Periodic Review Report

Former Brainerd Manufacturing Facility
East Rochester, New York
NYSDEC Site No. V00519-8

February 2020 0040-002-400

Prepared For:

Despatch Industries, Inc.

Prepared By:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York | P: (716) 856-0599 | F: (716) 856-0583

PERIODIC REVIEW REPORT

FORMER BRAINERD MANUFACTURING FACILITY SITE
(VOLUNTARY CLEANUP SITE NO. V00519-8)

EAST ROCHESTER, NEW YORK

February 2020 0040-002-400

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Prepared By:

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

PERIODIC REVIEW REPORT

Former Brainerd Manufacturing Facility Site

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1.0 INTRODUCTION

Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR), on behalf of Despatch Industries, Inc. (Despatch) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) Site No. V00519-8, located in East Rochester, Monroe County, New York (Site; see Figure 1), commonly referred to as the Former Brainerd Manufacturing Facility site ("Site").

This PRR has been prepared for the Site in accordance with NYSDEC DER-10/*Technical Guidance for Site Investigation and Remediation* (May 3, 2010). The NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been completed for the Site (see Appendix A).

This PRR and the associated inspections form has been completed for the post-remedial activities at the Site for the period from January 31, 2019 to January 31, 2020.

1.1 Site Background

Despatch Industries, Inc. entered into Voluntary Cleanup Agreement (VCA) Site # V00519-8 with the New York State Department of Environmental Conservation (NYSDEC) in February 2002, to investigate and remediate a 3.3-acre property consisting of two parcels located in East Rochester, Monroe County, New York. The property was remediated to restricted commercial use and has been vacant and unoccupied except for periodic maintenance by the building owner until October 2019. On March 18, 2016, 107/115 North Washington Street, LLC purchased the Site from Despatch. Despatch remains responsible for environmental obligations at the Site as they pertain to the subject VCP, with access to the Site provided by the new owner to fulfill those obligations. The Site is currently undergoing interior renovation activities, by 107/115 North Washington Street, LLC, for planned use as a self-storage building; consistent with Institutional Control land-use restrictions.

The site is located in the County of Monroe, New York and is comprised of two parcels: an approximate 3.0-acre parcel identified as 115 North Washington Street on the East Rochester Tax Map #139.69-1-17 improved with a 73,400 square foot industrial/manufacturing building and offices; and an approximately 0.3-acre parcel, comprised of an asphalt parking lot (Tax Map#139.69-1-19). The site is bounded by residential properties, a Rochester Gas and Electric (RG&E) substation and a pre-cast concrete product

manufacturing building owned by E.J. Delmonte to the north, Monroe Street, Rochester Lumber Company and A.J. Interiors to the south, North Washington Street to the east, and light industrial properties, railway and green space to the west (see Figure 2).

The Site was operated as an industrial facility for nearly 100 years prior to relocation of Brainerd's operations in 1998. Historic uses of the Site included the manufacture of hardware and decorative metal products using various metal finishing processes. The property was subsequently operated under lease by an office furniture reconditioning and sales company beginning in 2004, however that business terminated its lease and left the Site in fall of 2017.

In May 2002, Despatch Industries, Inc. signed a voluntary agreement with the New York State Department of Environmental Conservation (NYSDEC) to investigate and cleanup the Site. Environmental site investigations were conducted by Benchmark which identified the following:

- The uppermost-water bearing zone consists of a poorly graded sand, and is contaminated with chlorinated volatile organic compounds (cVOCs) suspected to originate from former plating operations and released via a sump interior to the Site building (the sump has been sealed). The primary cVOCs are perchloroethylene (PCE), trichloroethene (TCE), and to a lesser degree 1,1,1-trichloroethane. A narrow groundwater plume developed from the area of the source and traveled to the northwest.
- A localized area (approximately 20 feet by 25 feet) of the surficial soils along the western portion of the Site were contaminated with metals (i.e., lead, barium).

1.2 Remedial History

After acceptance into the VCP in May 2002, there were two interim remedial measures (IRMs) undertaken for this project: 1) groundwater pumping, pretreatment, and conveyance to the Monroe County Sewer System; and 2) installation of an on-site subslab depressurization system. A more detailed discussion of these IRMs is provided below.

1.2.1 Groundwater Pumping and Pretreatment

Site investigation data supported the need for an IRM to address groundwater impacts at the Site and to cut-off contaