration. Benchmark placed the soil in the fall 2019. On April 17, 2020, Benchmark measured the cover soil thickness to verify a minimum of 12 inches; however, several areas did not meet the 12-inch requirement. Therefore, additional soil was placed April 30 and May 1, 2020. On May 4, 2020, Benchmark confirmed a 12-inch thickness in all areas as shown on Figure 5.

3.0 SITE MANAGEMENT PLAN

The SMP was approved by the Department on November 2, 2016. The SMP includes an IC/EC Plan, a Monitoring and Sampling Plan and 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 controlled property 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 buildings on-site and, as such, no sub-slab depressurization system exists.
- Groundwater Monitoring: Groundwater monitoring was completed in June and December 2019.
- Cover System: The cover system was disturbed during installation of the solar panels and infrastructure and requires repair/restoration. The EWP, included as Appendix B to the SMP, provides guidelines for the management of soil and fill material during intrusive actives. The EWP was followed during installation of the solar facility infrastructure.

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 except for required cover system repair discussed in Section 2.5.1. 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
- 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 June 27 and December 13, 2019 at wells MW-1, MW-6R, MW-7, MW-8R, MW-10, MW-12R and MW-14. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) and tentatively identified compounds (TICs) using USEPA Method 8260; semi-VOCs and TICs via USEPA Method 8270; and arsenic and lead using USEPA Method 6010. Appendix C includes field notes and analytical data packages for this sampling event. Table 1 summarizes current and historic groundwater elevations. Table 2 summarizes the analytical results as well as historic groundwater quality data. The wells noted with an "R" are replacement wells as the original well was removed during remediation. For the replacement wells, trends in groundwater quality predating the replacement well installation are not considered reliable even though the wells are close to the original well location. As such, the only wells where trends in groundwater quality are discussed are MW-1, MW-7, MW-10 and MW-14.

3.2.1.1 Groundwater Elevations

Figures 3 (June 2019) and 4 (December 2019) are isopotential maps prepared using the groundwater elevations from Table 1. Overall groundwater flow direction in the uppermost sand and gravel aquifer is toward the southeast, consistent with the prior groundwater contour maps. This indicates that wells MW-8R and MW-14 are upgradient wells, and wells MW-7, MW-6R, MW-12R, MW-10, and MW-1 are downgradient wells.

3.2.1.2 Field Observations

As indicated on the field forms in Appendix C, a thin layer of product was observed on the water in well MW-6R during the June and December 2019 sampling events. In both cases, Benchmark's sampler used a bailer to extract groundwater and the product was on the outside of the bailer. The sampler used an absorbent pad to remove the product from the

bailer before extracting more groundwater. Eventually, no more product was visible on the bailer. An absorbent sock was placed in the well for a few hours, and the well was sampled once all oil had been removed.

3.2.1.3 Analytical Data

VOCs

The June and December 2019 groundwater concentrations indicate only one exceedance of the NYSDEC Class GA groundwater quality standards/guidance values (GWQS/GVs), which occurred at well MW-12R. The concentration of 1,2,4-trimethylbenzene (7.9 ug/L) slightly exceeded the GWQS of 5 ug/L during the June 2019 sampling event but was non-detect in December 2019. VOC TIC concentrations decreased in wells MW-1, MW-6R, MW-7, and MW-12, while well MW-8R showed an increase in the June 2019 result followed by a non-detect result in December 2019.

SVOCs

The June and December 2019 groundwater concentrations indicate all SVOCs were either not detected or detected below the NYSDEC Class GA GWQS/GVs. SVOC TIC concentrations increased in all wells from the June 2019 to December 2019 sampling events.

Metals

The concentration of lead in well MW-7 (41 ug/L) exceeded its GWQS 25 ug/L) in June 2019 but was not detected in December 2019. There were no other exceedances of GWQS/GVs for lead during the June or December 2019 sampling events. Arsenic concentrations above the GWQS (25 ug/L) ranged between 27 and 67 ug/L during the June and December 2019 sampling events at wells MW-1, MW-6R, MW-7, MW-12R and MW-14. However, these concentrations decreased when compared to the June 2018 data at all wells except MW-1.

3.2.2 Site-Wide Inspection - Cover System Monitoring

The existing cover system is comprised of a minimum of 12 inches of clean soil (vegetated to prevent erosion) and 12 inches of gravel/stone for the access roads. 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. If frequent areas of distress are noted, they will be repaired based on the following conditions.

If the type of cover system changes from that which exists (i.e., a soil 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. The key maintenance concerns and corrective actions are provided below:

- Vegetative Soil Cover Monitoring
  - *Areas where erosion problems (i.e., rills or gullies) are observed will be repaired by re-grading the localized area, adding the required fill material and/or topsoil, and reseeding/replanting.*
  - *If burrowing animals are observed breaching the soil cover, as evidenced by exposed fill material, they will be eradicated by a licensed exterminator.*
- Gravel/Stone Cover Monitoring
  - *Ruts or erosion along the access roads will be repaired by re-grading the localized area and adding additional material.*

At the time of the Site inspection several areas showed the grass cover between solar panel rows was underwater. As discussed in Section 2.5.1, cover system repairs were completed. Re-seeding activities are planned when weather permits and will be performed in accordance with the 2018 Homeridae Solar Facility Development Plan. The gravel/stone access roads are in good condition. Appendix B includes a photographic log showing the constructed solar facility, vegetated soil cover system, and general Site conditions at the time of the inspection.

3.3 O&M Plan

The Site remedy does not rely on any mechanical systems (e.g., sub-slab depressurization systems, groundwater pump and treat, or soil vapor extraction systems) to

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on our observation during the March 11 and May 4, 2020 inspections, the Site covered by this PRR was fully compliant with the IC/EC requirements except for establishment of grass in the cover system restoration area.

Long-term groundwater monitoring indicates improvement to the groundwater quality for VOCs, SVOCs, and arsenic and lead; however, a small amount of product was present in downgradient well MW-6R during both sampling events. The next groundwater monitoring is planned for June 2020.

4.2 Recommendations

The SMP states that semi-annual sampling will be conducted for a minimum of two years with the frequency thereafter to be determined. Five sampling events have been conducted since June 2017 and based on the results of the 2019 groundwater sampling, we respectfully request that the frequency of sampling be decreased to annually, with sampling events occurring each June. Benchmark will begin checking for the presence of product in well MW-6R monthly. During the summer 2020, Benchmark will confirm establishment of grass in the cover system restoration area.

5.0 DECLARATION/LIMITATION

Benchmark Environmental Engineering & Science, PLLC, personnel conducted the annual site inspection for Brownfield Cleanup Program Site No. C905037, 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.

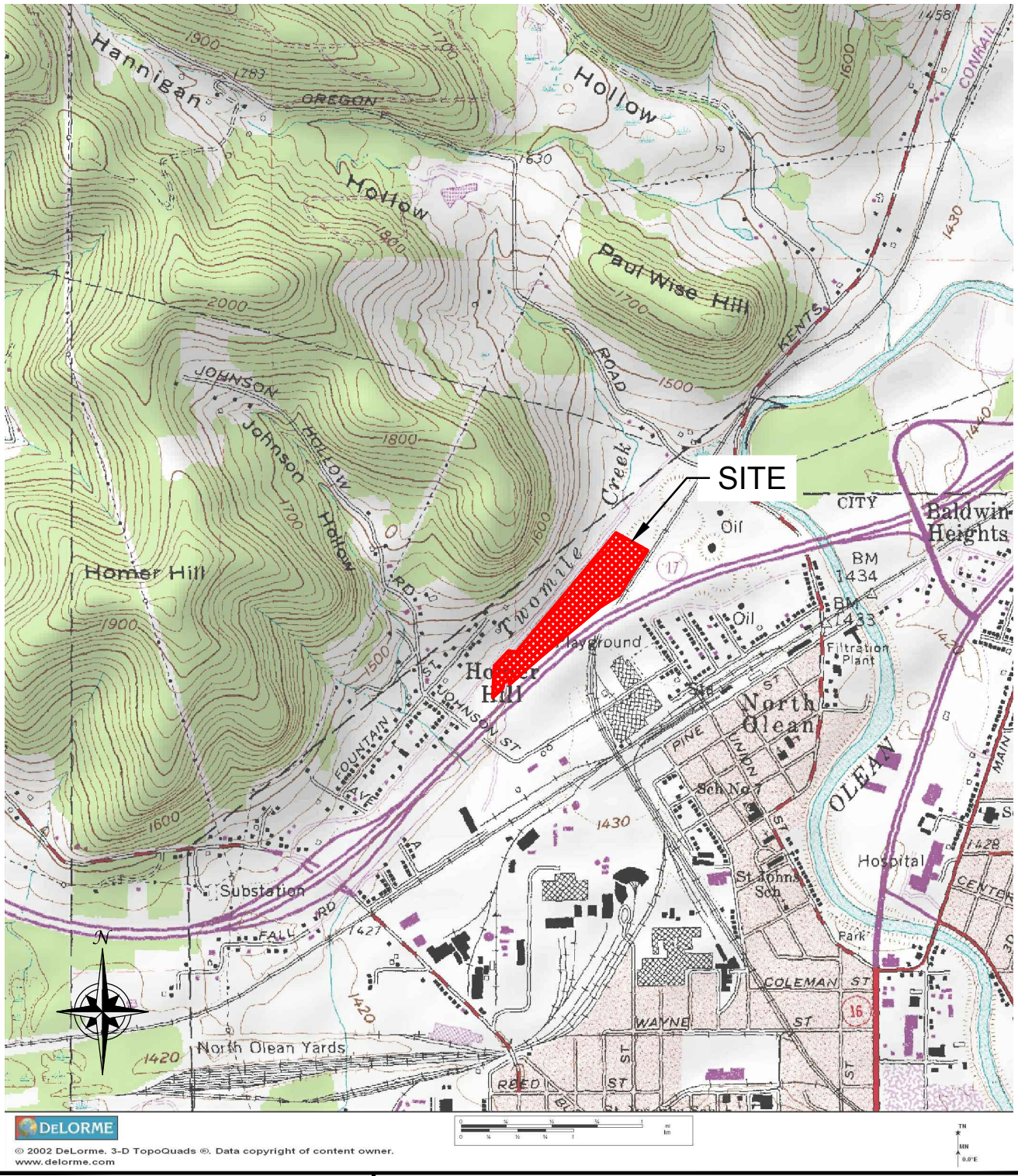
6.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10/Technical Guidance for Site Investigation and Remediation.* May 2010.
2. TurnKey Environmental Restoration, LLC. *Interim Remedial Measures and Field-Scale Pilot Study Work Plan, 251 Homer Street Redevelopment BCP Site (Site No. C905037).* September 6, 2012.
3. TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC. *Additional Interim Remedial Measures Work Plan, 251 Homer Street Redevelopment Site, Olean, NY, BCP Site No. C905037*. July 2014.
4. TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering & Science, PLLC. *Supplemental Interim Remedial Measures Work Plan, 251 Homer Street Redevelopment, Olean, NY, BCP Site No. C905037*. November 2015; revised February 2016.
5. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. *Site Management Plan, 251 Homer Street Redevelopment, NYSDEC Site Number C905037, Olean, NY*. August 2015; revised September 2016.
6. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. *Final Engineering Report, 251 Homer Street Redevelopment, NYSDEC Site Number C905037, Olean, NY*. October 2016.
7. TurnKey Environmental Restoration, LLC. *Interim Remedial Measures Closeout Report, 251 Homer Street Redevelopment BCP Site (Site No. C905037).* February 26, 2013.
8. Benchmark Environmental Engineering & Science, PLLC. *Homeridae Solar Facility Development Plan (Revised), 231-251 Homer Street Site, Olean, NY, BCP Site No. C905037*. July 18, 2018.

FIGURES

F:\CAD\Benchmark\Homeridae, LLC\PRR\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

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

SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

251 HOMER STREET REDEVELOPMENT SITE
BCP SITE NO. C905037
OLEAN, NEW YORK

PREPARED FOR

OLEAN SOLAR LAND LLC AND HOMERIDAE LLC

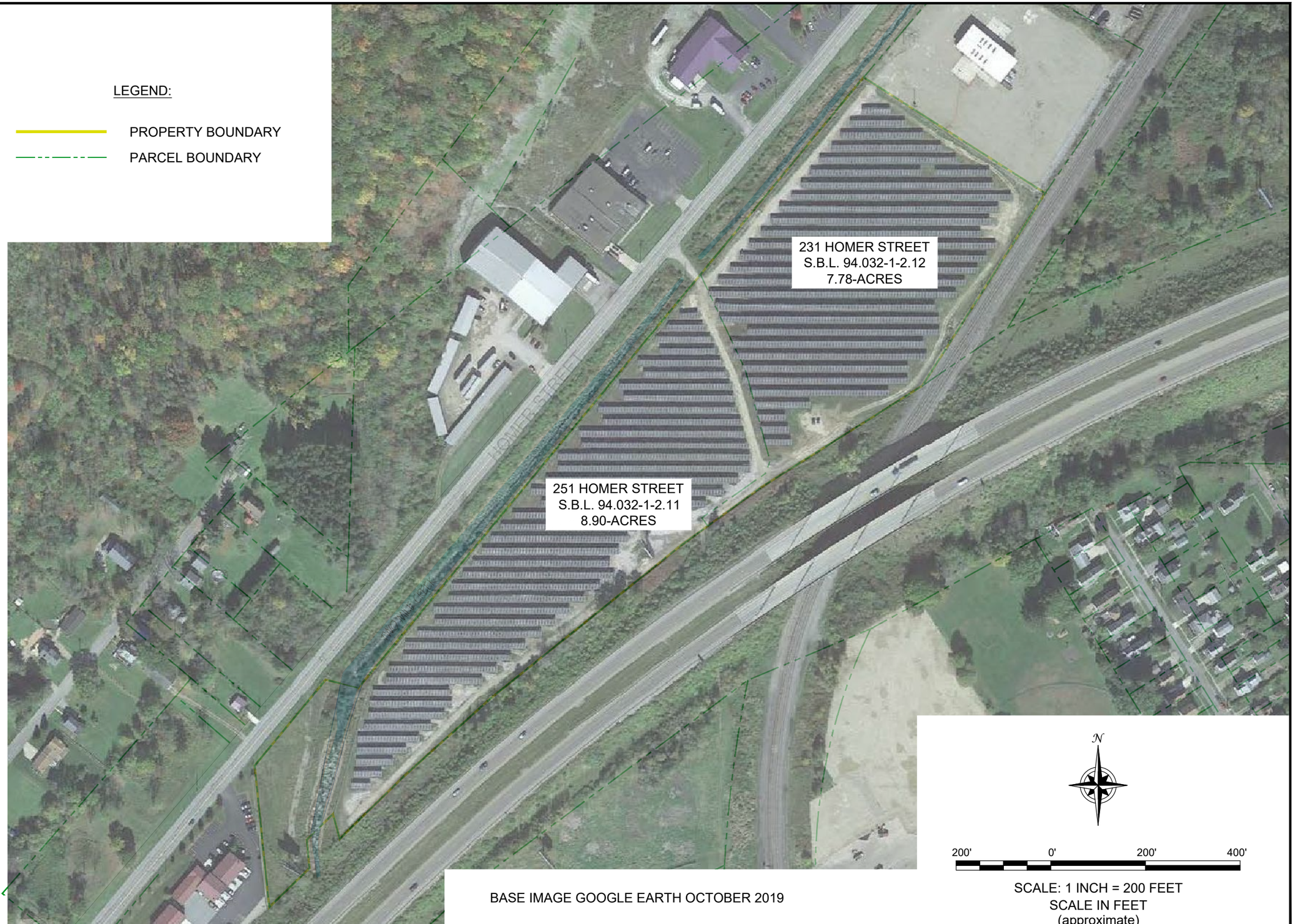
PROJECT NO.:	0362-019-001
DATE:	MAY 2019
DRAFTED BY:	CCB

F:\CAD\Benchmark\Olean Solar Land\2020 PRR\Figure 2; Site Plan (Post Remediation).dwg, 5/18/2020 9:22:37 AM

LEGEND:

PROPERTY BOUNDARY

PARCEL BOUNDARY



BASE IMAGE GOOGLE EARTH OCTOBER 2019

N

200' 0' 200' 400'

SCALE: 1 INCH = 200 FEET
SCALE IN FEET
(approximate)

DATE: MAY 2019
DRAFTED BY: CCB

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0362-019-001

SITE PLAN (POST REMEDIATION)

PERIODIC REVIEW REPORT

251 HOMER STREET REDEVELOPMENT SITE

OLEAN, NEW YORK

PREPARED FOR

OLEAN SOLAR LAND LLC AND HOMERIDAE LLC

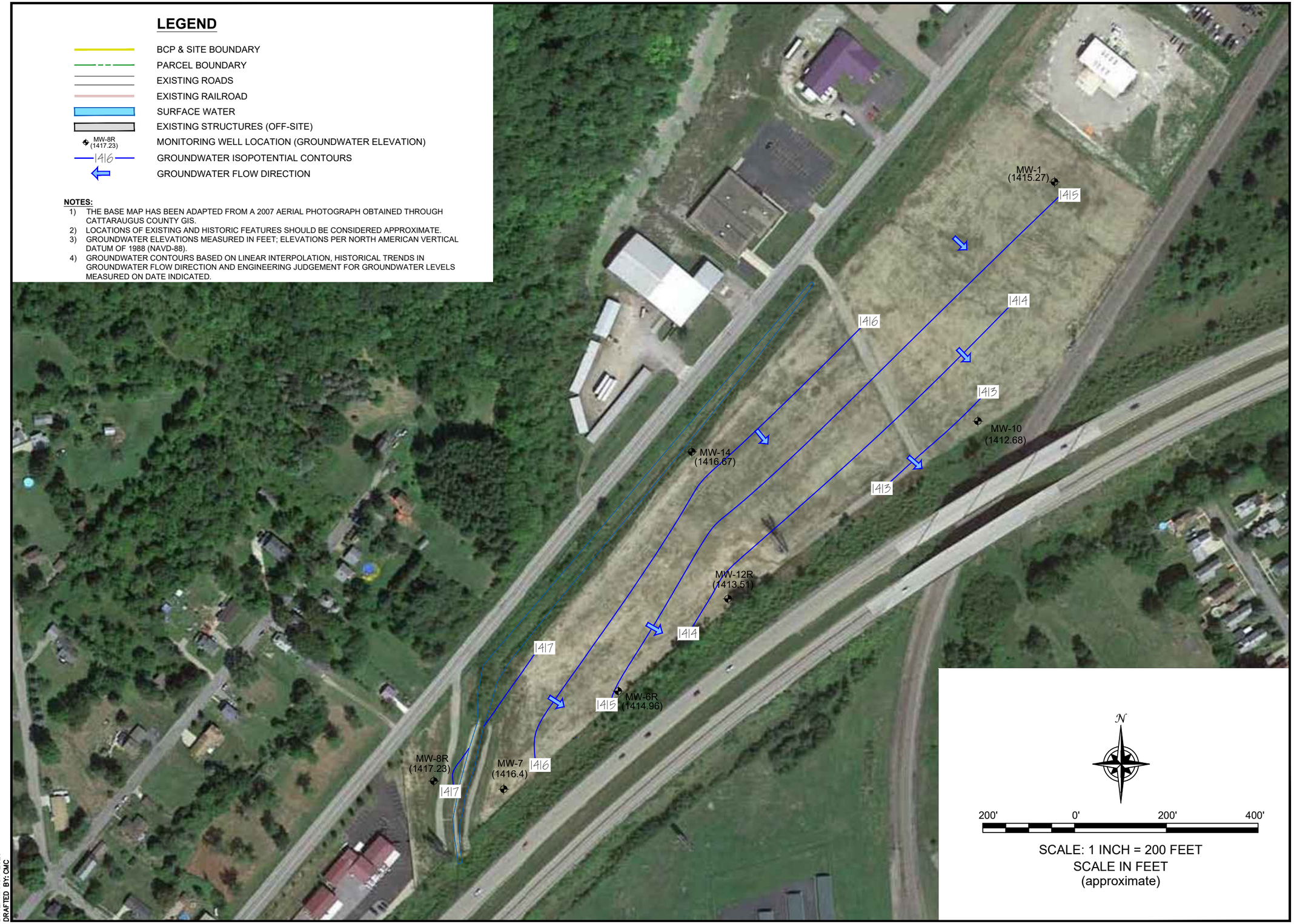
FIGURE 2

LEGEND

- BCP & SITE BOUNDARY
- PARCEL BOUNDARY
- EXISTING ROADS
- EXISTING RAILROAD
- SURFACE WATER
- EXISTING STRUCTURES (OFF-SITE)
- MW-8R (1417.23) — MONITORING WELL LOCATION (GROUNDWATER ELEVATION)
- 1416 — GROUNDWATER ISOPOTENTIAL CONTOURS
- GROUNDWATER FLOW DIRECTION

NOTES:

1) THE BASE MAP HAS BEEN ADAPTED FROM A 2007 AERIAL PHOTOGRAPH OBTAINED THROUGH CATTARAUGUS COUNTY GIS.
2) LOCATIONS OF EXISTING AND HISTORIC FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3) GROUNDWATER ELEVATIONS MEASURED IN FEET; ELEVATIONS PER NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88).
4) GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION, HISTORICAL TRENDS IN GROUNDWATER FLOW DIRECTION AND ENGINEERING JUDGEMENT FOR GROUNDWATER LEVELS MEASURED ON DATE INDICATED.



N

200' 0' 200' 400'

SCALE: 1 INCH = 200 FEET
SCALE IN FEET
(approximate)

DATE: MARCH 2020
DRAFTED BY: CMC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0491-019-001

GROUNDWATER ISOPOTENTIAL MAP (JUNE 2019)

PERIODIC REVIEW REPORT
251 HOMER STREET REDEVELOPMENT SITE
BCP SITE NO. C905037
OLEAN, NEW YORK
PREPARED FOR
OLEAN SOLAR LAND LLC AND HOMERIDAE LLC

FIGURE 3

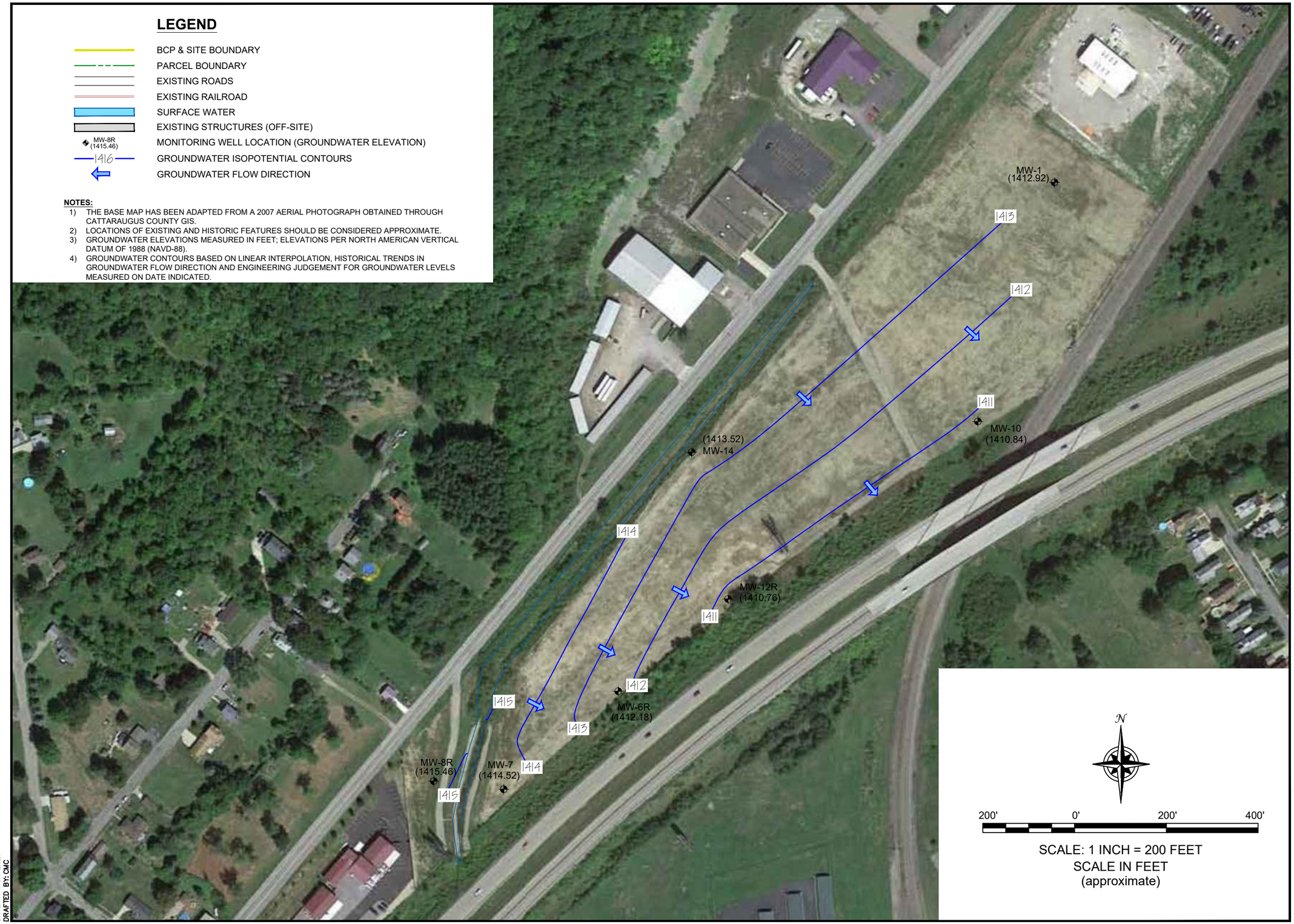
F:\CAD\Benchmark\Olean Solar Land\2020 PRR\Figure 3; Groundwater Isopotential Map (June 2019).dwg, 3/12/2020 5:44:30 PM, DWG To PDF.pc3

LEGEND

- BCP & SITE BOUNDARY
- PARCEL BOUNDARY
- EXISTING ROADS
- EXISTING RAILROAD
- SURFACE WATER
- EXISTING STRUCTURES (OFF-SITE)
- MW-8R (1415.46) — MONITORING WELL LOCATION (GROUNDWATER ELEVATION)
- 1416 — GROUNDWATER ISOPOTENTIAL CONTOURS
- GROUNDWATER FLOW DIRECTION

NOTES:

1) THE BASE MAP HAS BEEN ADAPTED FROM A 2007 AERIAL PHOTOGRAPH OBTAINED THROUGH CATTARAUGUS COUNTY GIS.
2) LOCATIONS OF EXISTING AND HISTORIC FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3) GROUNDWATER ELEVATIONS MEASURED IN FEET; ELEVATIONS PER NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88).
4) GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION, HISTORICAL TRENDS IN GROUNDWATER FLOW DIRECTION AND ENGINEERING JUDGEMENT FOR GROUNDWATER LEVELS MEASURED ON DATE INDICATED.



DATE: MARCH 2020
DRAFTED BY: CMC

GROUNDWATER ISOPOTENTIAL MAP (DECEMBER 2019)

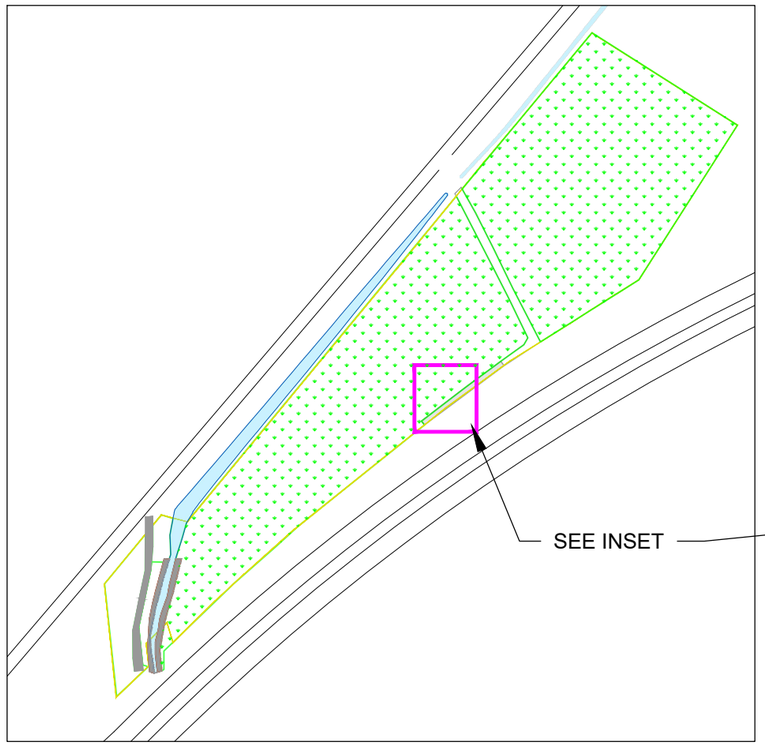
PERIODIC REVIEW REPORT
251 HOMER STREET REDEVELOPMENT SITE
BCP SITE NO. C905037
OLEAN, NEW YORK
PREPARED FOR
OLEAN SOLAR LAND LLC AND HOMERIDAE LLC

FIGURE 4

BENCHMARK ENVIRONMENTAL ENGINEERING SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0491-019-001

F:\CAD\Benchmark\Olean Solar Land\2020 PRR\Figure 4; Groundwater Isopotential Map (December 2019).dwg, 3/12/2020 5:33:05 PM, DWG To PDF.pc3

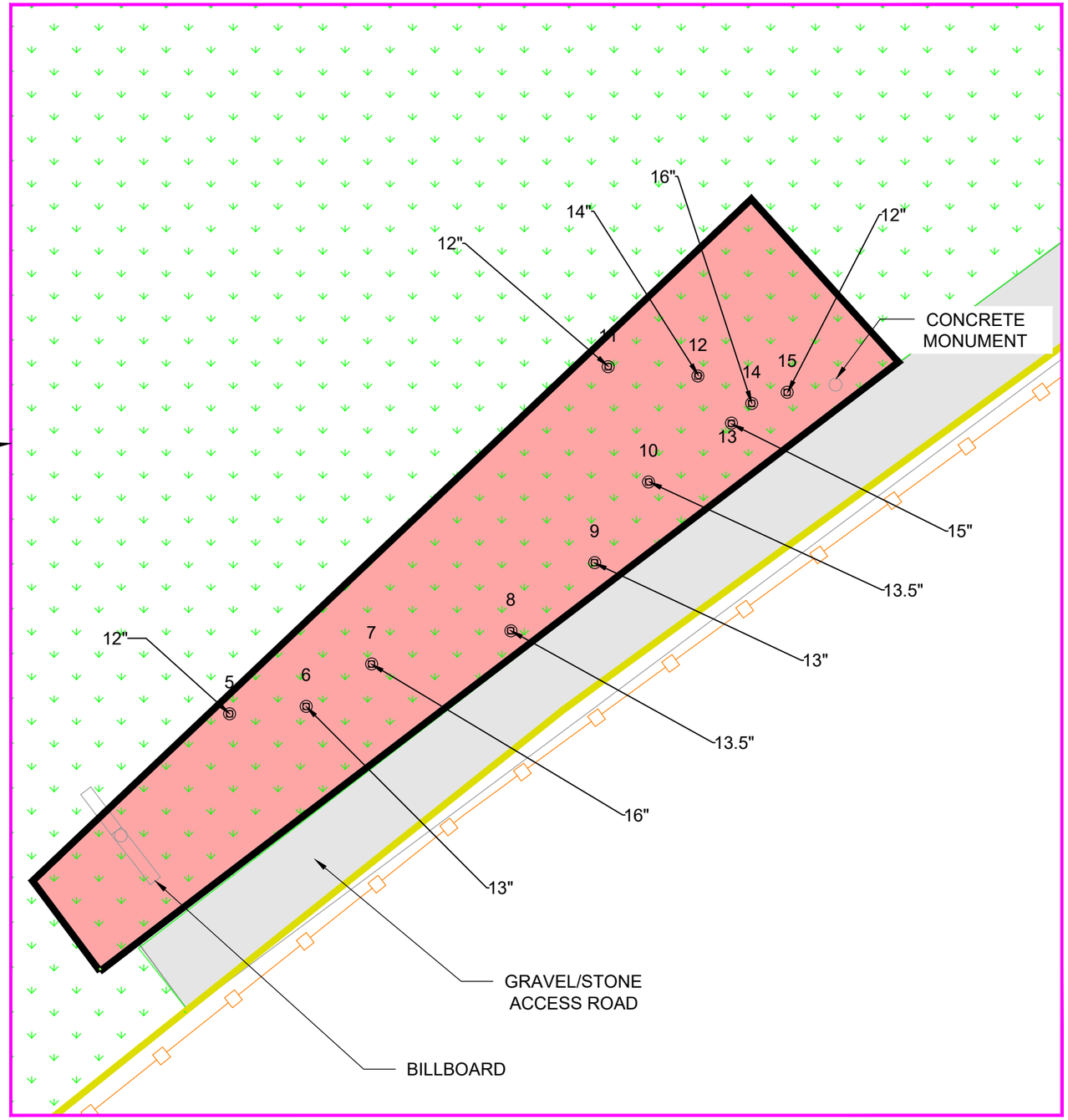


SITE PLAN
SCALE: 1" = 400'

LEGEND

- SITE BOUNDARY
- GENERAL AREA OF OBSERVED EROSION 2019
- SOIL RESTORATION AREA 2019 & 2020
- 12 INCHES — COVER THICKNESS MEASUREMENT FROM GROUND SURFACE TO DEMARCATION LAYER
- VEGETATED COVER AREA
- FENCE

NOTES:
1. COVER THICKNESS MEASUREMENT MADE BY BENCHMARK/TURNKEY REPRESENTATIVE ON APRIL 13, 202 AND MAY 4, 2020 AFTER ADDING SOIL TO AREAS INDICATED.



INSET
SCALE: 1" = 20'

DATE: OCTOBER 2018
DRAFTED BY: CMC/RFL

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: JOB##

SITE COVER RESTORATION

COVER SYSTEM REPAIRS
251 HOMER STREET SITE
OLEAN, NEW YORK
PREPARED FOR
HOMERIDAE, LLC

FIGURE 5

TABLES

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS

251 HOMER STREET REDEVELOPMENT SITE
OLEAN, NEW YORK

Location	Date	TOR Elevation[1] (ft)	DTW (fbTOR)	Groundwater Elevation (ft)
MW-1	6/27/2011	1426.78	12.11	1414.67
	5/22/2012		13.48	1413.30
	2/27/2013		12.37	1414.41
	5/16/2016		12.75	1414.03
	6/21/2017 & 6/22/2017		12.82	1413.96
	12/14/2017 & 12/15/2017		14.48	1412.30
	6/12/2018		12.85	1413.93
	6/27/2019		11.51	1415.27
	12/12/2019		13.86	1412.92
MW-6R	5/16/2016	1427.14	12.67	1414.47
	6/21/2017 & 6/22/2017		13.25	1413.89
	12/14/2017 & 12/15/2017		14.01	1413.13
	6/12/2018		12.25	1414.89
	6/27/2019		12.18	1414.96
	12/12/2019		14.96	1412.18
MW-7	6/27/2011	1424.42	7.99	1416.43
	5/21/2012		9.65	1414.77
	2/27/2013		8.25	1416.17
	5/16/2016		8.55	1415.87
	6/21/2017 & 6/22/2017		8.92	1415.50
	12/14/2017 & 12/15/2017		9.81	1414.61
	6/13/2018		9.12	1415.30
	6/27/2019		8.02	1416.40
	12/12/2019		9.90	1414.52
MW-8R	5/16/2016	1426.74	9.97	1416.77
	6/21/2017 & 6/22/2017		10.25	1416.49
	12/14/2017 & 12/15/2017		11.21	1415.53
	6/13/2018		10.30	1416.44
	6/27/2019		9.51	1417.23
	12/12/2019		11.28	1415.46
MW-10	5/22/2012	1425.88	13.23	1412.65
	2/27/2013		11.69	1414.19
	5/16/2016		14.19	1411.69
	6/21/2017 & 6/22/2017		14.38	1411.50
	12/14/2017 & 12/15/2017		15.11	1410.77
	6/12/2018		14.53	1411.35
	6/27/2019		13.2	1412.68
	12/12/2019		15.04	1410.84
MW-12R	5/16/2016	1427.76	14.84	1412.92
	6/21/2017 & 6/22/2017		15.36	1412.40
	12/14/2017 & 12/15/2017		16.24	1411.52
	6/12/2018		15.05	1412.71
	6/27/2019		14.25	1413.51
	12/12/2019		17.00	1410.76
MW-14	5/21/2012	1427.50	14.05	1413.45
	2/27/2013		12.48	1415.02
	5/16/2016		12.17	1415.33
	6/21/2017 & 6/22/2017		12.37	1415.13
	12/14/2017 & 12/15/2017		14.07	1413.43
	6/12/2018		12.90	1414.60
	6/27/2019		10.83	1416.67
	12/12/2019		13.98	1413.52

Notes:

1. Wells were surveyed 5/19/16 using the North American Vertical Datum of 1988 (NAVD-88).

Acronyms:

fbTOR = Feet below top of riser

DTW = Depth to water

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
251 HOMER STREET REDEVELOPMENT SITE
OLEAN, NEW YORK

Parameter [1]	NYSDEC Class GA GWQS[2]	Well ID and Sample Date																						
		MW-1							MW-6		MW-6R					MW-7							MW-8	
		6/6/11	5/22/12	6/22/17	12/14/17	6/12/18	6/27/19	12/13/19	6/7/11	5/21/12	6/22/17	12/14/17	6/12/18	6/27/19	12/13/19	6/7/11	5/21/12	6/22/17	12/14/17	6/13/18	6/27/19	12/13/19	6/6/11	5/22/12
TCL Volatile Organic Compounds (VOCs) - ug/L																								
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	4.7	10	ND	7 J	ND	ND	ND	ND	5.1	ND	4.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	98	18	27	24	19	22	2.3	ND	ND	15	12	6.8	18	4.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	**--**	150	25	42	31	21.7	32	2.4	ND	ND	8.3	11	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	**--**	**248**	**43**	**74**	**65**	**41**	**61**	**5**	**0**	**0**	**23**	**28**	**7**	**37**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TICs[3]	**--**	ND	42	37	39	64	66	ND	ND	57	45	63	141	83	ND	ND	ND	7.6	ND	ND	2.5	ND	ND	ND
TCL Semi-Volatile Organic Compounds (SVOCs) - ug/L																								
2-Methylnaphthalene	**--**	ND	0.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	0.09	ND	ND	ND	ND	ND
2,4-Dimethylphenol	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	**20**	ND	ND	0.11	0.08	ND	ND	ND	ND	ND	0.14	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	ND
Acenaphthylene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	**0.002**	ND	ND	ND	**0.02**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.07**	**0.03**	ND	ND	ND	ND	ND
Benzo(a)pyrene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.08**	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.02**	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16	0.05	ND	ND	ND	ND	ND
Biphenyl	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	**--**	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.09**	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	ND	ND
Diethyl phthalate	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	**50**	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	ND
Indeno(1,2,3-cd)pyrene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.05**	ND	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	ND	0.05	ND	ND	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	0.12	0.08	ND	ND	ND	ND	ND
Fluoranthene	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND
Fluorene	**50**	ND	ND	0.10	0.06	ND	ND	ND	ND	ND	0.19	0.10	ND	ND	ND	0.37	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**50**	ND	ND	0.04	0.03	ND	0.94 JBT	ND	ND	ND	ND	0.17	ND	3.7 BJ	ND	ND	ND	0.37	0.15	ND	0.81 BJ	ND	ND	ND
Pyrene	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22	0.09	ND	ND	ND	ND	ND
Total SVOCs	**--**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**1**	**0**
TICs[3]	**--**	ND	102	1380	26.7	ND	183	337	ND	ND	2090	815	21.5	1030	1810	ND	15.8	ND	5.8	20.2	161	314	ND	28.9
TAL Metals - ug/L (Total)																								
Arsenic	**25**	**38**	NA	**61.7**	**49**	**34.9**	**48**	**49**	19	NA	**42.6**	**34.9**	**35.5**	**42**	**35**	ND	NA	1.8	1.3	ND	**67**	ND	ND	NA
Lead	**25**	15	NA	0.37	ND	7.6	5 J	ND	22	NA	2.4	2.7	24.6	12	ND	ND	NA	12.8	4.7	**25.4**	**41 J**	ND	ND	NA
Field Paramters																								
Turbidity (NTU)	**--**	>1,000	220	21.3	34.7	46.9	4.7	12	555	>1,000	19.3	13	310	29.9	30	35.2	57.5	26.1	35.3	13.6	81.9	16.3	28	20.4

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. Tentatively identified compounds

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No GWQS available.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
N = presumptive evidence of material.
T = Result is a tentatively identified compound (TIC) and an estimated value.
B = Compound was found in the blank and sample

Sample result exceeds NYSDEC Class GA GWQS/GV
Dates of samples collected pre-remediation

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
251 HOMER STREET REDEVELOPMENT SITE
OLEAN, NEW YORK

Parameter [1]	NYSDEC Class GA GWQS[2]	Well ID and Sample Date																							
		MW-8R					MW-9	MW-10						MW-12	MW-12R					MW-14					
		6/22/17	12/14/17	6/13/18	6/27/19	12/13/19	5/22/12	5/22/12	6/22/17	12/14/17	6/12/18	6/27/19	12/13/19	5/21/12	6/22/17	12/14/17	6/12/18	6/27/19	12/13/19	5/21/12	6/22/17	12/14/17	6/12/18	6/27/19	12/13/19
TCL Volatile Organic Compounds (VOCs) - ug/L																									
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12.5**	**7.9**	ND	ND	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	4.4 J	4.2 J	9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	ND	ND	ND	ND	ND	94	ND	ND	ND	ND	ND	ND	520	94	60 D	155	70	63	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	**--**	ND	ND	ND	ND	ND	440 E	46	3.4	6	ND	8.1	ND	590	270	160	276	130	140	1.2	ND	ND	ND	ND	ND
n-Butylbenzene	**5**	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	4.3	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.3	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	**--**	**0**	**0**	**0**	**0**	**0**		**46**	**3**	**9**	**0**	**14**	**6**	**1175**	**364**	**220**	**439**	**204**	**203**	**1**	**0**	**0**	**0**	**0**	**0**
TICs[3]	**--**	5.3	ND	ND	281	ND	628	319	52	119	98	271	93	1721	146	139	572	247	99	87	6.2	4.5	20	ND	ND
TCL Semi-Volatile Organic Compounds (SVOC																									
2-Methylnaphthalene	**--**	ND	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	25	ND	0.05	ND	ND	ND	2.8	ND	ND	ND	ND	ND
2,4-Dimethylphenol	**50**	ND	ND	ND	0.93 J	1.4 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	**20**	ND	ND	ND	ND	ND	ND	0.49	ND	0.04	ND	ND	ND	ND	0.26	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	**--**	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	0.07	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	**--**	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**50**	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	0.09	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	**0.02**	ND	ND	ND	ND	ND	**0.04**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	**ND**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	**0.002**	ND	ND	ND	ND	ND	ND	**0.44**	ND	ND	ND	ND	ND	ND	ND	**0.02**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	**--**	ND	ND	ND	ND	ND	ND	0.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Biphenyl	**5**	ND	ND	ND	ND	ND	ND	0.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	**50**	ND	ND	ND	ND	ND	ND	0.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	**--**	ND	ND	ND	ND	ND	ND	0.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**0.002**	ND	ND	ND	ND	ND	ND	**0.52**	ND	ND	ND	ND	ND	ND	ND	**0.07**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	**--**	ND	ND	ND	ND	ND	ND	0.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	**50**	ND	ND	ND	ND	ND	ND	0.42	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	**50**	ND	ND	ND	ND	ND	ND	0.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	ND	ND	ND	ND	ND	ND	0.05	0.1	ND	ND	ND	ND	0.42	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	**50**	ND	ND	ND	ND	ND	ND	0.48	ND	ND	ND	ND	ND	ND	0.04	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**50**	ND	ND	ND	ND	ND	15	1.1	0.1	0.18	ND	ND	ND	ND	0.63	0.44	ND	ND	ND	ND	0.06	ND	ND	ND	ND
Phenanthrene	**50**	0.04	ND	ND	0.71 BJ	ND	36 J	1.0	ND	0.03	ND	ND	ND	ND	0.10	0.34	ND	ND	ND	1.5	0.04	0.05	ND	0.9 BJ	ND
Pyrene	**50**	ND	ND	ND	ND	ND	ND	0.46	ND	ND	ND	ND	ND	ND	0.16	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	**--**	**0**	**0**	**0**	**2**	**1**	**191**	**10**	**2**	**0**	**0**	**0**	**0**	**25**	**2**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**
TICs[3]	**--**	376	9.7	11.4	143	338	5280 TJN	206	310	21.2	15.6	617	337	849	657	192	101	350	1645	267	699	16.5	11.3	181	365
TAL Metals - ug/L (Total)																									
Arsenic	**25**	5.4	5.5	12.4	5.9 J	ND	NA	NA	4.1	1.2	15.1	ND	ND	NA	20.1	**39.7**	**36.4**	**27**	**27**	NA	**70.1**	**77.3**	**65.4**	**66**	**27**
Lead	**25**	2.1	0.69	**59.5**	7.8 J	ND	NA	NA	0.54	ND	**39.7**	3.6 J	ND	NA	ND	ND	**30**	6 J	ND	NA	7.5	ND	23.8	3.2 J	ND
Field Paramters																									
Turbidity (NTU)	**--**	49.4	47.3	263	27.4	18.5		216	5.8	12.4	452	17.4	16	>1,000	5.7	12.4	>1,000	49	18.3	>1,000	172	73	579	36.4	31.7

Notes:
1. Only those parameters detected at a minimum of or
all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class GA Ground
3. Tentatively identified compounds

Definitions:
ND = Parameter not detected above laboratory detect
"--" = No GWQS available.
J = Estimated value; result is less than the sample qu
N = presumptive evidence of material.
T = Result is a tentatively identified compound (TIC) a
B = Compound was found in the blank and sample

Sample result exce
Dates of samples c

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. **C905037**

Site Name 251 Homer Street Development

Site Address: 231-251 Homer Street Zip Code: 14760
City/Town: Olean
County: Cattaraugus
Site Acreage: 16.680

Reporting Period: April 16, 2019 to April 16, 2020

	YES	NO
1. Is the information above correct?	☑	☐
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?	☑	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☑	☐
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☑	☐
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?	☑	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

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

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

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. C905037 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
94.032-1-2.11	Olean Solar Land LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for commercial use or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- the potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- require compliance with the Department approved Site Management Plan.

94.032-1-2.12	Olean Solar Land LLC	Soil Management Plan Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for commercial use or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- the potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- require compliance with the Department approved Site Management Plan.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
94.032-1-2.11	Cover System

A site cover will be required to allow for commercial or industrial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

94.032-1-2.12	Cover System

A site cover will be required to allow for commercial or industrial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

Box 5

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 compete.

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. C905037

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.

I Paul F. Curran, P.E. at 400 Market Industrial Park, Suite 32 Wappingers Falls, NY 12590,
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.

PAUL CURRAN 18 May 2020
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification 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
2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218,
print name — print business address

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

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		05/18/2020

APPENDIX B

SITE PHOTOGRAPHIC LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

SITE INSPECTION (MARCH 11, 2020)

Photo 1: View of Solar Panels looking east from the northern Access Road (looking east)

Photo 2: View of Solar Panels showing grass cover underwater (looking east)

Photo 3: View of Solar Panels from the southern Access Road along fence line (looking northeast)

Photo 4: View of eastern Access Road (looking northeast)

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

SITE INSPECTION (MARCH 11, 2020)

Photo 5: Vegetative cover on eastern corner (looking west)

Photo 6: Vegetative cover between solar panels rows (looking west)

Photo 7: Area that received additional soil cover in 2019 but needs additional soil (looking northeast)

Photo 8: Area that received additional soil cover in 2019 but needs additional soil (looking northwest)

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

SITE INSPECTION (MARCH 11, 2020)

Photo 9: Iron staining along banks of Two Mile Creek at southern end (looking west)

Photo 10: Stone along banks of Two Mile Creek (looking northwest)

Photo 11: Vegetated cover on southwest portion of undeveloped land west of Two Mile Creek (looking east)

Photo 12: Vegetated cover on southwest portion of undeveloped land west of Two Mile Creek (looking south)

SITE PHOTOGRAPHS

Photo 13:

Photo 14:

Photo 15:

Photo 16:

SITE INSPECTION (APRIL 30 - MAY 4, 2020)

Photo 13: Placing additional soil cover (looking southwest)

Photo 14: Placing additional soil cover (looking west)

Photo 15: Soil cover restored to 12-inch minimum (looking southwest)

Photo 16: Soil cover restored to 12-inch minimum (looking west)

APPENDIX C

GROUNDWATER SAMPLING FIELD FORMS AND ANALYTICAL DATA

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae — Date:

Location: Olean, New York — Project No.: B0362-019-001 — Field Team: CFD

Well No. MW-1			Diameter (inches): 2"			Sample Date / Time: 6-27-17 / 1050			
Product Depth (fbTOR): —			Water Column (ft): 11.48			DTW when sampled: 11.61			
DTW (static) (fbTOR): 11.51			One Well Volume (gal): 1.87sa			Purpose: ☐ Development ☐ Sample ☑ Purge & Sample			
Total Depth (fbTOR): 22.99			Total Volume Purged (gal): 6 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
1000	0 Initial	0	6.36	13.0	1232	13.6	0.28	-26	Cloudy / Light Sewage Odor
1010	1 11.52	1	6.49	12.7	1145	10.2	0.78	-106	↓
1020	2 11.54	2	6.50	12.6	1117	8.9	0.80	-109	↓
1025	3 11.59	3	6.48	12.4	1097	7.6	0.84	-112	Clear / Sewage Odor
1030	4 11.60	4	6.49	12.2	1092	7.2	0.88	-113	↓
1040	5 11.61	5	6.50	12.4	1090	5.4	0.89	-115	↓
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1050	S1 11.61	5.5	6.49	12.1	1088	4.7	0.88	-119	Clear
1055	S2 11.61	6	6.48	12.0	1082	4.1	0.92	-120	Sewage Chem Odor

Well No. MW-6R			Diameter (inches): 2"			Sample Date / Time: 6-27-17 / 1500			
Product Depth (fbTOR): —			Water Column (ft): 9.03			DTW when sampled: 13.40			
DTW (static) (fbTOR): 12.18			One Well Volume (gal): 1.4			Purpose: ☐ Development ☐ Sample ☑ Purge & Sample			
Total Depth (fbTOR): 21.21			Total Volume Purged (gal): 6.25			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
1405	0 Initial	0	7.20	12.7	1515	86	0.41	-27	Blackish "Hue" Cloud
1415	1 12.15	1.25	6.90	12.4	1533	96	0.55	-89	↳ Petro Odor
1425	2 12.83	2.5	6.83	12.2	1547	67.7	0.58	-111	Clear-er, Particulate
1435	3 12.98	3.75	6.81	12.0	1538	52.5	0.64	-109	"
1450	4 13.17	5.0	6.79	11.9	1529	43.7	0.68	-97	Clear / Light Petro
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1	S1 13.38	6	6.78	11.7	1515	29.9	0.71	-103	↓
1500	S2 13.40	6.25	6.65	11.7	1509	17.1	0.72	-105	Small "Floaties"

REMARKS:

*MW-1 = Blind Dup & MS/MSD

MW-6R - Very Thin Layer of Product on top of Water, Used Bailer to Remove + Absorbent Sock for Couple Hours Sampled @ End of Day

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

MW-6R - Also Grey Sludge w/ Petro Odor @ Bottom of Well

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: CFD

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae — Date:

Location: Olean, New York — Project No.: B0362-019-001 — Field Team: CFD

Well No. MW-7			Diameter (inches): 1"			Sample Date / Time: 6-28-19 / 0915			
Product Depth (fbTOR): —			Water Column (ft): 8.83			DTW when sampled: 12.88			
DTW (static) (fbTOR): 8.02			One Well Volume (gal): 1.4			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 16.85			Total Volume Purged (gal): 4.5 gal			Purge Method: PARASTHALTIC Pump *			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0815	0 Initial	0	7.23	12.7	1544	198	-32	0.67	Grey Turbid
	1 8.00	1	7.07	12.4	1587	168.2	-94	0.58	↳ Light Odor
	2 9.43	2	6.92	12.1	1529	157.6	-116	0.79	
	3 10.27	3	6.82	11.9	1503	93.6	-115	0.84	Cloudy Turbid
	4 11.67	4	6.80	12.0	1497	89.3	-103	0.97	↳ Light Odor
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
0915	S1 12.88	4.5	6.77	11.7	1484	81.9	-101	0.92	"Clearer" - Cloudy
0925	S2 12.90	4.75	6.73	11.6		77.4	-103	0.92	

Well No. MW-8R			Diameter (inches): 2"			Sample Date / Time: 6-28-19 / 0930			
Product Depth (fbTOR): —			Water Column (ft): 14.29			DTW when sampled: 9.85			
DTW (static) (fbTOR): 9.51			One Well Volume (gal): 2.3 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 23.80			Total Volume Purged (gal): 7.5 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	0 Initial	12.7	6.84	12.7	2617	531	1.15	-50	Cloudy / Petro Odor
0945	1 0	12.6	6.50	12.6	2619	342	0.92	-55	
1000	2 2	12.3	6.37	12.3	2614	69.0	1.22	-53	*
1015	3 4	12.1	6.33	12.2	2609	39.3	1.53	-54	Clear / Light Sewer Odor
1030	4 6	12.0	6.30	12.0	2608	32.3	1.58	-55	"
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1045	S1 7	12.0	6.30	12.1	2605	27.4	1.59	-57	Clear
1050	S2 7.5	11.8	6.27	11.9	2612	19.3	1.60	-59	↳ Pine Odor

REMARKS: * MW-7 - USED Parasthaltic Pump
MW-7 * USED FIELD FILTER FOR METALS Sample

Note: All water level 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: CFD

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae — Date:

Location: Olean, New York — Project No.: B0362-019-001 — Field Team: CFD

Well No. MW-10

Product Depth (fbTOR): ~~3~~ —
DTW (static) (fbTOR): 13.20
Total Depth (fbTOR): 22.07

Diameter (inches): 2"
Water Column (ft): 8.87
One Well Volume (gal): 1.4
Total Volume Purged (gal): 4.5 gal

Sample Date / Time: 6-27-19 / 1215
DTW when sampled: 16.72
Purpose: ☐ Development ☐ Sample ☒ Purge & Sample
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
1115	0	Initial	0	7.25	14.0	1033	59.5	1.02	-39	BLACKISH HUE / POTRO
1125	1	13.22	1.0	6.99	13.0	1028	541	1.58	-48	BLACK PARTICULATES
1140	2	14.18	~~1~~ 1.75	6.75	12.7	868	45	1.62	-61	CLEAR-GR / POTRO ODOR
1150	3	15.02	2.5	6.89	12.4	749	36	1.68	-54	"
1205	4	16.55	3.5	6.75	12.4	706	27.2	1.79	-53	Clear / Tiny Black Particulate
	5									
	6									
	7									
	8									
	9									
	10									

* LIGHT SHEEN ON TOP

Sample Information:

1215	S1	16.71	4.0	6.72	12.1	702	17.4	1.92	-60	Clear / POTRO ODOR
1220	S2	16.72	4.5	6.70	12.0	701	15.8	2.37	-58	"

Well No. MW-12R

Product Depth (fbTOR): —
DTW (static) (fbTOR): 14.25
Total Depth (fbTOR): 24.20

Diameter (inches): 2"
Water Column (ft): 9.95
One Well Volume (gal): 1.6
Total Volume Purged (gal): 7 gal

Sample Date / Time: 6-27-19 / 1330
DTW when sampled: 19.01
Purpose: ☐ Development ☐ Sample ☒ Purge & Sample
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
1605	0	Initial	0	7.13	13.1	1163	~~>~~ NA	1.89	15	GRAY TURBID
	1	14.10	1	7.08	12.4	1294	~~>~~ 800	1.37	-13	→ POTRO ODOR
	2	15.37	2	7.07	11.8	1423	~~>~~ 319	1.30	-43	↓
	3	16.78	3	6.99	10.6	1641	278	1.10	-48	↓
	4	17.38	4	7.01	10.6	1744	236	1.32	-54	LIGHT GRAY / POTRO
	5	18.84	5	7.02	10.6	1725	194	1.45	-62	CLOUDY TURBID
	6	17.00	6	7.03	10.5	1686	68	1.47	-67	CLEAR-GR, POTRO ODOR
	7									
	8									
	9									
	10									

Sample Information:

1215	S1	19.00	6.5	7.05	10.4	1635	49	1.68	-74	Clear
	S2	19.01	7	7.07	10.4	1615	37	1.72	-81	LITTLE ODOR

REMARKS: * MW-12R – THICK GRAY SLUDGE @ BOTTOM OF WELL W/ STRONG POTRO ODOR

Note: All water level 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: CFD

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae | Date:

Location: Olean, New York | Project No.: B0362-019-001 | Field Team: CFD

Well No. MW-14			Diameter (inches): 2"			Sample Date / Time: 6-28-19 / 1215			
Product Depth (fbTOR): —			Water Column (ft): 10.17			DTW when sampled: 17.67			
DTW (static) (fbTOR): 10.83			One Well Volume (gal): 1.6			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 21.80			Total Volume Purged (gal): 7gal			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
1100	0 Initial	0	8.20	12.2	806	214	0.50	-110	YELLOWISH TURBID
1115	1 10.80	1.75	7.93	11.4	808	139	0.54	-127	LT LIGHT ODOR
1130	2 12.99	3.25	7.41	11.2	803	115	0.42	-126	"
1145	3 15.40	5.0	7.12	11.2	795	103	0.87	-110	"
1200	4 17.09	6.25	7.06	11.0	795	87	1.27	-109	CLEARISH CLOUDY
	5					49			NO ODOR
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1215	S1 17.67	7	7.06	10.8	797	36.4	1.29	-92	CLEAR
	S2	7.25	7.08	11.0	800	23.0	1.34	-88	LIGHT ODOR

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ 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								

REMARKS:

Note: All water level 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: CFD

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-155596-1
Client Project/Site: Benchmark - Olean Solar Land, LLC

For:
Benchmark Env. Eng. & Science, PLLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski

Authorized for release by:
3/17/2020 4:50:55 PM

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-155596-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-155596-1

Comments
Revision II - This report was revised to add 4 analytes as per client request.
Revision I - This report has been revised to update the project/site description.

Receipt
The samples were received on 6/28/2019 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-481020 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-481060 recovered above the upper control limit for 1,1,1-Trichloroethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon disulfide, Cyclohexane, Methylcyclohexane and trans-1,2-Dichloroethene. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and TRIP BLANK (480-155596-9).

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-8R (480-155596-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12R (480-155596-3). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-480622 and analytical batch 480-481186 recovered outside control limits for the following surrogate: 2,4,6-Tribromophenol. This surrogate is biased high and no detections were found for associated analytes in the following affected samples: MW-1 (480-155596-1), MW-10 (480-155596-2), MW-12R (480-155596-3), MW-6R (480-155596-4), MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and BLIND DUP (480-155596-8). Therefore, the data has been reported.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-480622 and analytical batch 480-481186 recovered outside control limits for the following analytes: 4-Nitrophenol, 2,4,6-Trichlorophenol and 4,6-Dinitro-2-methylphenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted:MW-1 (480-155596-1), MW-10 (480-155596-2), MW-12R (480-155596-3), MW-6R (480-155596-4), MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and BLIND DUP (480-155596-8).

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW-1 (480-155596-1), MW-1 (480-155596-1[MS]), MW-1 (480-155596-1[MSD]), MW-12R (480-155596-3) and MW-6R (480-155596-4). These results have been reported and qualified.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: MW-10 (480-155596-2) and MW-12R (480-155596-3). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-481186 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether, bis (2-chloroisopropyl) ether, 3-Nitroaniline and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted:MW-1 (480-155596-1), MW-10 (480-155596-2), MW-12R (480-155596-3),

Job ID: 480-155596-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

MW-6R (480-155596-4), MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and BLIND DUP (480-155596-8).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-481186 recovered above the upper control limit for 4-Nitrophenol and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-1 (480-155596-1), MW-10 (480-155596-2), MW-12R (480-155596-3), MW-6R (480-155596-4), MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and BLIND DUP (480-155596-8).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-481186 was outside the method criteria for the following surrogate: 2,4,6-Tribromophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated. The following samples are impacted:MW-1 (480-155596-1), MW-10 (480-155596-2), MW-12R (480-155596-3), MW-6R (480-155596-4), MW-7 (480-155596-5), MW-8R (480-155596-6), MW-14 (480-155596-7) and BLIND DUP (480-155596-8).

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

Metals

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

Organic Prep

Method(s) 3510C: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: MW-6R (480-155596-4). The reporting limits (RLs) have been adjusted proportionately.

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-1
Date Collected: 06/27/19 10:50
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/06/19 21:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/19 21:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/06/19 21:35	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/06/19 21:35	1
1,1-Dichloroethane	ND	F1	1.0	0.38	ug/L			07/06/19 21:35	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/06/19 21:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/06/19 21:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/06/19 21:35	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/06/19 21:35	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/06/19 21:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/06/19 21:35	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/06/19 21:35	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/06/19 21:35	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/06/19 21:35	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/06/19 21:35	1
2-Hexanone	ND	F1	5.0	1.2	ug/L			07/06/19 21:35	1
4-Methyl-2-pentanone (MIBK)	ND	F1	5.0	2.1	ug/L			07/06/19 21:35	1
Acetone	**7.0**	**J**	10	3.0	ug/L			07/06/19 21:35	1
Benzene	ND		1.0	0.41	ug/L			07/06/19 21:35	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/06/19 21:35	1
Bromoform	ND		1.0	0.26	ug/L			07/06/19 21:35	1
Bromomethane	ND		1.0	0.69	ug/L			07/06/19 21:35	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/06/19 21:35	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/06/19 21:35	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/06/19 21:35	1
Chloroethane	ND	F1	1.0	0.32	ug/L			07/06/19 21:35	1
Chloroform	ND		1.0	0.34	ug/L			07/06/19 21:35	1
Chloromethane	ND	F1	1.0	0.35	ug/L			07/06/19 21:35	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/06/19 21:35	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/06/19 21:35	1
Cyclohexane	**22**		1.0	0.18	ug/L			07/06/19 21:35	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/06/19 21:35	1
Dichlorodifluoromethane	ND	F1	1.0	0.68	ug/L			07/06/19 21:35	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/06/19 21:35	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/06/19 21:35	1
Methyl acetate	ND		2.5	1.3	ug/L			07/06/19 21:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/06/19 21:35	1
Methylcyclohexane	**32**		1.0	0.16	ug/L			07/06/19 21:35	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/06/19 21:35	1
Styrene	ND		1.0	0.73	ug/L			07/06/19 21:35	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/06/19 21:35	1
Toluene	ND		1.0	0.51	ug/L			07/06/19 21:35	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/06/19 21:35	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/06/19 21:35	1
Trichloroethene	ND		1.0	0.46	ug/L			07/06/19 21:35	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/06/19 21:35	1
Vinyl chloride	ND	F1	1.0	0.90	ug/L			07/06/19 21:35	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/06/19 21:35	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/06/19 21:35	1

Client Sample ID: MW-1
Date Collected: 06/27/19 10:50
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/06/19 21:35	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/06/19 21:35	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/06/19 21:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane, 1,1-dimethyl-	*4.9*	*T J N*	*ug/L*		*4.88*	*1638-26-2*		*07/06/19 21:35*	*1*
Cyclohexane, 1,3-dimethyl-, cis-	*13*	*T J N*	*ug/L*		*6.72*	*638-04-0*		*07/06/19 21:35*	*1*
Cyclohexane, 1,2-dimethyl-	*8.6*	*T J N*	*ug/L*		*7.08*	*583-57-3*		*07/06/19 21:35*	*1*
Cyclohexane, 1,3-dimethyl-, trans-	*5.3*	*T J N*	*ug/L*		*7.20*	*2207-03-6*		*07/06/19 21:35*	*1*
Cyclohexane, ethyl-	*12*	*T J N*	*ug/L*		*7.68*	*1678-91-7*		*07/06/19 21:35*	*1*
Unknown	*4.6*	*T J*	*ug/L*		*8.89*			*07/06/19 21:35*	*1*
Benzene, 4-ethyl-1,2-dimethyl-	*4.2*	*T J N*	*ug/L*		*11.37*	*934-80-5*		*07/06/19 21:35*	*1*
Benzene, 1,2,3,4-tetramethyl-	*4.2*	*T J N*	*ug/L*		*11.72*	*488-23-3*		*07/06/19 21:35*	*1*
Benzene, 1,2,4,5-tetramethyl-	*4.5*	*T J N*	*ug/L*		*12.14*	*95-93-2*		*07/06/19 21:35*	*1*
Benzene, (3-methyl-2-butenyl)-	*4.7*	*T J N*	*ug/L*		*12.55*	*4489-84-3*		*07/06/19 21:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*07/06/19 21:35*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*07/06/19 21:35*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/06/19 21:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,4,6-Trichlorophenol	ND	* F1	5.0	0.61	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/02/19 15:56	07/08/19 23:49	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Nitroaniline	ND		10	0.42	ug/L		07/02/19 15:56	07/08/19 23:49	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/08/19 23:49	1
3,3'-Dichlorobenzidine	ND	F2	5.0	0.40	ug/L		07/02/19 15:56	07/08/19 23:49	1
3-Nitroaniline	ND		10	0.48	ug/L		07/02/19 15:56	07/08/19 23:49	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Methylphenol	ND		10	0.36	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Nitroaniline	ND	F2	10	0.25	ug/L		07/02/19 15:56	07/08/19 23:49	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/02/19 15:56	07/08/19 23:49	1
Acenaphthene	ND		5.0	0.41	ug/L		07/02/19 15:56	07/08/19 23:49	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/02/19 15:56	07/08/19 23:49	1
Acetophenone	ND		5.0	0.54	ug/L		07/02/19 15:56	07/08/19 23:49	1
Anthracene	ND		5.0	0.28	ug/L		07/02/19 15:56	07/08/19 23:49	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-1
Date Collected: 06/27/19 10:50
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		5.0	0.46	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/02/19 15:56	07/08/19 23:49	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/02/19 15:56	07/08/19 23:49	1
Biphenyl	ND		5.0	0.65	ug/L		07/02/19 15:56	07/08/19 23:49	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/02/19 15:56	07/08/19 23:49	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/02/19 15:56	07/08/19 23:49	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/02/19 15:56	07/08/19 23:49	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/02/19 15:56	07/08/19 23:49	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/02/19 15:56	07/08/19 23:49	1
Caprolactam	ND		5.0	2.2	ug/L		07/02/19 15:56	07/08/19 23:49	1
Carbazole	ND		5.0	0.30	ug/L		07/02/19 15:56	07/08/19 23:49	1
Chrysene	ND		5.0	0.33	ug/L		07/02/19 15:56	07/08/19 23:49	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/02/19 15:56	07/08/19 23:49	1
Dibenzofuran	ND		10	0.51	ug/L		07/02/19 15:56	07/08/19 23:49	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/02/19 15:56	07/08/19 23:49	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/02/19 15:56	07/08/19 23:49	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/02/19 15:56	07/08/19 23:49	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/02/19 15:56	07/08/19 23:49	1
Fluoranthene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/08/19 23:49	1
Fluorene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/08/19 23:49	1
Hexachlorobenzene	ND	F1 F2	5.0	0.51	ug/L		07/02/19 15:56	07/08/19 23:49	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/02/19 15:56	07/08/19 23:49	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/02/19 15:56	07/08/19 23:49	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/02/19 15:56	07/08/19 23:49	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/08/19 23:49	1
Isophorone	ND		5.0	0.43	ug/L		07/02/19 15:56	07/08/19 23:49	1
Naphthalene	ND		5.0	0.76	ug/L		07/02/19 15:56	07/08/19 23:49	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/02/19 15:56	07/08/19 23:49	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/02/19 15:56	07/08/19 23:49	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/02/19 15:56	07/08/19 23:49	1
Pentachlorophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/08/19 23:49	1
Phenanthrene	**0.94**	**J B F1**	5.0	0.44	ug/L		07/02/19 15:56	07/08/19 23:49	1
Phenol	ND		5.0	0.39	ug/L		07/02/19 15:56	07/08/19 23:49	1
Pyrene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/08/19 23:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3.0*	*T J*	*ug/L*		*2.53*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*120*	*T J*	*ug/L*		*2.82*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*30*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*5.1*	*T J*	*ug/L*		*5.93*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Benzene, 2-ethyl-1,3-dimethyl-	*2.7*	*T J N*	*ug/L*		*6.73*	*2870-04-4*	*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Benzene, 1,2,4,5-tetramethyl-	*2.1*	*T J N*	*ug/L*		*6.93*	*95-93-2*	*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*2.5*	*T J*	*ug/L*		*7.14*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*2.7*	*T J*	*ug/L*		*7.77*		*07/02/19 15:56*	*07/08/19 23:49*	*1*
Unknown	*1.6*	*T J*	*ug/L*		*8.05*		*07/02/19 15:56*	*07/08/19 23:49*	*1*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-1
Date Collected: 06/27/19 10:50
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-1
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.8	T J	ug/L		8.54		07/02/19 15:56	07/08/19 23:49	1
Anthracene-d10-	2.6	T J N	ug/L		10.08	1719-06-8	07/02/19 15:56	07/08/19 23:49	1
Unknown	5.8	T J	ug/L		11.01		07/02/19 15:56	07/08/19 23:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	152	X	41 - 120	07/02/19 15:56	07/08/19 23:49	1
2-Fluorobiphenyl	104		48 - 120	07/02/19 15:56	07/08/19 23:49	1
2-Fluorophenol	65		35 - 120	07/02/19 15:56	07/08/19 23:49	1
Nitrobenzene-d5	91		46 - 120	07/02/19 15:56	07/08/19 23:49	1
Phenol-d5	40		22 - 120	07/02/19 15:56	07/08/19 23:49	1
p-Terphenyl-d14	70		59 - 136	07/02/19 15:56	07/08/19 23:49	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.048**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 20:15	1
Lead	**0.0050**	**J**	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 20:15	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-10
Date Collected: 06/27/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/08/19 23:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/08/19 23:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/08/19 23:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/08/19 23:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/08/19 23:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/08/19 23:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/08/19 23:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/08/19 23:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/08/19 23:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/08/19 23:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/08/19 23:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/08/19 23:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/08/19 23:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/08/19 23:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/08/19 23:51	1
2-Hexanone	ND		5.0	1.2	ug/L			07/08/19 23:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/08/19 23:51	1
Acetone	**4.4**	**J**	10	3.0	ug/L			07/08/19 23:51	1
Benzene	ND		1.0	0.41	ug/L			07/08/19 23:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/08/19 23:51	1
Bromoform	ND		1.0	0.26	ug/L			07/08/19 23:51	1
Bromomethane	ND		1.0	0.69	ug/L			07/08/19 23:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/08/19 23:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/08/19 23:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/08/19 23:51	1
Chloroethane	ND		1.0	0.32	ug/L			07/08/19 23:51	1
Chloroform	ND		1.0	0.34	ug/L			07/08/19 23:51	1
Chloromethane	ND		1.0	0.35	ug/L			07/08/19 23:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/08/19 23:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/08/19 23:51	1
Cyclohexane	ND		1.0	0.18	ug/L			07/08/19 23:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/08/19 23:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/08/19 23:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/08/19 23:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/08/19 23:51	1
Methyl acetate	ND		2.5	1.3	ug/L			07/08/19 23:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/08/19 23:51	1
Methylcyclohexane	**8.1**		1.0	0.16	ug/L			07/08/19 23:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/08/19 23:51	1
Styrene	ND		1.0	0.73	ug/L			07/08/19 23:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/08/19 23:51	1
Toluene	ND		1.0	0.51	ug/L			07/08/19 23:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/08/19 23:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/08/19 23:51	1
Trichloroethene	ND		1.0	0.46	ug/L			07/08/19 23:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/08/19 23:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/08/19 23:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/08/19 23:51	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/08/19 23:51	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-10

Date Collected: 06/27/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/08/19 23:51	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/08/19 23:51	1
tert-Butylbenzene	**1.5**		1.0	0.81	ug/L			07/08/19 23:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexane, 1,2-dimethyl-, trans-	*25*	*T J N*	*ug/L*		*7.32*	*6876-23-9*		*07/08/19 23:51*	*1*
Cyclohexane, 1,3,5-trimethyl-	*26*	*T J N*	*ug/L*		*7.83*	*1839-63-0*		*07/08/19 23:51*	*1*
Cyclohexane, 1,2,4-trimethyl-	*25*	*T J N*	*ug/L*		*8.19*	*2234-75-5*		*07/08/19 23:51*	*1*
Unknown	*32*	*T J*	*ug/L*		*8.76*			*07/08/19 23:51*	*1*
Unknown	*30*	*T J*	*ug/L*		*9.45*			*07/08/19 23:51*	*1*
Unknown	*24*	*T J*	*ug/L*		*11.47*			*07/08/19 23:51*	*1*
Unknown	*23*	*T J*	*ug/L*		*12.30*			*07/08/19 23:51*	*1*
Unknown	*30*	*T J*	*ug/L*		*12.45*			*07/08/19 23:51*	*1*
Unknown	*31*	*T J*	*ug/L*		*12.88*			*07/08/19 23:51*	*1*
Unknown	*25*	*T J*	*ug/L*		*12.97*			*07/08/19 23:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*07/08/19 23:51*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*07/08/19 23:51*	*1*
Toluene-d8 (Surr)	*83*		*80 - 120*		*07/08/19 23:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,4,6-Trichlorophenol	ND	*	25	3.1	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,4-Dichlorophenol	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,4-Dimethylphenol	ND		25	2.5	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,4-Dinitrophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,4-Dinitrotoluene	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:17	5
2,6-Dinitrotoluene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Chloronaphthalene	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Chlorophenol	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Methylnaphthalene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Methylphenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Nitroaniline	ND		50	2.1	ug/L		07/02/19 15:56	07/09/19 00:17	5
2-Nitrophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
3-Nitroaniline	ND		50	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
4,6-Dinitro-2-methylphenol	ND	*	50	11	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Chloroaniline	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Methylphenol	ND		50	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Nitroaniline	ND		50	1.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
4-Nitrophenol	ND	*	50	7.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Acenaphthene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 00:17	5
Acenaphthylene	ND		25	1.9	ug/L		07/02/19 15:56	07/09/19 00:17	5
Acetophenone	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
Anthracene	ND		25	1.4	ug/L		07/02/19 15:56	07/09/19 00:17	5

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-10
Date Collected: 06/27/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzaldehyde	ND		25	1.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzo(a)anthracene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzo(a)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzo(b)fluoranthene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Benzo(k)fluoranthene	ND		25	3.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
Biphenyl	ND		25	3.3	ug/L		07/02/19 15:56	07/09/19 00:17	5
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		07/02/19 15:56	07/09/19 00:17	5
Butyl benzyl phthalate	ND		25	5.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Caprolactam	ND		25	11	ug/L		07/02/19 15:56	07/09/19 00:17	5
Carbazole	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 00:17	5
Chrysene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 00:17	5
Dibenzofuran	ND		50	2.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Diethyl phthalate	ND		25	1.1	ug/L		07/02/19 15:56	07/09/19 00:17	5
Dimethyl phthalate	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Di-n-butyl phthalate	ND		25	1.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Di-n-octyl phthalate	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
Fluoranthene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Fluorene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Hexachlorobenzene	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Hexachlorobutadiene	ND		25	3.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Hexachloroethane	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:17	5
Isophorone	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:17	5
Naphthalene	ND		25	3.8	ug/L		07/02/19 15:56	07/09/19 00:17	5
Nitrobenzene	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 00:17	5
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:17	5
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:17	5
Pentachlorophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 00:17	5
Phenanthrene	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:17	5
Phenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:17	5
Pyrene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:17	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*100*	*T J*	*ug/L*		*2.53*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*110*	*T J*	*ug/L*		*2.71*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*24*	*T J*	*ug/L*		*4.76*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*32*	*T J*	*ug/L*		*4.81*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*25*	*T J*	*ug/L*		*4.99*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Cyclooctane, 1-methyl-3-propyl-	*30*	*T J N*	*ug/L*		*5.47*	*1000151-39-4*	*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*29*	*T J*	*ug/L*		*5.60*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*23*	*T J*	*ug/L*		*5.68*		*07/02/19 15:56*	*07/09/19 00:17*	*5*
Unknown	*26*	*T J*	*ug/L*		*5.90*		*07/02/19 15:56*	*07/09/19 00:17*	*5*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-10

Date Collected: 06/27/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-2

Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	16	T J	ug/L		6.10		07/02/19 15:56	07/09/19 00:17	5
Unknown	23	T J	ug/L		6.36		07/02/19 15:56	07/09/19 00:17	5
Unknown	17	T J	ug/L		6.64		07/02/19 15:56	07/09/19 00:17	5
Unknown	18	T J	ug/L		6.73		07/02/19 15:56	07/09/19 00:17	5
Unknown	16	T J	ug/L		6.97		07/02/19 15:56	07/09/19 00:17	5
Unknown	22	T J	ug/L		7.69		07/02/19 15:56	07/09/19 00:17	5
Unknown	19	T J	ug/L		7.91		07/02/19 15:56	07/09/19 00:17	5
Unknown	21	T J	ug/L		8.57		07/02/19 15:56	07/09/19 00:17	5
Unknown	21	T J	ug/L		8.59		07/02/19 15:56	07/09/19 00:17	5
Unknown	22	T J	ug/L		9.12		07/02/19 15:56	07/09/19 00:17	5
Octadecane, 2,6-dimethyl-	23	T J N	ug/L		9.57	75163-97-2	07/02/19 15:56	07/09/19 00:17	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		41 - 120	07/02/19 15:56	07/09/19 00:17	5
2-Fluorobiphenyl	93		48 - 120	07/02/19 15:56	07/09/19 00:17	5
2-Fluorophenol	48		35 - 120	07/02/19 15:56	07/09/19 00:17	5
Nitrobenzene-d5	76		46 - 120	07/02/19 15:56	07/09/19 00:17	5
Phenol-d5	29		22 - 120	07/02/19 15:56	07/09/19 00:17	5
p-Terphenyl-d14	64		59 - 136	07/02/19 15:56	07/09/19 00:17	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 20:46	1
Lead	**0.0036**	**J**	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 20:46	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-12R
Date Collected: 06/27/19 13:30
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			07/09/19 00:16	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			07/09/19 00:16	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			07/09/19 00:16	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			07/09/19 00:16	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			07/09/19 00:16	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			07/09/19 00:16	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			07/09/19 00:16	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			07/09/19 00:16	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			07/09/19 00:16	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			07/09/19 00:16	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			07/09/19 00:16	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			07/09/19 00:16	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			07/09/19 00:16	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			07/09/19 00:16	4
2-Butanone (MEK)	ND		40	5.3	ug/L			07/09/19 00:16	4
2-Hexanone	ND		20	5.0	ug/L			07/09/19 00:16	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			07/09/19 00:16	4
Acetone	ND		40	12	ug/L			07/09/19 00:16	4
Benzene	ND		4.0	1.6	ug/L			07/09/19 00:16	4
Bromodichloromethane	ND		4.0	1.6	ug/L			07/09/19 00:16	4
Bromoform	ND		4.0	1.0	ug/L			07/09/19 00:16	4
Bromomethane	ND		4.0	2.8	ug/L			07/09/19 00:16	4
Carbon disulfide	ND		4.0	0.76	ug/L			07/09/19 00:16	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			07/09/19 00:16	4
Chlorobenzene	ND		4.0	3.0	ug/L			07/09/19 00:16	4
Chloroethane	ND		4.0	1.3	ug/L			07/09/19 00:16	4
Chloroform	ND		4.0	1.4	ug/L			07/09/19 00:16	4
Chloromethane	ND		4.0	1.4	ug/L			07/09/19 00:16	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			07/09/19 00:16	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			07/09/19 00:16	4
Cyclohexane	**70**		4.0	0.72	ug/L			07/09/19 00:16	4
Dibromochloromethane	ND		4.0	1.3	ug/L			07/09/19 00:16	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			07/09/19 00:16	4
Ethylbenzene	ND		4.0	3.0	ug/L			07/09/19 00:16	4
Isopropylbenzene	ND		4.0	3.2	ug/L			07/09/19 00:16	4
Methyl acetate	ND		10	5.2	ug/L			07/09/19 00:16	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			07/09/19 00:16	4
Methylcyclohexane	**130**		4.0	0.64	ug/L			07/09/19 00:16	4
Methylene Chloride	ND		4.0	1.8	ug/L			07/09/19 00:16	4
Styrene	ND		4.0	2.9	ug/L			07/09/19 00:16	4
Tetrachloroethene	ND		4.0	1.4	ug/L			07/09/19 00:16	4
Toluene	ND		4.0	2.0	ug/L			07/09/19 00:16	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			07/09/19 00:16	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			07/09/19 00:16	4
Trichloroethene	ND		4.0	1.8	ug/L			07/09/19 00:16	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			07/09/19 00:16	4
Vinyl chloride	ND		4.0	3.6	ug/L			07/09/19 00:16	4
Xylenes, Total	ND		8.0	2.6	ug/L			07/09/19 00:16	4
n-Butylbenzene	ND		4.0	2.6	ug/L			07/09/19 00:16	4

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-12R

Date Collected: 06/27/19 13:30
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	7.9		4.0	3.0	ug/L			07/09/19 00:16	4
sec-Butylbenzene	4.3		4.0	3.0	ug/L			07/09/19 00:16	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			07/09/19 00:16	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Butane, 2-methyl-	*18*	*T J N*	*ug/L*		*2.05*	*78-78-4*		*07/09/19 00:16*	*4*
Cyclohexane, 1,3-dimethyl-, cis-	*21*	*T J N*	*ug/L*		*6.95*	*638-04-0*		*07/09/19 00:16*	*4*
Unknown	*15*	*T J*	*ug/L*		*10.41*			*07/09/19 00:16*	*4*
Benzene, 1-methyl-4-(1-methylethyl)-	*36*	*T J N*	*ug/L*		*11.58*	*99-87-6*		*07/09/19 00:16*	*4*
Unknown	*18*	*T J*	*ug/L*		*11.70*			*07/09/19 00:16*	*4*
Benzene, methyl(1-methylethyl)-	*38*	*T J N*	*ug/L*		*11.94*	*25155-15-1*		*07/09/19 00:16*	*4*
1,3-Cyclopentadiene, 1,2,3,4-tetramethyl-5-methylene-	*16*	*T J N*	*ug/L*		*11.98*	*76089-59-3*		*07/09/19 00:16*	*4*
Benzene, 1,2,4,5-tetramethyl-	*55*	*T J N*	*ug/L*		*12.35*	*95-93-2*		*07/09/19 00:16*	*4*
Unknown	*16*	*T J*	*ug/L*		*12.66*			*07/09/19 00:16*	*4*
1,4-Methanonaphthalene, 1,4-dihydro-	*14*	*T J N*	*ug/L*		*13.99*	*4453-90-1*		*07/09/19 00:16*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/09/19 00:16*	*4*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/09/19 00:16*	*4*
Toluene-d8 (Surr)	*88*		*80 - 120*		*07/09/19 00:16*	*4*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,4,6-Trichlorophenol	ND	*	25	3.1	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,4-Dichlorophenol	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,4-Dimethylphenol	ND		25	2.5	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,4-Dinitrophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,4-Dinitrotoluene	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:45	5
2,6-Dinitrotoluene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Chloronaphthalene	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Chlorophenol	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Methylnaphthalene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Methylphenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Nitroaniline	ND		50	2.1	ug/L		07/02/19 15:56	07/09/19 00:45	5
2-Nitrophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
3-Nitroaniline	ND		50	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
4,6-Dinitro-2-methylphenol	ND	*	50	11	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Chloroaniline	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Methylphenol	ND		50	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Nitroaniline	ND		50	1.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
4-Nitrophenol	ND	*	50	7.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Acenaphthene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 00:45	5
Acenaphthylene	ND		25	1.9	ug/L		07/02/19 15:56	07/09/19 00:45	5
Acetophenone	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:45	5

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-12R
Date Collected: 06/27/19 13:30
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		25	1.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
Atrazine	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzaldehyde	ND		25	1.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzo(a)anthracene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzo(a)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzo(b)fluoranthene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Benzo(k)fluoranthene	ND		25	3.7	ug/L		07/02/19 15:56	07/09/19 00:45	5
Biphenyl	ND		25	3.3	ug/L		07/02/19 15:56	07/09/19 00:45	5
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		07/02/19 15:56	07/09/19 00:45	5
Butyl benzyl phthalate	ND		25	5.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Caprolactam	ND		25	11	ug/L		07/02/19 15:56	07/09/19 00:45	5
Carbazole	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 00:45	5
Chrysene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:45	5
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 00:45	5
Dibenzofuran	ND		50	2.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Diethyl phthalate	ND		25	1.1	ug/L		07/02/19 15:56	07/09/19 00:45	5
Dimethyl phthalate	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Di-n-butyl phthalate	ND		25	1.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Di-n-octyl phthalate	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
Fluoranthene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Fluorene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Hexachlorobenzene	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Hexachlorobutadiene	ND		25	3.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Hexachloroethane	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 00:45	5
Isophorone	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:45	5
Naphthalene	ND		25	3.8	ug/L		07/02/19 15:56	07/09/19 00:45	5
Nitrobenzene	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 00:45	5
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 00:45	5
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 00:45	5
Pentachlorophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 00:45	5
Phenanthrene	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 00:45	5
Phenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 00:45	5
Pyrene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 00:45	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*90*	*T J*	*ug/L*		*2.53*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*100*	*T J*	*ug/L*		*2.71*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*34*	*T J*	*ug/L*		*4.81*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*9.6*	*T J*	*ug/L*		*5.94*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*10*	*T J*	*ug/L*		*7.08*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*12*	*T J*	*ug/L*		*7.28*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*16*	*T J*	*ug/L*		*7.63*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*8.4*	*T J*	*ug/L*		*7.98*		*07/02/19 15:56*	*07/09/19 00:45*	*5*
Unknown	*15*	*T J*	*ug/L*		*8.01*		*07/02/19 15:56*	*07/09/19 00:45*	*5*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-12R
Date Collected: 06/27/19 13:30
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-3
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	9.9	T J	ug/L		8.10		07/02/19 15:56	07/09/19 00:45	5
Hexadecane, 2,6,10,14-tetramethyl-	8.3	T J N	ug/L		8.19	638-36-8	07/02/19 15:56	07/09/19 00:45	5
Unknown	15	T J	ug/L		8.35		07/02/19 15:56	07/09/19 00:45	5
Unknown	13	T J	ug/L		8.96		07/02/19 15:56	07/09/19 00:45	5
Unknown	8.8	T J	ug/L		9.30		07/02/19 15:56	07/09/19 00:45	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	112		41 - 120	07/02/19 15:56	07/09/19 00:45	5
2-Fluorobiphenyl	87		48 - 120	07/02/19 15:56	07/09/19 00:45	5
2-Fluorophenol	56		35 - 120	07/02/19 15:56	07/09/19 00:45	5
Nitrobenzene-d5	76		46 - 120	07/02/19 15:56	07/09/19 00:45	5
Phenol-d5	35		22 - 120	07/02/19 15:56	07/09/19 00:45	5
p-Terphenyl-d14	58	X	59 - 136	07/02/19 15:56	07/09/19 00:45	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.027**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 20:50	1
Lead	**0.0060**	**J**	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 20:50	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-6R
Date Collected: 06/27/19 15:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/09/19 00:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/19 00:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/09/19 00:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/09/19 00:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/09/19 00:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/09/19 00:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/09/19 00:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/09/19 00:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/09/19 00:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/09/19 00:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/09/19 00:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/09/19 00:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/09/19 00:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/09/19 00:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/09/19 00:40	1
2-Hexanone	ND		5.0	1.2	ug/L			07/09/19 00:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/09/19 00:40	1
Acetone	**4.4**	**J**	10	3.0	ug/L			07/09/19 00:40	1
Benzene	ND		1.0	0.41	ug/L			07/09/19 00:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/09/19 00:40	1
Bromoform	ND		1.0	0.26	ug/L			07/09/19 00:40	1
Bromomethane	ND		1.0	0.69	ug/L			07/09/19 00:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/09/19 00:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/09/19 00:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/09/19 00:40	1
Chloroethane	ND		1.0	0.32	ug/L			07/09/19 00:40	1
Chloroform	ND		1.0	0.34	ug/L			07/09/19 00:40	1
Chloromethane	ND		1.0	0.35	ug/L			07/09/19 00:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/09/19 00:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/09/19 00:40	1
Cyclohexane	**18**		1.0	0.18	ug/L			07/09/19 00:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/09/19 00:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/09/19 00:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/09/19 00:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/09/19 00:40	1
Methyl acetate	ND		2.5	1.3	ug/L			07/09/19 00:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/09/19 00:40	1
Methylcyclohexane	**13**		1.0	0.16	ug/L			07/09/19 00:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/09/19 00:40	1
Styrene	ND		1.0	0.73	ug/L			07/09/19 00:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/09/19 00:40	1
Toluene	ND		1.0	0.51	ug/L			07/09/19 00:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/09/19 00:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/09/19 00:40	1
Trichloroethene	ND		1.0	0.46	ug/L			07/09/19 00:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/09/19 00:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/09/19 00:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/09/19 00:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/09/19 00:40	1

Client Sample ID: MW-6R
Date Collected: 06/27/19 15:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/09/19 00:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/09/19 00:40	1
tert-Butylbenzene	**1.6**		1.0	0.81	ug/L			07/09/19 00:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentane, 1,1-dimethyl-	*7.2*	*T J N*	*ug/L*		*5.11*	*1638-26-2*		*07/09/19 00:40*	*1*
Cyclohexane, 1,3-dimethyl-, cis-	*11*	*T J N*	*ug/L*		*6.95*	*638-04-0*		*07/09/19 00:40*	*1*
Unknown	*7.0*	*T J*	*ug/L*		*7.14*			*07/09/19 00:40*	*1*
Cyclohexane, 1,2-dimethyl-, trans-	*9.1*	*T J N*	*ug/L*		*7.32*	*6876-23-9*		*07/09/19 00:40*	*1*
Cyclohexane, 1,4-dimethyl-	*7.1*	*T J N*	*ug/L*		*7.44*	*589-90-2*		*07/09/19 00:40*	*1*
Unknown	*7.0*	*T J*	*ug/L*		*8.76*			*07/09/19 00:40*	*1*
Benzene, 1-methyl-2-(1-methylethyl)-	*7.0*	*T J N*	*ug/L*		*11.58*	*527-84-4*		*07/09/19 00:40*	*1*
Benzene, 1-ethyl-2,4-dimethyl-	*11*	*T J N*	*ug/L*		*11.94*	*874-41-9*		*07/09/19 00:40*	*1*
Unknown	*10*	*T J*	*ug/L*		*12.36*			*07/09/19 00:40*	*1*
Unknown	*6.8*	*T J*	*ug/L*		*12.65*			*07/09/19 00:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*07/09/19 00:40*	*1*
4-Bromofluorobenzene (Surr)	*85*		*73 - 120*		*07/09/19 00:40*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*07/09/19 00:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,4,6-Trichlorophenol	ND	*	25	3.1	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,4-Dichlorophenol	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,4-Dimethylphenol	ND		25	2.5	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,4-Dinitrophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,4-Dinitrotoluene	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 01:13	1
2,6-Dinitrotoluene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Chloronaphthalene	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Chlorophenol	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Methylnaphthalene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Methylphenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Nitroaniline	ND		50	2.1	ug/L		07/02/19 15:56	07/09/19 01:13	1
2-Nitrophenol	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
3-Nitroaniline	ND		50	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
4,6-Dinitro-2-methylphenol	ND	*	50	11	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Chloroaniline	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Methylphenol	ND		50	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Nitroaniline	ND		50	1.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
4-Nitrophenol	ND	*	50	7.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Acenaphthene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 01:13	1
Acenaphthylene	ND		25	1.9	ug/L		07/02/19 15:56	07/09/19 01:13	1
Acetophenone	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
Anthracene	ND		25	1.4	ug/L		07/02/19 15:56	07/09/19 01:13	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-6R
Date Collected: 06/27/19 15:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		25	2.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzaldehyde	ND		25	1.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzo(a)anthracene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzo(a)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzo(b)fluoranthene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Benzo(k)fluoranthene	ND		25	3.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
Biphenyl	ND		25	3.3	ug/L		07/02/19 15:56	07/09/19 01:13	1
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		07/02/19 15:56	07/09/19 01:13	1
Butyl benzyl phthalate	ND		25	5.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Caprolactam	ND		25	11	ug/L		07/02/19 15:56	07/09/19 01:13	1
Carbazole	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 01:13	1
Chrysene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		07/02/19 15:56	07/09/19 01:13	1
Dibenzofuran	ND		50	2.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Diethyl phthalate	ND		25	1.1	ug/L		07/02/19 15:56	07/09/19 01:13	1
Dimethyl phthalate	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Di-n-butyl phthalate	ND		25	1.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Di-n-octyl phthalate	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
Fluoranthene	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Fluorene	ND		25	1.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Hexachlorobenzene	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Hexachlorobutadiene	ND		25	3.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Hexachloroethane	ND		25	3.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		07/02/19 15:56	07/09/19 01:13	1
Isophorone	ND		25	2.2	ug/L		07/02/19 15:56	07/09/19 01:13	1
Naphthalene	ND		25	3.8	ug/L		07/02/19 15:56	07/09/19 01:13	1
Nitrobenzene	ND		25	1.5	ug/L		07/02/19 15:56	07/09/19 01:13	1
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		07/02/19 15:56	07/09/19 01:13	1
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		07/02/19 15:56	07/09/19 01:13	1
Pentachlorophenol	ND		50	11	ug/L		07/02/19 15:56	07/09/19 01:13	1
Phenanthrene	**3.7**	**J B**	25	2.2	ug/L		07/02/19 15:56	07/09/19 01:13	1
Phenol	ND		25	2.0	ug/L		07/02/19 15:56	07/09/19 01:13	1
Pyrene	ND		25	1.7	ug/L		07/02/19 15:56	07/09/19 01:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*72*	*T J*	*ug/L*		*2.54*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*530*	*T J*	*ug/L*		*2.82*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*160*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*13*	*T J*	*ug/L*		*5.93*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Benzene, 4-ethyl-1,2-dimethyl-	*11*	*T J N*	*ug/L*		*6.73*	*934-80-5*	*07/02/19 15:56*	*07/09/19 01:13*	*1*
Column Bleed	*9.0*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*19*	*T J*	*ug/L*		*7.30*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*11*	*T J*	*ug/L*		*7.59*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*33*	*T J*	*ug/L*		*7.65*		*07/02/19 15:56*	*07/09/19 01:13*	*1*
Unknown	*10*	*T J*	*ug/L*		*7.69*		*07/02/19 15:56*	*07/09/19 01:13*	*1*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-6R
Date Collected: 06/27/19 15:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-4
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	17	T J	ug/L		7.77		07/02/19 15:56	07/09/19 01:13	1
Unknown	10	T J	ug/L		7.90		07/02/19 15:56	07/09/19 01:13	1
Unknown	24	T J	ug/L		8.03		07/02/19 15:56	07/09/19 01:13	1
Unknown	15	T J	ug/L		8.16		07/02/19 15:56	07/09/19 01:13	1
Unknown	9.0	T J	ug/L		8.36		07/02/19 15:56	07/09/19 01:13	1
Unknown	25	T J	ug/L		8.52		07/02/19 15:56	07/09/19 01:13	1
Unknown	21	T J	ug/L		8.54		07/02/19 15:56	07/09/19 01:13	1
Unknown	14	T J	ug/L		9.07		07/02/19 15:56	07/09/19 01:13	1
Unknown	14	T J	ug/L		9.31		07/02/19 15:56	07/09/19 01:13	1
Unknown	13	T J	ug/L		10.49		07/02/19 15:56	07/09/19 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	124	X	41 - 120	07/02/19 15:56	07/09/19 01:13	1
2-Fluorobiphenyl	94		48 - 120	07/02/19 15:56	07/09/19 01:13	1
2-Fluorophenol	66		35 - 120	07/02/19 15:56	07/09/19 01:13	1
Nitrobenzene-d5	85		46 - 120	07/02/19 15:56	07/09/19 01:13	1
Phenol-d5	44		22 - 120	07/02/19 15:56	07/09/19 01:13	1
p-Terphenyl-d14	68		59 - 136	07/02/19 15:56	07/09/19 01:13	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.042**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 20:54	1
Lead	**0.012**		0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 20:54	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-7

Date Collected: 06/28/19 09:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/08/19 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/08/19 13:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/08/19 13:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/08/19 13:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/08/19 13:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/08/19 13:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/08/19 13:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/08/19 13:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/08/19 13:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/08/19 13:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/08/19 13:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/08/19 13:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/08/19 13:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/08/19 13:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/08/19 13:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/08/19 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/08/19 13:52	1
Acetone	ND		10	3.0	ug/L			07/08/19 13:52	1
Benzene	ND		1.0	0.41	ug/L			07/08/19 13:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/08/19 13:52	1
Bromoform	ND		1.0	0.26	ug/L			07/08/19 13:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/08/19 13:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/08/19 13:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/08/19 13:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/08/19 13:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/08/19 13:52	1
Chloroform	ND		1.0	0.34	ug/L			07/08/19 13:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/08/19 13:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/08/19 13:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/08/19 13:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/08/19 13:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/08/19 13:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/08/19 13:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/08/19 13:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/08/19 13:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/08/19 13:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/08/19 13:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/08/19 13:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/08/19 13:52	1
Styrene	ND		1.0	0.73	ug/L			07/08/19 13:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/08/19 13:52	1
Toluene	ND		1.0	0.51	ug/L			07/08/19 13:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/08/19 13:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/08/19 13:52	1
Trichloroethene	ND		1.0	0.46	ug/L			07/08/19 13:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/08/19 13:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/08/19 13:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/08/19 13:52	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/08/19 13:52	1

Client Sample ID: MW-7
Lab Sample ID: 480-155596-5
Date Collected: 06/28/19 09:15
Matrix: Water
Date Received: 06/28/19 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/08/19 13:52	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/08/19 13:52	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/08/19 13:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1-ethyl-3,5-dimethyl-	*2.5*	*T J N*	*ug/L*		*11.94*	*934-74-7*		*07/08/19 13:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*07/08/19 13:52*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*07/08/19 13:52*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*07/08/19 13:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,4,6-Trichlorophenol	ND	*	5.0	0.61	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 01:41	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Nitroaniline	ND		10	0.42	ug/L		07/02/19 15:56	07/09/19 01:41	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 01:41	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 01:41	1
3-Nitroaniline	ND		10	0.48	ug/L		07/02/19 15:56	07/09/19 01:41	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Methylphenol	ND		10	0.36	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Nitroaniline	ND		10	0.25	ug/L		07/02/19 15:56	07/09/19 01:41	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/02/19 15:56	07/09/19 01:41	1
Acenaphthene	ND		5.0	0.41	ug/L		07/02/19 15:56	07/09/19 01:41	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/02/19 15:56	07/09/19 01:41	1
Acetophenone	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 01:41	1
Anthracene	ND		5.0	0.28	ug/L		07/02/19 15:56	07/09/19 01:41	1
Atrazine	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 01:41	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/02/19 15:56	07/09/19 01:41	1
Biphenyl	ND		5.0	0.65	ug/L		07/02/19 15:56	07/09/19 01:41	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/02/19 15:56	07/09/19 01:41	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-7
Date Collected: 06/28/19 09:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 01:41	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 01:41	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 01:41	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/02/19 15:56	07/09/19 01:41	1
Caprolactam	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 01:41	1
Carbazole	ND		5.0	0.30	ug/L		07/02/19 15:56	07/09/19 01:41	1
Chrysene	ND		5.0	0.33	ug/L		07/02/19 15:56	07/09/19 01:41	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/02/19 15:56	07/09/19 01:41	1
Dibenzofuran	ND		10	0.51	ug/L		07/02/19 15:56	07/09/19 01:41	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/02/19 15:56	07/09/19 01:41	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 01:41	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/02/19 15:56	07/09/19 01:41	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 01:41	1
Fluoranthene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 01:41	1
Fluorene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 01:41	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 01:41	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/02/19 15:56	07/09/19 01:41	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 01:41	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 01:41	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 01:41	1
Isophorone	ND		5.0	0.43	ug/L		07/02/19 15:56	07/09/19 01:41	1
Naphthalene	ND		5.0	0.76	ug/L		07/02/19 15:56	07/09/19 01:41	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/02/19 15:56	07/09/19 01:41	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 01:41	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 01:41	1
Pentachlorophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 01:41	1
Phenanthrene	**0.81**	**J B**	5.0	0.44	ug/L		07/02/19 15:56	07/09/19 01:41	1
Phenol	ND		5.0	0.39	ug/L		07/02/19 15:56	07/09/19 01:41	1
Pyrene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 01:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.8*	*T J*	*ug/L*		*2.54*		*07/02/19 15:56*	*07/09/19 01:41*	*1*
Unknown	*120*	*T J*	*ug/L*		*2.83*		*07/02/19 15:56*	*07/09/19 01:41*	*1*
Unknown	*28*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/09/19 01:41*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*5.94*		*07/02/19 15:56*	*07/09/19 01:41*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/09/19 01:41*	*1*
Column Bleed	*1.9*	*T J*	*ug/L*		*7.77*		*07/02/19 15:56*	*07/09/19 01:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*41 - 120*	*07/02/19 15:56*	*07/09/19 01:41*	*1*
2-Fluorobiphenyl	*102*		*48 - 120*	*07/02/19 15:56*	*07/09/19 01:41*	*1*
2-Fluorophenol	*63*		*35 - 120*	*07/02/19 15:56*	*07/09/19 01:41*	*1*
Nitrobenzene-d5	*92*		*46 - 120*	*07/02/19 15:56*	*07/09/19 01:41*	*1*
Phenol-d5	*41*		*22 - 120*	*07/02/19 15:56*	*07/09/19 01:41*	*1*
p-Terphenyl-d14	*78*		*59 - 136*	*07/02/19 15:56*	*07/09/19 01:41*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.067**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 20:58	1
Lead	**0.0041**	**J**	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 20:58	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-8R
Date Collected: 06/28/19 10:45
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			07/08/19 14:16	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			07/08/19 14:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			07/08/19 14:16	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			07/08/19 14:16	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			07/08/19 14:16	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			07/08/19 14:16	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			07/08/19 14:16	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			07/08/19 14:16	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			07/08/19 14:16	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			07/08/19 14:16	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			07/08/19 14:16	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			07/08/19 14:16	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			07/08/19 14:16	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			07/08/19 14:16	2
2-Butanone (MEK)	ND		20	2.6	ug/L			07/08/19 14:16	2
2-Hexanone	ND		10	2.5	ug/L			07/08/19 14:16	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			07/08/19 14:16	2
Acetone	ND		20	6.0	ug/L			07/08/19 14:16	2
Benzene	ND		2.0	0.82	ug/L			07/08/19 14:16	2
Bromodichloromethane	ND		2.0	0.78	ug/L			07/08/19 14:16	2
Bromoform	ND		2.0	0.52	ug/L			07/08/19 14:16	2
Bromomethane	ND		2.0	1.4	ug/L			07/08/19 14:16	2
Carbon disulfide	ND		2.0	0.38	ug/L			07/08/19 14:16	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			07/08/19 14:16	2
Chlorobenzene	ND		2.0	1.5	ug/L			07/08/19 14:16	2
Chloroethane	ND		2.0	0.64	ug/L			07/08/19 14:16	2
Chloroform	ND		2.0	0.68	ug/L			07/08/19 14:16	2
Chloromethane	ND		2.0	0.70	ug/L			07/08/19 14:16	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			07/08/19 14:16	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			07/08/19 14:16	2
Cyclohexane	ND		2.0	0.36	ug/L			07/08/19 14:16	2
Dibromochloromethane	ND		2.0	0.64	ug/L			07/08/19 14:16	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			07/08/19 14:16	2
Ethylbenzene	ND		2.0	1.5	ug/L			07/08/19 14:16	2
Isopropylbenzene	ND		2.0	1.6	ug/L			07/08/19 14:16	2
Methyl acetate	ND		5.0	2.6	ug/L			07/08/19 14:16	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			07/08/19 14:16	2
Methylcyclohexane	ND		2.0	0.32	ug/L			07/08/19 14:16	2
Methylene Chloride	ND		2.0	0.88	ug/L			07/08/19 14:16	2
Styrene	ND		2.0	1.5	ug/L			07/08/19 14:16	2
Tetrachloroethene	ND		2.0	0.72	ug/L			07/08/19 14:16	2
Toluene	ND		2.0	1.0	ug/L			07/08/19 14:16	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			07/08/19 14:16	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			07/08/19 14:16	2
Trichloroethene	ND		2.0	0.92	ug/L			07/08/19 14:16	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			07/08/19 14:16	2
Vinyl chloride	ND		2.0	1.8	ug/L			07/08/19 14:16	2
Xylenes, Total	ND		4.0	1.3	ug/L			07/08/19 14:16	2
n-Butylbenzene	ND		2.0	1.3	ug/L			07/08/19 14:16	2

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-8R

Date Collected: 06/28/19 10:45
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			07/08/19 14:16	2
sec-Butylbenzene	ND		2.0	1.5	ug/L			07/08/19 14:16	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			07/08/19 14:16	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/08/19 14:16*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*07/08/19 14:16*	*2*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/08/19 14:16*	*2*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/08/19 14:16*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,4,6-Trichlorophenol	ND	*	5.0	0.61	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,4-Dimethylphenol	**0.93**	**J**	5.0	0.50	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:09	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Nitroaniline	ND		10	0.42	ug/L		07/02/19 15:56	07/09/19 02:09	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 02:09	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:09	1
3-Nitroaniline	ND		10	0.48	ug/L		07/02/19 15:56	07/09/19 02:09	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Methylphenol	ND		10	0.36	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Nitroaniline	ND		10	0.25	ug/L		07/02/19 15:56	07/09/19 02:09	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/02/19 15:56	07/09/19 02:09	1
Acenaphthene	ND		5.0	0.41	ug/L		07/02/19 15:56	07/09/19 02:09	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/02/19 15:56	07/09/19 02:09	1
Acetophenone	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 02:09	1
Anthracene	ND		5.0	0.28	ug/L		07/02/19 15:56	07/09/19 02:09	1
Atrazine	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:09	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/02/19 15:56	07/09/19 02:09	1
Biphenyl	ND		5.0	0.65	ug/L		07/02/19 15:56	07/09/19 02:09	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/02/19 15:56	07/09/19 02:09	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-8R
Date Collected: 06/28/19 10:45
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:09	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:09	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 02:09	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/02/19 15:56	07/09/19 02:09	1
Caprolactam	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 02:09	1
Carbazole	ND		5.0	0.30	ug/L		07/02/19 15:56	07/09/19 02:09	1
Chrysene	ND		5.0	0.33	ug/L		07/02/19 15:56	07/09/19 02:09	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/02/19 15:56	07/09/19 02:09	1
Dibenzofuran	ND		10	0.51	ug/L		07/02/19 15:56	07/09/19 02:09	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/02/19 15:56	07/09/19 02:09	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:09	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/02/19 15:56	07/09/19 02:09	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:09	1
Fluoranthene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:09	1
Fluorene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:09	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:09	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/02/19 15:56	07/09/19 02:09	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:09	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:09	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:09	1
Isophorone	ND		5.0	0.43	ug/L		07/02/19 15:56	07/09/19 02:09	1
Naphthalene	ND		5.0	0.76	ug/L		07/02/19 15:56	07/09/19 02:09	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/02/19 15:56	07/09/19 02:09	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 02:09	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:09	1
Pentachlorophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 02:09	1
Phenanthrene	**0.71**	**J B**	5.0	0.44	ug/L		07/02/19 15:56	07/09/19 02:09	1
Phenol	ND		5.0	0.39	ug/L		07/02/19 15:56	07/09/19 02:09	1
Pyrene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 02:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2.8*	*T J*	*ug/L*		*2.44*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*2.1*	*T J*	*ug/L*		*2.75*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*90*	*T J*	*ug/L*		*2.82*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*3.61*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*2.5*	*T J*	*ug/L*		*4.75*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*23*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
1-Methylcyclohexanol	*6.1*	*T J N*	*ug/L*		*5.40*	*590-67-0*	*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*5.79*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*5.94*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*6.72*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Column Bleed	*2.1*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*2.3*	*T J*	*ug/L*		*7.77*		*07/02/19 15:56*	*07/09/19 02:09*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*9.49*		*07/02/19 15:56*	*07/09/19 02:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*116*		*41 - 120*	*07/02/19 15:56*	*07/09/19 02:09*	*1*
2-Fluorobiphenyl	*99*		*48 - 120*	*07/02/19 15:56*	*07/09/19 02:09*	*1*
2-Fluorophenol	*58*		*35 - 120*	*07/02/19 15:56*	*07/09/19 02:09*	*1*
Nitrobenzene-d5	*84*		*46 - 120*	*07/02/19 15:56*	*07/09/19 02:09*	*1*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-8R
Date Collected: 06/28/19 10:45
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*37*		*22 - 120*	*07/02/19 15:56*	*07/09/19 02:09*	*1*
p-Terphenyl-d14	*59*		*59 - 136*	*07/02/19 15:56*	*07/09/19 02:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0059	J	0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 21:02	1
Lead	0.0078	J	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 21:02	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-14
Date Collected: 06/28/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/08/19 14:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/08/19 14:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/08/19 14:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/08/19 14:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/08/19 14:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/08/19 14:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/08/19 14:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/08/19 14:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/08/19 14:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/08/19 14:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/08/19 14:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/08/19 14:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/08/19 14:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/08/19 14:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/08/19 14:40	1
2-Hexanone	ND		5.0	1.2	ug/L			07/08/19 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/08/19 14:40	1
Acetone	ND		10	3.0	ug/L			07/08/19 14:40	1
Benzene	ND		1.0	0.41	ug/L			07/08/19 14:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/08/19 14:40	1
Bromoform	ND		1.0	0.26	ug/L			07/08/19 14:40	1
Bromomethane	ND		1.0	0.69	ug/L			07/08/19 14:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/08/19 14:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/08/19 14:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/08/19 14:40	1
Chloroethane	ND		1.0	0.32	ug/L			07/08/19 14:40	1
Chloroform	ND		1.0	0.34	ug/L			07/08/19 14:40	1
Chloromethane	ND		1.0	0.35	ug/L			07/08/19 14:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/08/19 14:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/08/19 14:40	1
Cyclohexane	ND		1.0	0.18	ug/L			07/08/19 14:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/08/19 14:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/08/19 14:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/08/19 14:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/08/19 14:40	1
Methyl acetate	ND		2.5	1.3	ug/L			07/08/19 14:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/08/19 14:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/08/19 14:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/08/19 14:40	1
Styrene	ND		1.0	0.73	ug/L			07/08/19 14:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/08/19 14:40	1
Toluene	ND		1.0	0.51	ug/L			07/08/19 14:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/08/19 14:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/08/19 14:40	1
Trichloroethene	ND		1.0	0.46	ug/L			07/08/19 14:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/08/19 14:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/08/19 14:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/08/19 14:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/08/19 14:40	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-14

Date Collected: 06/28/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/08/19 14:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/08/19 14:40	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/08/19 14:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/08/19 14:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/08/19 14:40*	*1*
4-Bromofluorobenzene (Surr)	*85*		*73 - 120*		*07/08/19 14:40*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*07/08/19 14:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,4,6-Trichlorophenol	ND	*	5.0	0.61	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:37	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Nitroaniline	ND		10	0.42	ug/L		07/02/19 15:56	07/09/19 02:37	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 02:37	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:37	1
3-Nitroaniline	ND		10	0.48	ug/L		07/02/19 15:56	07/09/19 02:37	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Methylphenol	ND		10	0.36	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Nitroaniline	ND		10	0.25	ug/L		07/02/19 15:56	07/09/19 02:37	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/02/19 15:56	07/09/19 02:37	1
Acenaphthene	ND		5.0	0.41	ug/L		07/02/19 15:56	07/09/19 02:37	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/02/19 15:56	07/09/19 02:37	1
Acetophenone	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 02:37	1
Anthracene	ND		5.0	0.28	ug/L		07/02/19 15:56	07/09/19 02:37	1
Atrazine	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:37	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/02/19 15:56	07/09/19 02:37	1
Biphenyl	ND		5.0	0.65	ug/L		07/02/19 15:56	07/09/19 02:37	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/02/19 15:56	07/09/19 02:37	1

Client Sample ID: MW-14
Lab Sample ID: 480-155596-7
Date Collected: 06/28/19 12:15
Matrix: Water
Date Received: 06/28/19 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 02:37	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:37	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 02:37	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/02/19 15:56	07/09/19 02:37	1
Caprolactam	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 02:37	1
Carbazole	ND		5.0	0.30	ug/L		07/02/19 15:56	07/09/19 02:37	1
Chrysene	ND		5.0	0.33	ug/L		07/02/19 15:56	07/09/19 02:37	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/02/19 15:56	07/09/19 02:37	1
Dibenzofuran	ND		10	0.51	ug/L		07/02/19 15:56	07/09/19 02:37	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/02/19 15:56	07/09/19 02:37	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:37	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/02/19 15:56	07/09/19 02:37	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:37	1
Fluoranthene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 02:37	1
Fluorene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 02:37	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:37	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/02/19 15:56	07/09/19 02:37	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:37	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 02:37	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 02:37	1
Isophorone	ND		5.0	0.43	ug/L		07/02/19 15:56	07/09/19 02:37	1
Naphthalene	ND		5.0	0.76	ug/L		07/02/19 15:56	07/09/19 02:37	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/02/19 15:56	07/09/19 02:37	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 02:37	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 02:37	1
Pentachlorophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 02:37	1
Phenanthrene	**0.90**	**J B**	5.0	0.44	ug/L		07/02/19 15:56	07/09/19 02:37	1
Phenol	ND		5.0	0.39	ug/L		07/02/19 15:56	07/09/19 02:37	1
Pyrene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 02:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*20*	*T J*	*ug/L*		*2.56*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Unknown	*120*	*T J*	*ug/L*		*2.82*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*2.89*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Unknown	*30*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Unknown	*4.3*	*T J*	*ug/L*		*5.93*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Column Bleed	*2.6*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/09/19 02:37*	*1*
Unknown	*2.1*	*T J*	*ug/L*		*7.77*		*07/02/19 15:56*	*07/09/19 02:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*41 - 120*	*07/02/19 15:56*	*07/09/19 02:37*	*1*
2-Fluorobiphenyl	*100*		*48 - 120*	*07/02/19 15:56*	*07/09/19 02:37*	*1*
2-Fluorophenol	*62*		*35 - 120*	*07/02/19 15:56*	*07/09/19 02:37*	*1*
Nitrobenzene-d5	*85*		*46 - 120*	*07/02/19 15:56*	*07/09/19 02:37*	*1*
Phenol-d5	*40*		*22 - 120*	*07/02/19 15:56*	*07/09/19 02:37*	*1*
p-Terphenyl-d14	*61*		*59 - 136*	*07/02/19 15:56*	*07/09/19 02:37*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.066**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 21:06	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-14
Date Collected: 06/28/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0032	J	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 21:06	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: BLIND DUP
Date Collected: 06/28/19 11:05
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/09/19 11:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/19 11:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/09/19 11:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/09/19 11:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/09/19 11:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/09/19 11:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/09/19 11:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/09/19 11:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/09/19 11:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/09/19 11:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/09/19 11:31	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/09/19 11:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/09/19 11:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/09/19 11:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/09/19 11:31	1
2-Hexanone	ND		5.0	1.2	ug/L			07/09/19 11:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/09/19 11:31	1
Acetone	**3.5**	**J**	10	3.0	ug/L			07/09/19 11:31	1
Benzene	ND		1.0	0.41	ug/L			07/09/19 11:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/09/19 11:31	1
Bromoform	ND		1.0	0.26	ug/L			07/09/19 11:31	1
Bromomethane	ND		1.0	0.69	ug/L			07/09/19 11:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/09/19 11:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/09/19 11:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/09/19 11:31	1
Chloroethane	ND		1.0	0.32	ug/L			07/09/19 11:31	1
Chloroform	ND		1.0	0.34	ug/L			07/09/19 11:31	1
Chloromethane	ND		1.0	0.35	ug/L			07/09/19 11:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/09/19 11:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/09/19 11:31	1
Cyclohexane	**20**		1.0	0.18	ug/L			07/09/19 11:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/09/19 11:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/09/19 11:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/09/19 11:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/09/19 11:31	1
Methyl acetate	ND		2.5	1.3	ug/L			07/09/19 11:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/09/19 11:31	1
Methylcyclohexane	**33**		1.0	0.16	ug/L			07/09/19 11:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/09/19 11:31	1
Styrene	ND		1.0	0.73	ug/L			07/09/19 11:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/09/19 11:31	1
Toluene	ND		1.0	0.51	ug/L			07/09/19 11:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/09/19 11:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/09/19 11:31	1
Trichloroethene	ND		1.0	0.46	ug/L			07/09/19 11:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/09/19 11:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/09/19 11:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/09/19 11:31	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/09/19 11:31	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: BLIND DUP

Date Collected: 06/28/19 11:05
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/09/19 11:31	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/09/19 11:31	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/09/19 11:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.0*	*T J*	*ug/L*		*5.10*			*07/09/19 11:31*	*1*
Unknown	*4.6*	*T J*	*ug/L*		*5.37*			*07/09/19 11:31*	*1*
Unknown	*2.8*	*T J*	*ug/L*		*6.24*			*07/09/19 11:31*	*1*
Cyclohexane, 1,3-dimethyl-, cis-	*8.1*	*T J N*	*ug/L*		*6.95*	*638-04-0*		*07/09/19 11:31*	*1*
Cyclohexane, 1,2-dimethyl-, trans-	*5.4*	*T J N*	*ug/L*		*7.32*	*6876-23-9*		*07/09/19 11:31*	*1*
Cyclohexane, 1,4-dimethyl-	*3.7*	*T J N*	*ug/L*		*7.44*	*589-90-2*		*07/09/19 11:31*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*12.36*			*07/09/19 11:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*07/09/19 11:31*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*07/09/19 11:31*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*07/09/19 11:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,4,6-Trichlorophenol	ND	*	5.0	0.61	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 03:05	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Nitroaniline	ND		10	0.42	ug/L		07/02/19 15:56	07/09/19 03:05	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/02/19 15:56	07/09/19 03:05	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 03:05	1
3-Nitroaniline	ND		10	0.48	ug/L		07/02/19 15:56	07/09/19 03:05	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Methylphenol	ND		10	0.36	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Nitroaniline	ND		10	0.25	ug/L		07/02/19 15:56	07/09/19 03:05	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/02/19 15:56	07/09/19 03:05	1
Acenaphthene	ND		5.0	0.41	ug/L		07/02/19 15:56	07/09/19 03:05	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/02/19 15:56	07/09/19 03:05	1
Acetophenone	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 03:05	1
Anthracene	ND		5.0	0.28	ug/L		07/02/19 15:56	07/09/19 03:05	1
Atrazine	ND		5.0	0.46	ug/L		07/02/19 15:56	07/09/19 03:05	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/02/19 15:56	07/09/19 03:05	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 03:05	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: BLIND DUP
Date Collected: 06/28/19 11:05
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 03:05	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 03:05	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 03:05	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/02/19 15:56	07/09/19 03:05	1
Biphenyl	ND		5.0	0.65	ug/L		07/02/19 15:56	07/09/19 03:05	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/02/19 15:56	07/09/19 03:05	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/02/19 15:56	07/09/19 03:05	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 03:05	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 03:05	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/02/19 15:56	07/09/19 03:05	1
Caprolactam	ND		5.0	2.2	ug/L		07/02/19 15:56	07/09/19 03:05	1
Carbazole	ND		5.0	0.30	ug/L		07/02/19 15:56	07/09/19 03:05	1
Chrysene	ND		5.0	0.33	ug/L		07/02/19 15:56	07/09/19 03:05	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/02/19 15:56	07/09/19 03:05	1
Dibenzofuran	ND		10	0.51	ug/L		07/02/19 15:56	07/09/19 03:05	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/02/19 15:56	07/09/19 03:05	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 03:05	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/02/19 15:56	07/09/19 03:05	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 03:05	1
Fluoranthene	ND		5.0	0.40	ug/L		07/02/19 15:56	07/09/19 03:05	1
Fluorene	ND		5.0	0.36	ug/L		07/02/19 15:56	07/09/19 03:05	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 03:05	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/02/19 15:56	07/09/19 03:05	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 03:05	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/02/19 15:56	07/09/19 03:05	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/02/19 15:56	07/09/19 03:05	1
Isophorone	ND		5.0	0.43	ug/L		07/02/19 15:56	07/09/19 03:05	1
Naphthalene	ND		5.0	0.76	ug/L		07/02/19 15:56	07/09/19 03:05	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/02/19 15:56	07/09/19 03:05	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/02/19 15:56	07/09/19 03:05	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/02/19 15:56	07/09/19 03:05	1
Pentachlorophenol	ND		10	2.2	ug/L		07/02/19 15:56	07/09/19 03:05	1
Phenanthrene	**0.90**	**J B**	5.0	0.44	ug/L		07/02/19 15:56	07/09/19 03:05	1
Phenol	ND		5.0	0.39	ug/L		07/02/19 15:56	07/09/19 03:05	1
Pyrene	ND		5.0	0.34	ug/L		07/02/19 15:56	07/09/19 03:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*1.7*	*T J*	*ug/L*		*2.67*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*110*	*T J*	*ug/L*		*2.82*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*30*	*T J*	*ug/L*		*4.83*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*5.93*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Benzene, 2-ethyl-1,3-dimethyl-	*2.0*	*T J N*	*ug/L*		*6.73*	*2870-04-4*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*2.3*	*T J*	*ug/L*		*6.89*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*2.3*	*T J*	*ug/L*		*7.15*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*2.3*	*T J*	*ug/L*		*7.77*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*10.08*		*07/02/19 15:56*	*07/09/19 03:05*	*1*
n-Hexadecanoic acid	*2.6*	*T J N*	*ug/L*		*10.49*	*57-10-3*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
Unknown	*5.4*	*T J*	*ug/L*		*11.00*		*07/02/19 15:56*	*07/09/19 03:05*	*1*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: BLIND DUP

Date Collected: 06/28/19 11:05
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*41 - 120*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
2-Fluorobiphenyl	*99*		*48 - 120*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
2-Fluorophenol	*61*		*35 - 120*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
Nitrobenzene-d5	*85*		*46 - 120*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
Phenol-d5	*38*		*22 - 120*	*07/02/19 15:56*	*07/09/19 03:05*	*1*
p-Terphenyl-d14	*66*		*59 - 136*	*07/02/19 15:56*	*07/09/19 03:05*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.050**		0.015	0.0056	mg/L		07/02/19 07:59	07/03/19 21:10	1
Lead	**0.0058**	**J**	0.010	0.0030	mg/L		07/02/19 07:59	07/03/19 21:10	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: TRIP BLANK

Date Collected: 06/27/19 00:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/08/19 15:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/08/19 15:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/08/19 15:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/08/19 15:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/08/19 15:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/08/19 15:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/08/19 15:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/08/19 15:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/08/19 15:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/08/19 15:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/08/19 15:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/08/19 15:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/08/19 15:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/08/19 15:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/08/19 15:29	1
2-Hexanone	ND		5.0	1.2	ug/L			07/08/19 15:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/08/19 15:29	1
Acetone	ND		10	3.0	ug/L			07/08/19 15:29	1
Benzene	ND		1.0	0.41	ug/L			07/08/19 15:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/08/19 15:29	1
Bromoform	ND		1.0	0.26	ug/L			07/08/19 15:29	1
Bromomethane	ND		1.0	0.69	ug/L			07/08/19 15:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/08/19 15:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/08/19 15:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/08/19 15:29	1
Chloroethane	ND		1.0	0.32	ug/L			07/08/19 15:29	1
Chloroform	ND		1.0	0.34	ug/L			07/08/19 15:29	1
Chloromethane	ND		1.0	0.35	ug/L			07/08/19 15:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/08/19 15:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/08/19 15:29	1
Cyclohexane	ND		1.0	0.18	ug/L			07/08/19 15:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/08/19 15:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/08/19 15:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/08/19 15:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/08/19 15:29	1
Methyl acetate	ND		2.5	1.3	ug/L			07/08/19 15:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/08/19 15:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/08/19 15:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/08/19 15:29	1
Styrene	ND		1.0	0.73	ug/L			07/08/19 15:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/08/19 15:29	1
Toluene	ND		1.0	0.51	ug/L			07/08/19 15:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/08/19 15:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/08/19 15:29	1
Trichloroethene	ND		1.0	0.46	ug/L			07/08/19 15:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/08/19 15:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/08/19 15:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/08/19 15:29	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/08/19 15:29	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: TRIP BLANK
Date Collected: 06/27/19 00:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/08/19 15:29	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/08/19 15:29	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/08/19 15:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/08/19 15:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*07/08/19 15:29*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*07/08/19 15:29*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*07/08/19 15:29*	*1*

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-1
Date Collected: 06/27/19 10:50
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481020	07/06/19 21:35	AMM	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/08/19 23:49	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 20:15	EMB	TAL BUF

Client Sample ID: MW-10
Date Collected: 06/27/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481199	07/08/19 23:51	OMI	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		5	481186	07/09/19 00:17	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 20:46	EMB	TAL BUF

Client Sample ID: MW-12R
Date Collected: 06/27/19 13:30
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	481199	07/09/19 00:16	OMI	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		5	481186	07/09/19 00:45	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 20:50	EMB	TAL BUF

Client Sample ID: MW-6R
Date Collected: 06/27/19 15:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481199	07/09/19 00:40	OMI	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/09/19 01:13	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 20:54	EMB	TAL BUF

Client Sample ID: MW-7
Date Collected: 06/28/19 09:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481060	07/08/19 13:52	AEM	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Client Sample ID: MW-7
Date Collected: 06/28/19 09:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/09/19 01:41	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 20:58	EMB	TAL BUF

Client Sample ID: MW-8R
Date Collected: 06/28/19 10:45
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	481060	07/08/19 14:16	AEM	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/09/19 02:09	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 21:02	EMB	TAL BUF

Client Sample ID: MW-14
Date Collected: 06/28/19 12:15
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481060	07/08/19 14:40	AEM	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/09/19 02:37	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 21:06	EMB	TAL BUF

Client Sample ID: BLIND DUP
Date Collected: 06/28/19 11:05
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481225	07/09/19 11:31	AEM	TAL BUF
Total/NA	Prep	3510C			480622	07/02/19 15:56	ATG	TAL BUF
Total/NA	Analysis	8270D		1	481186	07/09/19 03:05	RJS	TAL BUF
Total/NA	Prep	3005A			480374	07/02/19 07:59	EMB	TAL BUF
Total/NA	Analysis	6010C		1	480899	07/03/19 21:10	EMB	TAL BUF

Client Sample ID: TRIP BLANK
Date Collected: 06/27/19 00:00
Date Received: 06/28/19 15:30

Lab Sample ID: 480-155596-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	481060	07/08/19 15:29	AEM	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-155596-1
Project/Site: Benchmark - Olean Solar Land, LLC

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Solar Land, LLC

Job ID: 480-155596-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-155596-1	MW-1	Water	06/27/19 10:50	06/28/19 15:30	
480-155596-2	MW-10	Water	06/27/19 12:15	06/28/19 15:30	
480-155596-3	MW-12R	Water	06/27/19 13:30	06/28/19 15:30	
480-155596-4	MW-6R	Water	06/27/19 15:00	06/28/19 15:30	
480-155596-5	MW-7	Water	06/28/19 09:15	06/28/19 15:30	
480-155596-6	MW-8R	Water	06/28/19 10:45	06/28/19 15:30	
480-155596-7	MW-14	Water	06/28/19 12:15	06/28/19 15:30	
480-155596-8	BLIND DUP	Water	06/28/19 11:05	06/28/19 15:30	
480-155596-9	TRIP BLANK	Water	06/27/19 00:00	06/28/19 15:30	

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-155596-1

Login Number: 155596
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Connor Dowdell	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-132071-29793.1
Client Contact: Mr. Michael Lesakowski	Phone: (716) 697-5931	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): STANDARD			
State, Zip: NY, 14218				
Phone: 716-856-0599(Tel)	PO #: ~~B0362-019-001~~ 0491-019-001			
Email: mlesakowski@benchmarkturnkey.com	WO #:			
Project Name: Benchmark - Homeridae	Project #: 48020452			
Site: 231-251 Hamon St OLEAN, NY	SSOW#:			

Analysis Requested

Preservation Codes: A - HCL, M - Hexane, B - NaOH, ... Other (specify)

480-155596 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - (MOD) TCL SVOA - OLM04.2 w/ TICs	6010C - (MOD) As/Pb only	8260C - (MOD) TCL list OLM04.2 w/ TICs	Total Number of cont	Special Instructions/Note:
			Preservation Code:				N	D	A		
MW - 1	6-27-19	1050	G	Water		X	X	X	X		
MW - 10	6-27-19	1215		Water			X	X	X		
MW - 12R	6-27-19	1330		Water			X	X	X		
MW - 6R	6-27-19	1500		Water			X	X	X		
MW - 7	6-28-19	0915		Water	Y		X	X	X		
MW - 8R	6-28-19	1045		Water			X	X	X		
MW - 14	6-28-19	1215		Water			X	X	X		
BLIND DUP	6-27-19	1105	G	Water			X	X	X		
MS/MSD	6-27-19			Water			X	X	X		
TRIP BLANK				Water					X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/28/19 1345	BMTK		6/28/19 1500	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/28/19 1534	TAL		6/28/19 1534	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9 #1 ICE

Ver: 01/16/2019

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae (231 - 251 Homer St.) Date: 12-12-19

Location: Olean, NY Project No.: B0362-019-001 Field Team: CFD

Well No. MW - 1			Diameter (inches): 2"			Sample Date / Time: 12-12-19 1500			
Product Depth (fbTOR): -			Water Column (ft): 9.01			DTW when sampled: 13.92			
DTW (static) (fbTOR): 13.86			One Well Volume (gal): 1.5 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 22.87			Total Volume Purged (gal): 5.5 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
1340	0 Initial	0	6.54	11.0	1194	22.4	3.14	-90	VERY CLEAR
1345	1 14.08	0.5	6.50	11.8	1117	13.8	3.62	-85	PETRO ODOR
1400	2 14.19	1	6.57	11.7	1092	14.1	2.90	-87	
1405	3 14.08	2	6.54	12.0	1064	14.8	2.82	-88	VERY CLEAR
1415	4 13.99	2.5	6.55	12.1	1050	14.1	2.68	-88	-MUSTY, PETRO ODOR
1425	5 13.96	3	6.56	12.1	1031	13.2	|	-87	|
1435	6 13.93	4	6.56	12.0	1030	13.5	|	-86	|
1445	7 13.92	4.5	6.57	12.0	1024	12.8	2.62	-88	|
	8								
	9								
	10								
Sample Information:									
1450	S1 13.92	5	6.56	12.0	1025	12	2.54	-87	CLEAR MUSTY
1500	S2 13.92	5.5	6.57	12.1	1018	12	2.58	-86	PETRO ODOR

Well No. MW - 6R			Diameter (inches): 2"			Sample Date / Time: 12-12-19			
Product Depth (fbTOR): -			Water Column (ft): 6.24			DTW when sampled: 17.12			
DTW (static) (fbTOR): 14.96			One Well Volume (gal): 1.0 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 21.20			Total Volume Purged (gal): 5 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
1045	0 Initial	0	6.10	10.5	1615	65.7	1.78	-95	GROSS TURBID / PETRO
1055	1 16.04	1	6.20	10.3	1608	48	1.64	-96	|
1105	2 17.04	2	6.34	10.7	1621	29	1.72	-96	|
1115	3 17.98	2.5	6.39	11.4	1631	31	1.37	-100	CLEAR / PETRO ODOR
1125	4 17.28	3	6.47	11.5	1627	29	1.16	-101	|
1130	5 17.17	4	6.51	11.7	1620	30	1.12	-103	|
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1135	S1 17.12	4.5	6.52	11.7	1610	30	1.02	-104	CLEAR / LIGHT PETRO
1145	S2 17.12	5	6.61	11.3	1605	14.8	0.90	-104	

REMARKS: *MW-6R - 0.20" of PRODUCT ON TOP OF WATER IN WELL. CD USES BAILER TO EXTRACT PRODUCT, THEN PUTS ABSORBENT SOCK IN WELL ... COMES BACK HOUR LATER TO SAMPLE - NO OIL.

Note: All water level 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: CFD

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae (231 - 251 Homer St.) Date: 12-13-19

Location: Olean, NY Project No.: B0362-019-001 Field Team: CFD

Well No. MW - 7			Diameter (inches): 2"			Sample Date / Time: 12-13-19			
Product Depth (fbTOR): —			Water Column (ft): 6.62			DTW when sampled: 10.25			
DTW (static) (fbTOR): 9.90			One Well Volume (gal): 1.1			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 16.52			Total Volume Purged (gal): 4.5 gal			Purge Method: PARASTALTIC PUMP ***			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0930	0 Initial	0	6.69	10.1	1301	29	NA	-87	CLEAR, PINEY CHEM
0940	1 9.83	.5	6.71	10.1	1297	41	NA	-82	"
0950	2 9.90	1	6.68	10.2	1287	31	"	-79	"
1000	3 9.98	1.5	6.80	10.3	1279	32.5	"	-79	CLEAR CHEM
1015	4 10.02	2	6.81	10.2	1281	31	"	-75	PINE ODOR
1025	5 10.10	2.5	6.81	10.7	1284	24.8	2.60	-75	"
1035	6 10.13	3	6.80	11.0	1290	21.3	2.34	-74	"
	7								
	8								
	9								
	10								
Sample Information:									
1045	S1 10.15	3.5	6.82	11.1	1291	16.3	1.80	-76	CLEAR
1055	S2 10.25	4.5	6.83	11.4	1291	16.1	1.12	-75	LIGHT ODOR

Well No. MW - 8R			Diameter (inches): 2"			Sample Date / Time: 12-13-19 1235			
Product Depth (fbTOR): —			Water Column (ft): 12.47			DTW when sampled: 11.42			
DTW (static) (fbTOR): 11.28			One Well Volume (gal): 2 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 23.72			Total Volume Purged (gal): 7			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
1115	0 Initial	0	6.35	9.9	3119	893	4.13	-40	GREY TURBID
1125	1 11.21	1	6.29	10.4	3107	325	4.36	-35	SLIGHT CHEM ODOR
1135	2 11.29	2	6.23	10.8	3076	227	4.86	-34	
1145	3 11.32	3	6.23	11.1	3055	95.3	4.34	-35	LIGHT GREY
1155	4 11.36	4	6.22	11.3	3037	35.2	3.86	-37	SLIGHT CHEM
1205	5 11.40	5	6.24	11.4	3049	21.7	2.43	-41	"
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1220	S1 11.42	6	6.23	11.1	2995	18.5	1.60	-41	CLEAR
1230	S2 11.42	7	6.22	11.2	2987	17.6	1.32	-39	SLIGHT CHEM ODOR

REMARKS: MW-7 - PARASTALTIC PUMP USED

Note: All water level 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:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae (231 - 251 Homer St.) Date: 12-12-19

Location: Olean, NY Project No.: B0362-019-001 Field Team: CFD

Well No. MW - 10			Diameter (inches): 2"			Sample Date / Time: 12-12-19			
Product Depth (fbTOR): -			Water Column (ft): 7.18			DTW when sampled: 17.99			
DTW (static) (fbTOR): 15.04			One Well Volume (gal): 1.2 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 22.22			Total Volume Purged (gal): 4.25			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
0815	0 Initial	0	5.21	10.3	913	181	2.45	-86	BLACKISH HUE
0830	1 16.15	1	6.17	10.7	727	42	2.12	-88	PETRO ODOR
0840	2 17.66	1.5	6.38	10.7	727	29	1	-82	*TINY BLACK PARTICULATES
0855	3 17.87	2	6.44	10.6	730	26		-78	* CLEAR
0905	4 18.05	2.5	6.51	10.9	734	22	1.68	-76	
0915	5 18.02	3	6.53	10.8	735	20	1.48	-76	
	6								CLEAR
	7								
	8								PETRO ODOR
	9								
	10								
Sample Information:									
0930	S1 17.99	4	6.56	10.6	738	16	1.38	-74	
0935	S2 17.93	4.25	6.57	10.9	738	14	1.32	-71	

Well No. MW - 12R			Diameter (inches): 2"			Sample Date / Time: 12-12-19			
Product Depth (fbTOR): -			Water Column (ft): 7.15			DTW when sampled: 18.20			
DTW (static) (fbTOR): 17.00			One Well Volume (gal): 1.17 gal			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 24.15			Total Volume Purged (gal): 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
0945	0 Initial	0	6.60	9.7	1217	386	NA	-72	PINE ODOR
0950	1 17.85	1	6.63	10.0	1415	178	2.74	-77	WHITE/GRAY TURBID
1000	2 18.00	2	6.67	10.3	1477	57.9	3.15	-81	- CLEAR - PINEY
1005	3 18.15	3	6.70	10.5	1498	27.3	2.68	-83	
1015	4 18.22	4	6.72	10.7	1552	25.6	2.14	-85	
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1020	S1 18.22	4.5	6.77	10.8	1630	18.3	1.68	-87	CLEAR, PINEY
1030	S2 18.2	5	6.78	10.8	1638	17.6	1.62	-88	CLEAR ODOR

REMARKS: ** MW-10 - MS/MSD ***

** MW-12R - BLIND DUP

Note: All water level 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:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

GROUNDWATER FIELD FORM

Project Name: Homeridae (231 - 251 Homer St.) Date: 12-13-19

Location: Olean, NY Project No.: B0362-019-001 Field Team: CFD

Well No. MW - 14			Diameter (inches): 2"			Sample Date / Time: 12-12-19			
Product Depth (fbTOR): —			Water Column (ft): 7.74			DTW when sampled: 14.35			
DTW (static) (fbTOR): 13.78			One Well Volume (gal): 1.3			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 21.72			Total Volume Purged (gal): 5gal			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
1215	0 Initial	0	6.85	10.5	913.3	168	2.64	-91	Cloudy Tan
1225	1 13.87	1	6.81	10.8	896.9	109	2.68	-96	Light Odor
1235	2 13.98	2	6.85	11.2	881.5	89	3.02	-98	"
1240	3 14.34	2.5	6.86	11.3	877	79	2.58	-98	"
1245	4 15.14	3	6.86	11.4	876	43.8	2.34	-97	"
1255	5 15.03	3.5	6.89	11.1	868	32.2	2.12	-99	Clear-ish
1305	6 14.68	4	6.89	11.3	869	30.9	1.62	-99	Light Odor
	7								
	8								
	9								
	10								
Sample Information:									
1315	S1 14.34	4.5	6.89	11.6	870	31.7	1.27	-97	
1325	S2 14.39	5	6.90	11.7	868	28.6	1.13	-96	

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ 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								

REMARKS:

Note: All water level 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:

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-164301-1
Client Project/Site: Benchmark - 251 Homer St. site
Revision: 1

For:
Homer Street Redevelopment LLC
2558 Hamburg Turnpike
Suite 330
Lackawanna, New York 14218

Attn: Michael A Lesakowski

Joseph V. Giacomazza

Authorized for release by:
3/10/2020 12:05:59 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

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

Job ID: 480-164301-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-164301-1

Comments
Revision I - This report was revised to add 4 analytes as per client request.

Receipt
The samples were received on 12/17/2019 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-1 (480-164301-1), MW-6R (480-164301-2), MW-7 (480-164301-3), MW-8R (480-164301-4), MW-12R (480-164301-6) and BLIND DUP (480-164301-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-510964 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-511210 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Samples were analyzed twice to confirm results, samples confirmed, therefore the data have been reported. The following samples are impacted: MW-10 (480-164301-5[MS]) and MW-10 (480-164301-5[MSD]).

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

GC/MS Semi VOA
Method 8270D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-511072 was outside criteria for the following analyte(s): Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether and N-Nitrosodi-n-propylamine. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW-6R (480-164301-2), MW-8R (480-164301-4), MW-10 (480-164301-5[MSD]) and BLIND DUP (480-164301-8). These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-510919 and analytical batch 480-511072 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-511072 recovered outside acceptance criteria, low biased, for 4-Methylphenol, 2-Methylphenol, Isophorone, Bis(2-chloroethyl)ether, Bis(2-chloroethoxy)methane, Phenol-d5, Phenol, N-Nitrosodi-n-propylamine, and 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-511072 recovered outside acceptance criteria, low biased, for Total cresols, 3-Methylphenol, and 3 & 4 Methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

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

Job ID: 480-164301-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

Organic Prep

Method 3510C: Due to the matrix, the initial volume(s) used for the following samples deviated from the standard procedure: MW-6R (480-164301-2), MW-12R (480-164301-6) and BLIND DUP (480-164301-8). The reporting limits (RLs) have been adjusted proportionately.

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

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-1

Date Collected: 12/13/19 13:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			12/19/19 21:59	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			12/19/19 21:59	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			12/19/19 21:59	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			12/19/19 21:59	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			12/19/19 21:59	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			12/19/19 21:59	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			12/19/19 21:59	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			12/19/19 21:59	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			12/19/19 21:59	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			12/19/19 21:59	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			12/19/19 21:59	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			12/19/19 21:59	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			12/19/19 21:59	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			12/19/19 21:59	2
2-Butanone (MEK)	ND		20	2.6	ug/L			12/19/19 21:59	2
2-Hexanone	ND		10	2.5	ug/L			12/19/19 21:59	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			12/19/19 21:59	2
Acetone	ND		20	6.0	ug/L			12/19/19 21:59	2
Benzene	ND		2.0	0.82	ug/L			12/19/19 21:59	2
Bromodichloromethane	ND		2.0	0.78	ug/L			12/19/19 21:59	2
Bromoform	ND		2.0	0.52	ug/L			12/19/19 21:59	2
Bromomethane	ND		2.0	1.4	ug/L			12/19/19 21:59	2
Carbon disulfide	ND		2.0	0.38	ug/L			12/19/19 21:59	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			12/19/19 21:59	2
Chlorobenzene	ND		2.0	1.5	ug/L			12/19/19 21:59	2
Chloroethane	ND		2.0	0.64	ug/L			12/19/19 21:59	2
Chloroform	ND		2.0	0.68	ug/L			12/19/19 21:59	2
Chloromethane	ND		2.0	0.70	ug/L			12/19/19 21:59	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			12/19/19 21:59	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			12/19/19 21:59	2
Cyclohexane	**2.3**		2.0	0.36	ug/L			12/19/19 21:59	2
Dibromochloromethane	ND		2.0	0.64	ug/L			12/19/19 21:59	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			12/19/19 21:59	2
Ethylbenzene	ND		2.0	1.5	ug/L			12/19/19 21:59	2
Isopropylbenzene	ND		2.0	1.6	ug/L			12/19/19 21:59	2
Methyl acetate	ND		5.0	2.6	ug/L			12/19/19 21:59	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			12/19/19 21:59	2
Methylcyclohexane	**2.4**		2.0	0.32	ug/L			12/19/19 21:59	2
Methylene Chloride	**1.5**	**J**	2.0	0.88	ug/L			12/19/19 21:59	2
Styrene	ND		2.0	1.5	ug/L			12/19/19 21:59	2
Tetrachloroethene	ND		2.0	0.72	ug/L			12/19/19 21:59	2
Toluene	ND		2.0	1.0	ug/L			12/19/19 21:59	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			12/19/19 21:59	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			12/19/19 21:59	2
Trichloroethene	ND		2.0	0.92	ug/L			12/19/19 21:59	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			12/19/19 21:59	2
Vinyl chloride	ND		2.0	1.8	ug/L			12/19/19 21:59	2
Xylenes, Total	ND		4.0	1.3	ug/L			12/19/19 21:59	2
n-Butylbenzene	ND		2.0	1.3	ug/L			12/19/19 21:59	2

Client Sample ID: MW-1

Date Collected: 12/13/19 13:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			12/19/19 21:59	2
sec-Butylbenzene	ND		2.0	1.5	ug/L			12/19/19 21:59	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			12/19/19 21:59	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/19/19 21:59*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*12/19/19 21:59*	*2*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*12/19/19 21:59*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/19/19 21:59*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 15:21	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Nitroaniline	ND		10	0.42	ug/L		12/19/19 15:19	12/20/19 15:21	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 15:21	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 15:21	1
3-Nitroaniline	ND		10	0.48	ug/L		12/19/19 15:19	12/20/19 15:21	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Methylphenol	ND		10	0.36	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Nitroaniline	ND		10	0.25	ug/L		12/19/19 15:19	12/20/19 15:21	1
4-Nitrophenol	ND		10	1.5	ug/L		12/19/19 15:19	12/20/19 15:21	1
Acenaphthene	ND		5.0	0.41	ug/L		12/19/19 15:19	12/20/19 15:21	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/19/19 15:19	12/20/19 15:21	1
Acetophenone	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 15:21	1
Anthracene	ND		5.0	0.28	ug/L		12/19/19 15:19	12/20/19 15:21	1
Atrazine	ND	*	5.0	0.46	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 15:21	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		12/19/19 15:19	12/20/19 15:21	1
Biphenyl	ND		5.0	0.65	ug/L		12/19/19 15:19	12/20/19 15:21	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/19/19 15:19	12/20/19 15:21	1

Client Sample ID: MW-1

Date Collected: 12/13/19 13:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 15:21	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 15:21	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 15:21	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/19/19 15:19	12/20/19 15:21	1
Caprolactam	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 15:21	1
Carbazole	ND		5.0	0.30	ug/L		12/19/19 15:19	12/20/19 15:21	1
Chrysene	ND		5.0	0.33	ug/L		12/19/19 15:19	12/20/19 15:21	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/19/19 15:19	12/20/19 15:21	1
Dibenzofuran	ND		10	0.51	ug/L		12/19/19 15:19	12/20/19 15:21	1
Diethyl phthalate	ND		5.0	0.22	ug/L		12/19/19 15:19	12/20/19 15:21	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 15:21	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/19/19 15:19	12/20/19 15:21	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 15:21	1
Fluoranthene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 15:21	1
Fluorene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 15:21	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 15:21	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/19/19 15:19	12/20/19 15:21	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 15:21	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 15:21	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 15:21	1
Isophorone	ND		5.0	0.43	ug/L		12/19/19 15:19	12/20/19 15:21	1
Naphthalene	ND		5.0	0.76	ug/L		12/19/19 15:19	12/20/19 15:21	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/19/19 15:19	12/20/19 15:21	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 15:21	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 15:21	1
Pentachlorophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 15:21	1
Phenanthrene	ND		5.0	0.44	ug/L		12/19/19 15:19	12/20/19 15:21	1
Phenol	ND		5.0	0.39	ug/L		12/19/19 15:19	12/20/19 15:21	1
Pyrene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 15:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3.8*	*T J*	*ug/L*		*2.46*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*290*	*T J*	*ug/L*		*2.85*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*22*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*3.0*	*T J*	*ug/L*		*6.84*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*2.4*	*T J*	*ug/L*		*6.90*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*7.22*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*7.54*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*7.64*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*7.78*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*2.2*	*T J*	*ug/L*		*9.24*		*12/19/19 15:19*	*12/20/19 15:21*	*1*
Unknown	*3.0*	*T J*	*ug/L*		*11.02*		*12/19/19 15:19*	*12/20/19 15:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*119*		*41 - 120*	*12/19/19 15:19*	*12/20/19 15:21*	*1*
2-Fluorobiphenyl	*97*		*48 - 120*	*12/19/19 15:19*	*12/20/19 15:21*	*1*
2-Fluorophenol	*59*		*35 - 120*	*12/19/19 15:19*	*12/20/19 15:21*	*1*
Nitrobenzene-d5	*92*		*46 - 120*	*12/19/19 15:19*	*12/20/19 15:21*	*1*
Phenol-d5	*40*		*22 - 120*	*12/19/19 15:19*	*12/20/19 15:21*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-1
Date Collected: 12/13/19 13:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-1
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl-d14	*79*		*60 - 148*	*12/19/19 15:19*	*12/20/19 15:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.049**		0.015		mg/L		12/18/19 09:30	12/18/19 22:24	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 22:24	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-6R
Date Collected: 12/13/19 11:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.0	6.6	ug/L			12/19/19 22:23	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			12/19/19 22:23	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			12/19/19 22:23	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			12/19/19 22:23	8
1,1-Dichloroethane	ND		8.0	3.0	ug/L			12/19/19 22:23	8
1,1-Dichloroethene	ND		8.0	2.3	ug/L			12/19/19 22:23	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			12/19/19 22:23	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			12/19/19 22:23	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			12/19/19 22:23	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			12/19/19 22:23	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			12/19/19 22:23	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			12/19/19 22:23	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			12/19/19 22:23	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			12/19/19 22:23	8
2-Butanone (MEK)	ND		80	11	ug/L			12/19/19 22:23	8
2-Hexanone	ND		40	9.9	ug/L			12/19/19 22:23	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			12/19/19 22:23	8
Acetone	ND		80	24	ug/L			12/19/19 22:23	8
Benzene	ND		8.0	3.3	ug/L			12/19/19 22:23	8
Bromodichloromethane	ND		8.0	3.1	ug/L			12/19/19 22:23	8
Bromoform	ND		8.0	2.1	ug/L			12/19/19 22:23	8
Bromomethane	ND		8.0	5.5	ug/L			12/19/19 22:23	8
Carbon disulfide	ND		8.0	1.5	ug/L			12/19/19 22:23	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			12/19/19 22:23	8
Chlorobenzene	ND		8.0	6.0	ug/L			12/19/19 22:23	8
Chloroethane	ND		8.0	2.6	ug/L			12/19/19 22:23	8
Chloroform	ND		8.0	2.7	ug/L			12/19/19 22:23	8
Chloromethane	ND		8.0	2.8	ug/L			12/19/19 22:23	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			12/19/19 22:23	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			12/19/19 22:23	8
Cyclohexane	**4.8**	**J**	8.0	1.4	ug/L			12/19/19 22:23	8
Dibromochloromethane	ND		8.0	2.6	ug/L			12/19/19 22:23	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			12/19/19 22:23	8
Ethylbenzene	ND		8.0	5.9	ug/L			12/19/19 22:23	8
Isopropylbenzene	ND		8.0	6.3	ug/L			12/19/19 22:23	8
Methyl acetate	ND		20	10	ug/L			12/19/19 22:23	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			12/19/19 22:23	8
Methylcyclohexane	ND		8.0	1.3	ug/L			12/19/19 22:23	8
Methylene Chloride	**4.2**	**J**	8.0	3.5	ug/L			12/19/19 22:23	8
Styrene	ND		8.0	5.8	ug/L			12/19/19 22:23	8
Tetrachloroethene	ND		8.0	2.9	ug/L			12/19/19 22:23	8
Toluene	ND		8.0	4.1	ug/L			12/19/19 22:23	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			12/19/19 22:23	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			12/19/19 22:23	8
Trichloroethene	ND		8.0	3.7	ug/L			12/19/19 22:23	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			12/19/19 22:23	8
Vinyl chloride	ND		8.0	7.2	ug/L			12/19/19 22:23	8
Xylenes, Total	ND		16	5.3	ug/L			12/19/19 22:23	8
n-Butylbenzene	ND		8.0	5.1	ug/L			12/19/19 22:23	8

Client Sample ID: MW-6R

Date Collected: 12/13/19 11:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		8.0	6.0	ug/L			12/19/19 22:23	8
sec-Butylbenzene	ND		8.0	6.0	ug/L			12/19/19 22:23	8
tert-Butylbenzene	ND		8.0	6.5	ug/L			12/19/19 22:23	8

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/19/19 22:23*	*8*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*77 - 120*		*12/19/19 22:23*	*8*
4-Bromofluorobenzene (Surr)	*120*		*73 - 120*		*12/19/19 22:23*	*8*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/19/19 22:23*	*8*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,4-Dichlorophenol	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,4-Dimethylphenol	ND		25	2.5	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,4-Dinitrophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,4-Dinitrotoluene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 15:49	1
2,6-Dinitrotoluene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Chloronaphthalene	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Chlorophenol	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Methylnaphthalene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Methylphenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Nitroaniline	ND		50	2.1	ug/L		12/19/19 15:19	12/20/19 15:49	1
2-Nitrophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
3-Nitroaniline	ND		50	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Chloroaniline	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Methylphenol	ND		50	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Nitroaniline	ND		50	1.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
4-Nitrophenol	ND		50	7.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
Acenaphthene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 15:49	1
Acenaphthylene	ND		25	1.9	ug/L		12/19/19 15:19	12/20/19 15:49	1
Acetophenone	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
Anthracene	ND		25	1.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
Atrazine	ND	*	25	2.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzaldehyde	ND		25	1.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzo(a)anthracene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzo(a)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzo(b)fluoranthene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Benzo(k)fluoranthene	ND		25	3.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
Biphenyl	ND		25	3.3	ug/L		12/19/19 15:19	12/20/19 15:49	1
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 15:49	1

Client Sample ID: MW-6R

Date Collected: 12/13/19 11:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		12/19/19 15:19	12/20/19 15:49	1
Butyl benzyl phthalate	ND		25	5.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Caprolactam	ND		25	11	ug/L		12/19/19 15:19	12/20/19 15:49	1
Carbazole	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 15:49	1
Chrysene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 15:49	1
Dibenzofuran	ND		50	2.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
Diethyl phthalate	ND		25	1.1	ug/L		12/19/19 15:19	12/20/19 15:49	1
Dimethyl phthalate	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Di-n-butyl phthalate	ND		25	1.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
Di-n-octyl phthalate	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
Fluoranthene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Fluorene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Hexachlorobenzene	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
Hexachlorobutadiene	ND		25	3.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Hexachloroethane	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 15:49	1
Isophorone	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 15:49	1
Naphthalene	ND		25	3.8	ug/L		12/19/19 15:19	12/20/19 15:49	1
Nitrobenzene	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 15:49	1
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 15:49	1
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 15:49	1
Pentachlorophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 15:49	1
Phenanthrene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 15:49	1
Phenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 15:49	1
Pyrene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 15:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*19*	*T J*	*ug/L*		*2.46*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*1300*	*T J*	*ug/L*		*2.85*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*110*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*20*	*T J*	*ug/L*		*5.27*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*30*	*T J*	*ug/L*		*5.30*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*19*	*T J*	*ug/L*		*5.51*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*23*	*T J*	*ug/L*		*6.13*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*23*	*T J*	*ug/L*		*6.17*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*26*	*T J*	*ug/L*		*6.33*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*26*	*T J*	*ug/L*		*6.86*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Column Bleed	*16*	*T J*	*ug/L*		*6.90*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*17*	*T J*	*ug/L*		*7.04*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*17*	*T J*	*ug/L*		*7.47*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*16*	*T J*	*ug/L*		*7.56*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*25*	*T J*	*ug/L*		*7.58*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*27*	*T J*	*ug/L*		*7.67*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*26*	*T J*	*ug/L*		*7.79*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*15*	*T J*	*ug/L*		*7.97*		*12/19/19 15:19*	*12/20/19 15:49*	*1*
Unknown	*32*	*T J*	*ug/L*		*8.05*		*12/19/19 15:19*	*12/20/19 15:49*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-6R
Date Collected: 12/13/19 11:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-2
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	*23*	*T J*	*ug/L*		*8.56*		*12/19/19 15:19*	*12/20/19 15:49*	*1*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*122*	*X*	*41 - 120*	*12/19/19 15:19*	*12/20/19 15:49*	*1*
2-Fluorobiphenyl	*93*		*48 - 120*	*12/19/19 15:19*	*12/20/19 15:49*	*1*
2-Fluorophenol	*59*		*35 - 120*	*12/19/19 15:19*	*12/20/19 15:49*	*1*
Nitrobenzene-d5	*94*		*46 - 120*	*12/19/19 15:19*	*12/20/19 15:49*	*1*
Phenol-d5	*42*		*22 - 120*	*12/19/19 15:19*	*12/20/19 15:49*	*1*
p-Terphenyl-d14	*86*		*60 - 148*	*12/19/19 15:19*	*12/20/19 15:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.035**		0.015		mg/L		12/18/19 09:30	12/18/19 22:28	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 22:28	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-7
Date Collected: 12/13/19 14:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			12/19/19 22:48	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			12/19/19 22:48	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			12/19/19 22:48	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			12/19/19 22:48	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			12/19/19 22:48	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			12/19/19 22:48	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			12/19/19 22:48	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/19/19 22:48	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/19/19 22:48	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/19/19 22:48	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			12/19/19 22:48	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/19/19 22:48	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/19/19 22:48	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/19/19 22:48	4
2-Butanone (MEK)	ND		40	5.3	ug/L			12/19/19 22:48	4
2-Hexanone	ND		20	5.0	ug/L			12/19/19 22:48	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/19/19 22:48	4
Acetone	ND		40	12	ug/L			12/19/19 22:48	4
Benzene	ND		4.0	1.6	ug/L			12/19/19 22:48	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/19/19 22:48	4
Bromoform	ND		4.0	1.0	ug/L			12/19/19 22:48	4
Bromomethane	ND		4.0	2.8	ug/L			12/19/19 22:48	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/19/19 22:48	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/19/19 22:48	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/19/19 22:48	4
Chloroethane	ND		4.0	1.3	ug/L			12/19/19 22:48	4
Chloroform	ND		4.0	1.4	ug/L			12/19/19 22:48	4
Chloromethane	ND		4.0	1.4	ug/L			12/19/19 22:48	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			12/19/19 22:48	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/19/19 22:48	4
Cyclohexane	ND		4.0	0.72	ug/L			12/19/19 22:48	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/19/19 22:48	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/19/19 22:48	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/19/19 22:48	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/19/19 22:48	4
Methyl acetate	ND		10	5.2	ug/L			12/19/19 22:48	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/19/19 22:48	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/19/19 22:48	4
Methylene Chloride	**2.4**	**J**	4.0	1.8	ug/L			12/19/19 22:48	4
Styrene	ND		4.0	2.9	ug/L			12/19/19 22:48	4
Tetrachloroethene	ND		4.0	1.4	ug/L			12/19/19 22:48	4
Toluene	ND		4.0	2.0	ug/L			12/19/19 22:48	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/19/19 22:48	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/19/19 22:48	4
Trichloroethene	ND		4.0	1.8	ug/L			12/19/19 22:48	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/19/19 22:48	4
Vinyl chloride	ND		4.0	3.6	ug/L			12/19/19 22:48	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/19/19 22:48	4
n-Butylbenzene	ND		4.0	2.6	ug/L			12/19/19 22:48	4

Client Sample ID: MW-7

Date Collected: 12/13/19 14:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			12/19/19 22:48	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			12/19/19 22:48	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			12/19/19 22:48	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/19/19 22:48*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*12/19/19 22:48*	*4*
4-Bromofluorobenzene (Surr)	*117*		*73 - 120*		*12/19/19 22:48*	*4*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/19/19 22:48*	*4*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:17	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Nitroaniline	ND		10	0.42	ug/L		12/19/19 15:19	12/20/19 16:17	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 16:17	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:17	1
3-Nitroaniline	ND		10	0.48	ug/L		12/19/19 15:19	12/20/19 16:17	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Methylphenol	ND		10	0.36	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Nitroaniline	ND		10	0.25	ug/L		12/19/19 15:19	12/20/19 16:17	1
4-Nitrophenol	ND		10	1.5	ug/L		12/19/19 15:19	12/20/19 16:17	1
Acenaphthene	ND		5.0	0.41	ug/L		12/19/19 15:19	12/20/19 16:17	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/19/19 15:19	12/20/19 16:17	1
Acetophenone	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 16:17	1
Anthracene	ND		5.0	0.28	ug/L		12/19/19 15:19	12/20/19 16:17	1
Atrazine	ND	*	5.0	0.46	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:17	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		12/19/19 15:19	12/20/19 16:17	1
Biphenyl	ND		5.0	0.65	ug/L		12/19/19 15:19	12/20/19 16:17	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/19/19 15:19	12/20/19 16:17	1

Client Sample ID: MW-7
Date Collected: 12/13/19 14:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:17	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:17	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 16:17	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/19/19 15:19	12/20/19 16:17	1
Caprolactam	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 16:17	1
Carbazole	ND		5.0	0.30	ug/L		12/19/19 15:19	12/20/19 16:17	1
Chrysene	ND		5.0	0.33	ug/L		12/19/19 15:19	12/20/19 16:17	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/19/19 15:19	12/20/19 16:17	1
Dibenzofuran	ND		10	0.51	ug/L		12/19/19 15:19	12/20/19 16:17	1
Diethyl phthalate	ND		5.0	0.22	ug/L		12/19/19 15:19	12/20/19 16:17	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:17	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/19/19 15:19	12/20/19 16:17	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:17	1
Fluoranthene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:17	1
Fluorene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:17	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:17	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/19/19 15:19	12/20/19 16:17	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:17	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:17	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:17	1
Isophorone	ND		5.0	0.43	ug/L		12/19/19 15:19	12/20/19 16:17	1
Naphthalene	ND		5.0	0.76	ug/L		12/19/19 15:19	12/20/19 16:17	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/19/19 15:19	12/20/19 16:17	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 16:17	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:17	1
Pentachlorophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:17	1
Phenanthrene	ND		5.0	0.44	ug/L		12/19/19 15:19	12/20/19 16:17	1
Phenol	ND		5.0	0.39	ug/L		12/19/19 15:19	12/20/19 16:17	1
Pyrene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 16:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3.8*	*T J*	*ug/L*		*2.46*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*280*	*T J*	*ug/L*		*2.84*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*16*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*2.7*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*2.7*	*T J*	*ug/L*		*6.83*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*2.5*	*T J*	*ug/L*		*6.90*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*2.4*	*T J*	*ug/L*		*7.79*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*8.56*		*12/19/19 15:19*	*12/20/19 16:17*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*9.24*		*12/19/19 15:19*	*12/20/19 16:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*41 - 120*	*12/19/19 15:19*	*12/20/19 16:17*	*1*
2-Fluorobiphenyl	*95*		*48 - 120*	*12/19/19 15:19*	*12/20/19 16:17*	*1*
2-Fluorophenol	*60*		*35 - 120*	*12/19/19 15:19*	*12/20/19 16:17*	*1*
Nitrobenzene-d5	*86*		*46 - 120*	*12/19/19 15:19*	*12/20/19 16:17*	*1*
Phenol-d5	*40*		*22 - 120*	*12/19/19 15:19*	*12/20/19 16:17*	*1*
p-Terphenyl-d14	*73*		*60 - 148*	*12/19/19 15:19*	*12/20/19 16:17*	*1*

Client Sample Results

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-7

Date Collected: 12/13/19 14:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-3

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		12/18/19 09:30	12/18/19 22:32	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 22:32	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-8R
Date Collected: 12/13/19 15:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/19/19 23:12	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/19/19 23:12	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/19/19 23:12	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/19/19 23:12	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/19/19 23:12	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/19/19 23:12	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/19/19 23:12	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/19/19 23:12	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/19/19 23:12	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/19/19 23:12	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/19/19 23:12	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/19/19 23:12	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/19/19 23:12	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/19/19 23:12	10
2-Butanone (MEK)	ND		100	13	ug/L			12/19/19 23:12	10
2-Hexanone	ND		50	12	ug/L			12/19/19 23:12	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/19/19 23:12	10
Acetone	ND		100	30	ug/L			12/19/19 23:12	10
Benzene	ND		10	4.1	ug/L			12/19/19 23:12	10
Bromodichloromethane	ND		10	3.9	ug/L			12/19/19 23:12	10
Bromoform	ND		10	2.6	ug/L			12/19/19 23:12	10
Bromomethane	ND		10	6.9	ug/L			12/19/19 23:12	10
Carbon disulfide	ND		10	1.9	ug/L			12/19/19 23:12	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/19/19 23:12	10
Chlorobenzene	ND		10	7.5	ug/L			12/19/19 23:12	10
Chloroethane	ND		10	3.2	ug/L			12/19/19 23:12	10
Chloroform	ND		10	3.4	ug/L			12/19/19 23:12	10
Chloromethane	ND		10	3.5	ug/L			12/19/19 23:12	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			12/19/19 23:12	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/19/19 23:12	10
Cyclohexane	ND		10	1.8	ug/L			12/19/19 23:12	10
Dibromochloromethane	ND		10	3.2	ug/L			12/19/19 23:12	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/19/19 23:12	10
Ethylbenzene	ND		10	7.4	ug/L			12/19/19 23:12	10
Isopropylbenzene	ND		10	7.9	ug/L			12/19/19 23:12	10
Methyl acetate	ND		25	13	ug/L			12/19/19 23:12	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/19/19 23:12	10
Methylcyclohexane	ND		10	1.6	ug/L			12/19/19 23:12	10
Methylene Chloride	ND		10	4.4	ug/L			12/19/19 23:12	10
Styrene	ND		10	7.3	ug/L			12/19/19 23:12	10
Tetrachloroethene	ND		10	3.6	ug/L			12/19/19 23:12	10
Toluene	ND		10	5.1	ug/L			12/19/19 23:12	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/19/19 23:12	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/19/19 23:12	10
Trichloroethene	ND		10	4.6	ug/L			12/19/19 23:12	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/19/19 23:12	10
Vinyl chloride	ND		10	9.0	ug/L			12/19/19 23:12	10
Xylenes, Total	ND		20	6.6	ug/L			12/19/19 23:12	10
n-Butylbenzene	ND		10	6.4	ug/L			12/19/19 23:12	10

Client Sample ID: MW-8R

Date Collected: 12/13/19 15:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			12/19/19 23:12	10
sec-Butylbenzene	ND		10	7.5	ug/L			12/19/19 23:12	10
tert-Butylbenzene	ND		10	8.1	ug/L			12/19/19 23:12	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/19/19 23:12*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*12/19/19 23:12*	*10*
4-Bromofluorobenzene (Surr)	*117*		*73 - 120*		*12/19/19 23:12*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/19/19 23:12*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,4-Dimethylphenol	**1.4**	**J**	5.0	0.50	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:45	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Nitroaniline	ND		10	0.42	ug/L		12/19/19 15:19	12/20/19 16:45	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 16:45	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:45	1
3-Nitroaniline	ND		10	0.48	ug/L		12/19/19 15:19	12/20/19 16:45	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Methylphenol	ND		10	0.36	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Nitroaniline	ND		10	0.25	ug/L		12/19/19 15:19	12/20/19 16:45	1
4-Nitrophenol	ND		10	1.5	ug/L		12/19/19 15:19	12/20/19 16:45	1
Acenaphthene	ND		5.0	0.41	ug/L		12/19/19 15:19	12/20/19 16:45	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/19/19 15:19	12/20/19 16:45	1
Acetophenone	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 16:45	1
Anthracene	ND		5.0	0.28	ug/L		12/19/19 15:19	12/20/19 16:45	1
Atrazine	ND	*	5.0	0.46	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:45	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		12/19/19 15:19	12/20/19 16:45	1
Biphenyl	ND		5.0	0.65	ug/L		12/19/19 15:19	12/20/19 16:45	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/19/19 15:19	12/20/19 16:45	1

Client Sample ID: MW-8R
Date Collected: 12/13/19 15:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 16:45	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:45	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 16:45	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/19/19 15:19	12/20/19 16:45	1
Caprolactam	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 16:45	1
Carbazole	ND		5.0	0.30	ug/L		12/19/19 15:19	12/20/19 16:45	1
Chrysene	ND		5.0	0.33	ug/L		12/19/19 15:19	12/20/19 16:45	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/19/19 15:19	12/20/19 16:45	1
Dibenzofuran	ND		10	0.51	ug/L		12/19/19 15:19	12/20/19 16:45	1
Diethyl phthalate	ND		5.0	0.22	ug/L		12/19/19 15:19	12/20/19 16:45	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:45	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/19/19 15:19	12/20/19 16:45	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:45	1
Fluoranthene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 16:45	1
Fluorene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 16:45	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:45	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/19/19 15:19	12/20/19 16:45	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:45	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 16:45	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 16:45	1
Isophorone	ND		5.0	0.43	ug/L		12/19/19 15:19	12/20/19 16:45	1
Naphthalene	ND		5.0	0.76	ug/L		12/19/19 15:19	12/20/19 16:45	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/19/19 15:19	12/20/19 16:45	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 16:45	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 16:45	1
Pentachlorophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 16:45	1
Phenanthrene	ND		5.0	0.44	ug/L		12/19/19 15:19	12/20/19 16:45	1
Phenol	ND		5.0	0.39	ug/L		12/19/19 15:19	12/20/19 16:45	1
Pyrene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 16:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.1*	*T J*	*ug/L*		*2.47*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*2.73*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*280*	*T J*	*ug/L*		*2.86*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*3.64*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.2*	*T J*	*ug/L*		*4.78*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*19*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.1*	*T J*	*ug/L*		*4.88*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*6.3*	*T J*	*ug/L*		*5.41*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*5.81*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*4.6*	*T J*	*ug/L*		*6.84*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.5*	*T J*	*ug/L*		*6.91*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*1.8*	*T J*	*ug/L*		*7.75*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.3*	*T J*	*ug/L*		*7.79*		*12/19/19 15:19*	*12/20/19 16:45*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*9.24*		*12/19/19 15:19*	*12/20/19 16:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*127*	*X*	*41 - 120*	*12/19/19 15:19*	*12/20/19 16:45*	*1*
2-Fluorobiphenyl	*106*		*48 - 120*	*12/19/19 15:19*	*12/20/19 16:45*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-8R
Date Collected: 12/13/19 15:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*65*		*35 - 120*	*12/19/19 15:19*	*12/20/19 16:45*	*1*
Nitrobenzene-d5	*100*		*46 - 120*	*12/19/19 15:19*	*12/20/19 16:45*	*1*
Phenol-d5	*43*		*22 - 120*	*12/19/19 15:19*	*12/20/19 16:45*	*1*
p-Terphenyl-d14	*73*		*60 - 148*	*12/19/19 15:19*	*12/20/19 16:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		12/18/19 09:30	12/18/19 22:35	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 22:35	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-10

Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/19/19 23:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/19 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/19/19 23:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/19 23:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/19 23:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/19 23:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/19/19 23:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/19/19 23:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/19/19 23:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/19/19 23:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/19 23:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/19 23:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/19/19 23:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/19/19 23:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/19 23:36	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/19 23:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/19 23:36	1
Acetone	**4.2**	**J**	10	3.0	ug/L			12/19/19 23:36	1
Benzene	ND		1.0	0.41	ug/L			12/19/19 23:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/19 23:36	1
Bromoform	ND		1.0	0.26	ug/L			12/19/19 23:36	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/19 23:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/19 23:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/19 23:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/19 23:36	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/19 23:36	1
Chloroform	ND		1.0	0.34	ug/L			12/19/19 23:36	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/19 23:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/19/19 23:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/19 23:36	1
Cyclohexane	ND		1.0	0.18	ug/L			12/19/19 23:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/19 23:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/19/19 23:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/19 23:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/19/19 23:36	1
Methyl acetate	ND		2.5	1.3	ug/L			12/19/19 23:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/19/19 23:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/19/19 23:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/19 23:36	1
Styrene	ND		1.0	0.73	ug/L			12/19/19 23:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/19 23:36	1
Toluene	ND		1.0	0.51	ug/L			12/19/19 23:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/19/19 23:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/19 23:36	1
Trichloroethene	ND		1.0	0.46	ug/L			12/19/19 23:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/19/19 23:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/19 23:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/19 23:36	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/19/19 23:36	1

Client Sample ID: MW-10

Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/19/19 23:36	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/19/19 23:36	1
tert-Butylbenzene	**1.3**		1.0	0.81	ug/L			12/19/19 23:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Butane, 2,3-dimethyl-	*11*	*T J N*	*ug/L*		*4.29*	*79-29-8*		*12/19/19 23:36*	*1*
Pentane, 2,4-dimethyl-	*6.8*	*T J N*	*ug/L*		*5.24*	*108-08-7*		*12/19/19 23:36*	*1*
Unknown	*25*	*T J*	*ug/L*		*5.97*			*12/19/19 23:36*	*1*
Cyclopentane, 1,2,4-trimethyl-	*10*	*T J N*	*ug/L*		*7.21*	*2815-58-9*		*12/19/19 23:36*	*1*
Unknown	*7.3*	*T J*	*ug/L*		*7.68*			*12/19/19 23:36*	*1*
Cyclohexane, 1,1-dimethyl-	*7.4*	*T J N*	*ug/L*		*8.10*	*590-66-9*		*12/19/19 23:36*	*1*
Cyclohexane, 1,2-dimethyl-, trans-	*9.2*	*T J N*	*ug/L*		*8.28*	*6876-23-9*		*12/19/19 23:36*	*1*
Cyclohexane, 1,3-dimethyl-, trans-	*5.9*	*T J N*	*ug/L*		*8.39*	*2207-03-6*		*12/19/19 23:36*	*1*
Unknown	*5.3*	*T J*	*ug/L*		*9.72*			*12/19/19 23:36*	*1*
Unknown	*5.1*	*T J*	*ug/L*		*10.12*			*12/19/19 23:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*12/19/19 23:36*	*1*
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*12/19/19 23:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/19/19 23:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 14:52	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Nitroaniline	ND		10	0.42	ug/L		12/19/19 15:19	12/20/19 14:52	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 14:52	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 14:52	1
3-Nitroaniline	ND	F2	10	0.48	ug/L		12/19/19 15:19	12/20/19 14:52	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Methylphenol	ND		10	0.36	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Nitroaniline	ND		10	0.25	ug/L		12/19/19 15:19	12/20/19 14:52	1
4-Nitrophenol	ND		10	1.5	ug/L		12/19/19 15:19	12/20/19 14:52	1
Acenaphthene	ND		5.0	0.41	ug/L		12/19/19 15:19	12/20/19 14:52	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/19/19 15:19	12/20/19 14:52	1
Acetophenone	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 14:52	1
Anthracene	ND		5.0	0.28	ug/L		12/19/19 15:19	12/20/19 14:52	1

Client Sample ID: MW-10

Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND	*	5.0	0.46	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 14:52	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		12/19/19 15:19	12/20/19 14:52	1
Biphenyl	ND		5.0	0.65	ug/L		12/19/19 15:19	12/20/19 14:52	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/19/19 15:19	12/20/19 14:52	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 14:52	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 14:52	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 14:52	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/19/19 15:19	12/20/19 14:52	1
Caprolactam	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 14:52	1
Carbazole	ND		5.0	0.30	ug/L		12/19/19 15:19	12/20/19 14:52	1
Chrysene	ND		5.0	0.33	ug/L		12/19/19 15:19	12/20/19 14:52	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/19/19 15:19	12/20/19 14:52	1
Dibenzofuran	ND		10	0.51	ug/L		12/19/19 15:19	12/20/19 14:52	1
Diethyl phthalate	**0.37**	**J**	5.0	0.22	ug/L		12/19/19 15:19	12/20/19 14:52	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 14:52	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/19/19 15:19	12/20/19 14:52	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 14:52	1
Fluoranthene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 14:52	1
Fluorene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 14:52	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 14:52	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/19/19 15:19	12/20/19 14:52	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 14:52	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 14:52	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 14:52	1
Isophorone	ND		5.0	0.43	ug/L		12/19/19 15:19	12/20/19 14:52	1
Naphthalene	ND		5.0	0.76	ug/L		12/19/19 15:19	12/20/19 14:52	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/19/19 15:19	12/20/19 14:52	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 14:52	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 14:52	1
Pentachlorophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 14:52	1
Phenanthrene	ND		5.0	0.44	ug/L		12/19/19 15:19	12/20/19 14:52	1
Phenol	ND		5.0	0.39	ug/L		12/19/19 15:19	12/20/19 14:52	1
Pyrene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 14:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*3.4*	*T J*	*ug/L*		*2.48*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*280*	*T J*	*ug/L*		*2.86*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*4.47*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*23*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*1.8*	*T J*	*ug/L*		*5.40*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*5.51*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*2.4*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*3.3*	*T J*	*ug/L*		*6.84*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*3.1*	*T J*	*ug/L*		*6.91*		*12/19/19 15:19*	*12/20/19 14:52*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*7.04*		*12/19/19 15:19*	*12/20/19 14:52*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-10

Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5

Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1.6	T J	ug/L		7.09		12/19/19 15:19	12/20/19 14:52	1
Unknown	2.2	T J	ug/L		7.17		12/19/19 15:19	12/20/19 14:52	1
Unknown	3.2	T J	ug/L		7.79		12/19/19 15:19	12/20/19 14:52	1
Unknown	1.6	T J	ug/L		9.24		12/19/19 15:19	12/20/19 14:52	1
Unknown	2.1	T J	ug/L		11.39		12/19/19 15:19	12/20/19 14:52	1
Unknown	2.4	T J	ug/L		13.96		12/19/19 15:19	12/20/19 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	120		41 - 120	12/19/19 15:19	12/20/19 14:52	1
2-Fluorobiphenyl	98		48 - 120	12/19/19 15:19	12/20/19 14:52	1
2-Fluorophenol	64		35 - 120	12/19/19 15:19	12/20/19 14:52	1
Nitrobenzene-d5	96		46 - 120	12/19/19 15:19	12/20/19 14:52	1
Phenol-d5	40		22 - 120	12/19/19 15:19	12/20/19 14:52	1
p-Terphenyl-d14	64		60 - 148	12/19/19 15:19	12/20/19 14:52	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		12/18/19 09:30	12/18/19 22:50	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 22:50	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-12R

Date Collected: 12/13/19 09:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/20/19 00:01	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/20/19 00:01	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/20/19 00:01	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/20/19 00:01	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/20/19 00:01	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/20/19 00:01	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/20/19 00:01	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/20/19 00:01	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/20/19 00:01	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/20/19 00:01	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/20/19 00:01	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/20/19 00:01	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/20/19 00:01	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/20/19 00:01	10
2-Butanone (MEK)	ND		100	13	ug/L			12/20/19 00:01	10
2-Hexanone	ND		50	12	ug/L			12/20/19 00:01	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/20/19 00:01	10
Acetone	ND		100	30	ug/L			12/20/19 00:01	10
Benzene	ND		10	4.1	ug/L			12/20/19 00:01	10
Bromodichloromethane	ND		10	3.9	ug/L			12/20/19 00:01	10
Bromoform	ND		10	2.6	ug/L			12/20/19 00:01	10
Bromomethane	ND		10	6.9	ug/L			12/20/19 00:01	10
Carbon disulfide	ND		10	1.9	ug/L			12/20/19 00:01	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/20/19 00:01	10
Chlorobenzene	ND		10	7.5	ug/L			12/20/19 00:01	10
Chloroethane	ND		10	3.2	ug/L			12/20/19 00:01	10
Chloroform	ND		10	3.4	ug/L			12/20/19 00:01	10
Chloromethane	ND		10	3.5	ug/L			12/20/19 00:01	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			12/20/19 00:01	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/20/19 00:01	10
Cyclohexane	**63**		10	1.8	ug/L			12/20/19 00:01	10
Dibromochloromethane	ND		10	3.2	ug/L			12/20/19 00:01	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/20/19 00:01	10
Ethylbenzene	ND		10	7.4	ug/L			12/20/19 00:01	10
Isopropylbenzene	ND		10	7.9	ug/L			12/20/19 00:01	10
Methyl acetate	ND		25	13	ug/L			12/20/19 00:01	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/20/19 00:01	10
Methylcyclohexane	**140**		10	1.6	ug/L			12/20/19 00:01	10
Methylene Chloride	**5.9**	**J**	10	4.4	ug/L			12/20/19 00:01	10
Styrene	ND		10	7.3	ug/L			12/20/19 00:01	10
Tetrachloroethene	ND		10	3.6	ug/L			12/20/19 00:01	10
Toluene	ND		10	5.1	ug/L			12/20/19 00:01	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/20/19 00:01	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/20/19 00:01	10
Trichloroethene	ND		10	4.6	ug/L			12/20/19 00:01	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/20/19 00:01	10
Vinyl chloride	ND		10	9.0	ug/L			12/20/19 00:01	10
Xylenes, Total	ND		20	6.6	ug/L			12/20/19 00:01	10
n-Butylbenzene	ND		10	6.4	ug/L			12/20/19 00:01	10

Client Sample ID: MW-12R

Date Collected: 12/13/19 09:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			12/20/19 00:01	10
sec-Butylbenzene	ND		10	7.5	ug/L			12/20/19 00:01	10
tert-Butylbenzene	ND		10	8.1	ug/L			12/20/19 00:01	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 2-ethyl-1,4-dimethyl-	*30*	*T J N*	*ug/L*		*12.35*	*1758-88-9*		*12/20/19 00:01*	*10*
Benzene, 1,2,3,4-tetramethyl-	*31*	*T J N*	*ug/L*		*12.68*	*488-23-3*		*12/20/19 00:01*	*10*
Benzene, 1,2,4,5-tetramethyl-	*38*	*T J N*	*ug/L*		*13.10*	*95-93-2*		*12/20/19 00:01*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*12/20/19 00:01*	*10*
4-Bromofluorobenzene (Surr)	*116*		*73 - 120*		*12/20/19 00:01*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/20/19 00:01*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,4-Dichlorophenol	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,4-Dimethylphenol	ND		25	2.5	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,4-Dinitrophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,4-Dinitrotoluene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 17:14	1
2,6-Dinitrotoluene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Chloronaphthalene	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Chlorophenol	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Methylnaphthalene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Methylphenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Nitroaniline	ND		50	2.1	ug/L		12/19/19 15:19	12/20/19 17:14	1
2-Nitrophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
3-Nitroaniline	ND		50	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Chloroaniline	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Methylphenol	ND		50	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Nitroaniline	ND		50	1.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
4-Nitrophenol	ND		50	7.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Acenaphthene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 17:14	1
Acenaphthylene	ND		25	1.9	ug/L		12/19/19 15:19	12/20/19 17:14	1
Acetophenone	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 17:14	1
Anthracene	ND		25	1.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
Atrazine	ND	*	25	2.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzaldehyde	ND		25	1.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzo(a)anthracene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzo(a)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzo(b)fluoranthene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Benzo(k)fluoranthene	ND		25	3.7	ug/L		12/19/19 15:19	12/20/19 17:14	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-12R
Date Collected: 12/13/19 09:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		25	3.3	ug/L		12/19/19 15:19	12/20/19 17:14	1
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		12/19/19 15:19	12/20/19 17:14	1
Butyl benzyl phthalate	ND		25	5.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Caprolactam	ND		25	11	ug/L		12/19/19 15:19	12/20/19 17:14	1
Carbazole	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 17:14	1
Chrysene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 17:14	1
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 17:14	1
Dibenzofuran	ND		50	2.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Diethyl phthalate	ND		25	1.1	ug/L		12/19/19 15:19	12/20/19 17:14	1
Dimethyl phthalate	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Di-n-butyl phthalate	ND		25	1.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Di-n-octyl phthalate	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
Fluoranthene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Fluorene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Hexachlorobenzene	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Hexachlorobutadiene	ND		25	3.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Hexachloroethane	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 17:14	1
Isophorone	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 17:14	1
Naphthalene	ND		25	3.8	ug/L		12/19/19 15:19	12/20/19 17:14	1
Nitrobenzene	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 17:14	1
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 17:14	1
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 17:14	1
Pentachlorophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 17:14	1
Phenanthrene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 17:14	1
Phenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 17:14	1
Pyrene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 17:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*18*	*T J*	*ug/L*		*2.46*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*1300*	*T J*	*ug/L*		*2.84*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*120*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
4-Nitro-4'-chlorodiphenylsulphoxide	*13*	*T J N*	*ug/L*		*5.95*	*24535-53-3*	*12/19/19 15:19*	*12/20/19 17:14*	*1*
Benzene, 1-ethyl-2,4-dimethyl-	*19*	*T J N*	*ug/L*		*6.75*	*874-41-9*	*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*13*	*T J*	*ug/L*		*6.85*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*9.9*	*T J*	*ug/L*		*6.90*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Benzene, 1,2,4,5-tetramethyl-	*15*	*T J N*	*ug/L*		*6.95*	*95-93-2*	*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*8.7*	*T J*	*ug/L*		*7.10*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*28*	*T J*	*ug/L*		*7.17*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*13*	*T J*	*ug/L*		*7.65*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*15*	*T J*	*ug/L*		*7.79*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
2,3,4,5,6,7-Hexahydro-1H-cyclopenta [a]pentalene	*8.1*	*T J N*	*ug/L*		*7.95*	*1000189-31-0*	*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*9.9*	*T J*	*ug/L*		*8.03*		*12/19/19 15:19*	*12/20/19 17:14*	*1*
Benzocycloheptatriene	*13*	*T J N*	*ug/L*		*8.08*	*264-09-5*	*12/19/19 15:19*	*12/20/19 17:14*	*1*
Unknown	*9.3*	*T J*	*ug/L*		*8.13*		*12/19/19 15:19*	*12/20/19 17:14*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-12R
Date Collected: 12/13/19 09:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-6
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	10	T J	ug/L		8.56		12/19/19 15:19	12/20/19 17:14	1
Unknown	13	T J	ug/L		8.58		12/19/19 15:19	12/20/19 17:14	1
Unknown	8.7	T J	ug/L		9.24		12/19/19 15:19	12/20/19 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		41 - 120	12/19/19 15:19	12/20/19 17:14	1
2-Fluorobiphenyl	90		48 - 120	12/19/19 15:19	12/20/19 17:14	1
2-Fluorophenol	56		35 - 120	12/19/19 15:19	12/20/19 17:14	1
Nitrobenzene-d5	86		46 - 120	12/19/19 15:19	12/20/19 17:14	1
Phenol-d5	38		22 - 120	12/19/19 15:19	12/20/19 17:14	1
p-Terphenyl-d14	88		60 - 148	12/19/19 15:19	12/20/19 17:14	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.027**		0.015		mg/L		12/18/19 09:30	12/18/19 23:08	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 23:08	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-14
Date Collected: 12/13/19 12:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/19 00:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/19 00:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/19 00:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/19 00:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/19 00:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/19 00:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/19 00:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/19 00:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/19 00:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/19 00:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/19 00:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/19 00:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/19 00:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/19 00:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/19 00:25	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/19 00:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/19 00:25	1
Acetone	ND		10	3.0	ug/L			12/20/19 00:25	1
Benzene	ND		1.0	0.41	ug/L			12/20/19 00:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/19 00:25	1
Bromoform	ND		1.0	0.26	ug/L			12/20/19 00:25	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/19 00:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/19 00:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/19 00:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/19 00:25	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/19 00:25	1
Chloroform	ND		1.0	0.34	ug/L			12/20/19 00:25	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/19 00:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/19 00:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/19 00:25	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/19 00:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/19 00:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/19 00:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/19 00:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/19 00:25	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/19 00:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/19 00:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/19 00:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/19 00:25	1
Styrene	ND		1.0	0.73	ug/L			12/20/19 00:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/19 00:25	1
Toluene	ND		1.0	0.51	ug/L			12/20/19 00:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/19 00:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/19 00:25	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/19 00:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/19 00:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/19 00:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/19 00:25	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/20/19 00:25	1

Client Sample ID: MW-14

Date Collected: 12/13/19 12:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/20/19 00:25	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/20/19 00:25	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/20/19 00:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/20/19 00:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*12/20/19 00:25*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*12/20/19 00:25*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/19 00:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 17:42	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Nitroaniline	ND		10	0.42	ug/L		12/19/19 15:19	12/20/19 17:42	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/19/19 15:19	12/20/19 17:42	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 17:42	1
3-Nitroaniline	ND		10	0.48	ug/L		12/19/19 15:19	12/20/19 17:42	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Methylphenol	ND		10	0.36	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Nitroaniline	ND		10	0.25	ug/L		12/19/19 15:19	12/20/19 17:42	1
4-Nitrophenol	ND		10	1.5	ug/L		12/19/19 15:19	12/20/19 17:42	1
Acenaphthene	ND		5.0	0.41	ug/L		12/19/19 15:19	12/20/19 17:42	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/19/19 15:19	12/20/19 17:42	1
Acetophenone	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 17:42	1
Anthracene	ND		5.0	0.28	ug/L		12/19/19 15:19	12/20/19 17:42	1
Atrazine	ND	*	5.0	0.46	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 17:42	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		12/19/19 15:19	12/20/19 17:42	1
Biphenyl	ND		5.0	0.65	ug/L		12/19/19 15:19	12/20/19 17:42	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/19/19 15:19	12/20/19 17:42	1

Client Sample ID: MW-14
Date Collected: 12/13/19 12:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/19/19 15:19	12/20/19 17:42	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 17:42	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 17:42	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/19/19 15:19	12/20/19 17:42	1
Caprolactam	ND		5.0	2.2	ug/L		12/19/19 15:19	12/20/19 17:42	1
Carbazole	ND		5.0	0.30	ug/L		12/19/19 15:19	12/20/19 17:42	1
Chrysene	ND		5.0	0.33	ug/L		12/19/19 15:19	12/20/19 17:42	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/19/19 15:19	12/20/19 17:42	1
Dibenzofuran	ND		10	0.51	ug/L		12/19/19 15:19	12/20/19 17:42	1
Diethyl phthalate	ND		5.0	0.22	ug/L		12/19/19 15:19	12/20/19 17:42	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 17:42	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/19/19 15:19	12/20/19 17:42	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 17:42	1
Fluoranthene	ND		5.0	0.40	ug/L		12/19/19 15:19	12/20/19 17:42	1
Fluorene	ND		5.0	0.36	ug/L		12/19/19 15:19	12/20/19 17:42	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 17:42	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/19/19 15:19	12/20/19 17:42	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 17:42	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/19/19 15:19	12/20/19 17:42	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		12/19/19 15:19	12/20/19 17:42	1
Isophorone	ND		5.0	0.43	ug/L		12/19/19 15:19	12/20/19 17:42	1
Naphthalene	ND		5.0	0.76	ug/L		12/19/19 15:19	12/20/19 17:42	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/19/19 15:19	12/20/19 17:42	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/19/19 15:19	12/20/19 17:42	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/19/19 15:19	12/20/19 17:42	1
Pentachlorophenol	ND		10	2.2	ug/L		12/19/19 15:19	12/20/19 17:42	1
Phenanthrene	ND		5.0	0.44	ug/L		12/19/19 15:19	12/20/19 17:42	1
Phenol	ND		5.0	0.39	ug/L		12/19/19 15:19	12/20/19 17:42	1
Pyrene	ND		5.0	0.34	ug/L		12/19/19 15:19	12/20/19 17:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.0*	*T J*	*ug/L*		*2.47*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*320*	*T J*	*ug/L*		*2.86*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*25*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*3.3*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*2.7*	*T J*	*ug/L*		*6.83*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*6.91*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*7.78*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*2.4*	*T J*	*ug/L*		*8.56*		*12/19/19 15:19*	*12/20/19 17:42*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*9.24*		*12/19/19 15:19*	*12/20/19 17:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*119*		*41 - 120*	*12/19/19 15:19*	*12/20/19 17:42*	*1*
2-Fluorobiphenyl	*113*		*48 - 120*	*12/19/19 15:19*	*12/20/19 17:42*	*1*
2-Fluorophenol	*65*		*35 - 120*	*12/19/19 15:19*	*12/20/19 17:42*	*1*
Nitrobenzene-d5	*106*		*46 - 120*	*12/19/19 15:19*	*12/20/19 17:42*	*1*
Phenol-d5	*43*		*22 - 120*	*12/19/19 15:19*	*12/20/19 17:42*	*1*
p-Terphenyl-d14	*78*		*60 - 148*	*12/19/19 15:19*	*12/20/19 17:42*	*1*

Client Sample Results

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-14

Date Collected: 12/13/19 12:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-7

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.072**		0.015		mg/L		12/18/19 09:30	12/18/19 23:12	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 23:12	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: BLIND DUP

Date Collected: 12/13/19 09:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/20/19 00:50	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/20/19 00:50	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/20/19 00:50	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/20/19 00:50	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/20/19 00:50	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/20/19 00:50	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/20/19 00:50	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/20/19 00:50	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/20/19 00:50	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/20/19 00:50	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/20/19 00:50	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/20/19 00:50	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/20/19 00:50	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/20/19 00:50	10
2-Butanone (MEK)	ND		100	13	ug/L			12/20/19 00:50	10
2-Hexanone	ND		50	12	ug/L			12/20/19 00:50	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/20/19 00:50	10
Acetone	ND		100	30	ug/L			12/20/19 00:50	10
Benzene	ND		10	4.1	ug/L			12/20/19 00:50	10
Bromodichloromethane	ND		10	3.9	ug/L			12/20/19 00:50	10
Bromoform	ND		10	2.6	ug/L			12/20/19 00:50	10
Bromomethane	ND		10	6.9	ug/L			12/20/19 00:50	10
Carbon disulfide	ND		10	1.9	ug/L			12/20/19 00:50	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/20/19 00:50	10
Chlorobenzene	ND		10	7.5	ug/L			12/20/19 00:50	10
Chloroethane	ND		10	3.2	ug/L			12/20/19 00:50	10
Chloroform	ND		10	3.4	ug/L			12/20/19 00:50	10
Chloromethane	ND		10	3.5	ug/L			12/20/19 00:50	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			12/20/19 00:50	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/20/19 00:50	10
Cyclohexane	**69**		10	1.8	ug/L			12/20/19 00:50	10
Dibromochloromethane	ND		10	3.2	ug/L			12/20/19 00:50	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/20/19 00:50	10
Ethylbenzene	ND		10	7.4	ug/L			12/20/19 00:50	10
Isopropylbenzene	ND		10	7.9	ug/L			12/20/19 00:50	10
Methyl acetate	ND		25	13	ug/L			12/20/19 00:50	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/20/19 00:50	10
Methylcyclohexane	**150**		10	1.6	ug/L			12/20/19 00:50	10
Methylene Chloride	**6.2**	**J**	10	4.4	ug/L			12/20/19 00:50	10
Styrene	ND		10	7.3	ug/L			12/20/19 00:50	10
Tetrachloroethene	ND		10	3.6	ug/L			12/20/19 00:50	10
Toluene	ND		10	5.1	ug/L			12/20/19 00:50	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/20/19 00:50	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/20/19 00:50	10
Trichloroethene	ND		10	4.6	ug/L			12/20/19 00:50	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/20/19 00:50	10
Vinyl chloride	ND		10	9.0	ug/L			12/20/19 00:50	10
Xylenes, Total	ND		20	6.6	ug/L			12/20/19 00:50	10
n-Butylbenzene	ND		10	6.4	ug/L			12/20/19 00:50	10

Client Sample ID: BLIND DUP

Date Collected: 12/13/19 09:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			12/20/19 00:50	10
sec-Butylbenzene	ND		10	7.5	ug/L			12/20/19 00:50	10
tert-Butylbenzene	ND		10	8.1	ug/L			12/20/19 00:50	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*26*	*T J*	*ug/L*		*3.14*			*12/20/19 00:50*	*10*
Benzene, 4-ethyl-1,2-dimethyl-	*32*	*T J N*	*ug/L*		*12.35*	*934-80-5*		*12/20/19 00:50*	*10*
Benzene, 1,2,3,4-tetramethyl-	*34*	*T J N*	*ug/L*		*12.69*	*488-23-3*		*12/20/19 00:50*	*10*
Benzene, 1-methyl-4-(1-methylethyl)-	*52*	*T J N*	*ug/L*		*13.10*	*99-87-6*		*12/20/19 00:50*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*77 - 120*		*12/20/19 00:50*	*10*
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*12/20/19 00:50*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/20/19 00:50*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,4-Dichlorophenol	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,4-Dimethylphenol	ND		25	2.5	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,4-Dinitrophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,4-Dinitrotoluene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 18:10	1
2,6-Dinitrotoluene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Chloronaphthalene	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Chlorophenol	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Methylnaphthalene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Methylphenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Nitroaniline	ND		50	2.1	ug/L		12/19/19 15:19	12/20/19 18:10	1
2-Nitrophenol	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
3-Nitroaniline	ND		50	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Chloroaniline	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Methylphenol	ND		50	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Nitroaniline	ND		50	1.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
4-Nitrophenol	ND		50	7.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Acenaphthene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 18:10	1
Acenaphthylene	ND		25	1.9	ug/L		12/19/19 15:19	12/20/19 18:10	1
Acetophenone	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
Anthracene	ND		25	1.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
Atrazine	ND	*	25	2.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
Benzaldehyde	ND		25	1.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
Benzo(a)anthracene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
Benzo(a)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
Benzo(b)fluoranthene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: BLIND DUP
Date Collected: 12/13/19 09:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(k)fluoranthene	ND		25	3.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
Biphenyl	ND		25	3.3	ug/L		12/19/19 15:19	12/20/19 18:10	1
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		12/19/19 15:19	12/20/19 18:10	1
Butyl benzyl phthalate	ND		25	5.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Caprolactam	ND		25	11	ug/L		12/19/19 15:19	12/20/19 18:10	1
Carbazole	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 18:10	1
Chrysene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		12/19/19 15:19	12/20/19 18:10	1
Dibenzofuran	ND		50	2.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Diethyl phthalate	ND		25	1.1	ug/L		12/19/19 15:19	12/20/19 18:10	1
Dimethyl phthalate	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
Di-n-butyl phthalate	ND		25	1.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Di-n-octyl phthalate	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
Fluoranthene	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Fluorene	ND		25	1.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
Hexachlorobenzene	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Hexachlorobutadiene	ND		25	3.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Hexachloroethane	ND		25	3.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		12/19/19 15:19	12/20/19 18:10	1
Isophorone	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 18:10	1
Naphthalene	ND		25	3.8	ug/L		12/19/19 15:19	12/20/19 18:10	1
Nitrobenzene	ND		25	1.5	ug/L		12/19/19 15:19	12/20/19 18:10	1
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		12/19/19 15:19	12/20/19 18:10	1
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		12/19/19 15:19	12/20/19 18:10	1
Pentachlorophenol	ND		50	11	ug/L		12/19/19 15:19	12/20/19 18:10	1
Phenanthrene	ND		25	2.2	ug/L		12/19/19 15:19	12/20/19 18:10	1
Phenol	ND		25	2.0	ug/L		12/19/19 15:19	12/20/19 18:10	1
Pyrene	ND		25	1.7	ug/L		12/19/19 15:19	12/20/19 18:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*21*	*T J*	*ug/L*		*2.47*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*8.9*	*T J*	*ug/L*		*2.72*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*1500*	*T J*	*ug/L*		*2.85*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*130*	*T J*	*ug/L*		*4.85*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*15*	*T J*	*ug/L*		*5.95*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Benzene, 2-ethyl-1,3-dimethyl-	*20*	*T J N*	*ug/L*		*6.75*	*2870-04-4*	*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*10*	*T J*	*ug/L*		*6.85*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*14*	*T J*	*ug/L*		*6.91*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Benzene, 1,2,4,5-tetramethyl-	*16*	*T J N*	*ug/L*		*6.95*	*95-93-2*	*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*12*	*T J*	*ug/L*		*7.10*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*30*	*T J*	*ug/L*		*7.17*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*8.8*	*T J*	*ug/L*		*7.34*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*16*	*T J*	*ug/L*		*7.64*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Unknown	*15*	*T J*	*ug/L*		*7.78*		*12/19/19 15:19*	*12/20/19 18:10*	*1*
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	*8.2*	*T J N*	*ug/L*		*7.95*	*1680-51-9*	*12/19/19 15:19*	*12/20/19 18:10*	*1*

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: BLIND DUP

Date Collected: 12/13/19 09:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-8

Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	10	T J	ug/L		8.03		12/19/19 15:19	12/20/19 18:10	1
Unknown	12	T J	ug/L		8.08		12/19/19 15:19	12/20/19 18:10	1
Unknown	8.2	T J	ug/L		8.13		12/19/19 15:19	12/20/19 18:10	1
Unknown	16	T J	ug/L		8.56		12/19/19 15:19	12/20/19 18:10	1
Unknown	15	T J	ug/L		8.59		12/19/19 15:19	12/20/19 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	131	X	41 - 120	12/19/19 15:19	12/20/19 18:10	1
2-Fluorobiphenyl	107		48 - 120	12/19/19 15:19	12/20/19 18:10	1
2-Fluorophenol	65		35 - 120	12/19/19 15:19	12/20/19 18:10	1
Nitrobenzene-d5	98		46 - 120	12/19/19 15:19	12/20/19 18:10	1
Phenol-d5	44		22 - 120	12/19/19 15:19	12/20/19 18:10	1
p-Terphenyl-d14	89		60 - 148	12/19/19 15:19	12/20/19 18:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.026**		0.015		mg/L		12/18/19 09:30	12/18/19 23:16	1
Lead	ND		0.010		mg/L		12/18/19 09:30	12/18/19 23:16	1

Lab Chronicle

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-1
Date Collected: 12/13/19 13:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	510964	12/19/19 21:59	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 15:21	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 22:24	EMB	TAL BUF

Client Sample ID: MW-6R
Date Collected: 12/13/19 11:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	510964	12/19/19 22:23	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 15:49	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 22:28	EMB	TAL BUF

Client Sample ID: MW-7
Date Collected: 12/13/19 14:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	510964	12/19/19 22:48	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 16:17	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 22:32	EMB	TAL BUF

Client Sample ID: MW-8R
Date Collected: 12/13/19 15:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	510964	12/19/19 23:12	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 16:45	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 22:35	EMB	TAL BUF

Client Sample ID: MW-10
Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	510964	12/19/19 23:36	OMI	TAL BUF

Lab Chronicle

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Client Sample ID: MW-10
Date Collected: 12/13/19 08:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 14:52	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 22:50	EMB	TAL BUF

Client Sample ID: MW-12R
Date Collected: 12/13/19 09:00
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	510964	12/20/19 00:01	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 17:14	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 23:08	EMB	TAL BUF

Client Sample ID: MW-14
Date Collected: 12/13/19 12:15
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	510964	12/20/19 00:25	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 17:42	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 23:12	EMB	TAL BUF

Client Sample ID: BLIND DUP
Date Collected: 12/13/19 09:30
Date Received: 12/17/19 12:00

Lab Sample ID: 480-164301-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	510964	12/20/19 00:50	OMI	TAL BUF
Total/NA	Prep	3510C			510919	12/19/19 15:19	AAP	TAL BUF
Total/NA	Analysis	8270D		1	511072	12/20/19 18:10	JMM	TAL BUF
Total/NA	Prep	3005A			510384	12/18/19 09:30	JLC	TAL BUF
Total/NA	Analysis	6010C		1	510747	12/18/19 23:16	EMB	TAL BUF

Laboratory References:
TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Homer Street Redevelopment LLC
Job ID: 480-164301-1
Project/Site: Benchmark - 251 Homer St. site

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method Summary

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Homer Street Redevelopment LLC
Project/Site: Benchmark - 251 Homer St. site

Job ID: 480-164301-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-164301-1	MW-1	Water	12/13/19 13:30	12/17/19 12:00	
480-164301-2	MW-6R	Water	12/13/19 11:00	12/17/19 12:00	
480-164301-3	MW-7	Water	12/13/19 14:30	12/17/19 12:00	
480-164301-4	MW-8R	Water	12/13/19 15:30	12/17/19 12:00	
480-164301-5	MW-10	Water	12/13/19 08:15	12/17/19 12:00	
480-164301-6	MW-12R	Water	12/13/19 09:00	12/17/19 12:00	
480-164301-7	MW-14	Water	12/13/19 12:15	12/17/19 12:00	
480-164301-8	BLIND DUP	Water	12/13/19 09:30	12/17/19 12:00	

Login Sample Receipt Checklist

Client: Homer Street Redevelopment LLC

Job Number: 480-164301-1

Login Number: 164301
List Number: 1
Creator: Harper, Marcus D

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Conor Donovan	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-138982-31276.1
Client Contact: Michael Lesakowski	Phone: (716) 697 5931	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Homer Street Redevelopment LLC				Job #:
Address: 2558 Hamburg Turnpike Suite 330	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Lackawanna	TAT Requested (days): STANDARD			A - HCL, B - NaOH, C - Zn Acetate, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: NY, 14218				
Phone: 716 6975931	PO #: Purchase Order not required			
Email: mlesakowski@turnkeyllc.com	WO #:			
Project Name: Benchmark - 251 Homer St. site	Project #: 48004164			
Site: 251 Homer St 06AN	SSOW#:			Other:

480-164301 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - (MOD) TCL SVOA - OLM04.2 w/ TICs	6010C - (MOD) As & Pb	8260C - (MOD) TCL list OLM04.2 w/ TICs	Total Number of con	Special Instructions/Note:
			Preservation Code:				N	D	A		
MW-1	12-13-19	1330	G	Water			X	X	X		
MW-6R		1100		Water			X	X	X		
MW-7		1430		Water			X	X	X		
MW-8R		1530		Water			X	X	X		
MW-10		0815		Water		Y	X	X	X		
MW-12R		0900		Water			X	X	X		
MW-14		1215		Water			X	X	X		
MS/MSD		0920		Water			X	X	X		
~~MSD~~		~~0925~~		Water			X	X	X		
BLIND DUP		0930		Water			X	X	X		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: 12-17-19 Time: 1030 Method of Shipment: Pickup

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12.17.19/1030	BMTK		12/17/19 11:30	BMTK
2		12/17/19 12:00	TAN			
3					12/17/19 1200	ONTS

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 29 #C

Ver: 01/16/2019

Page 44 of 44

3/10/2020 (Rev. 1)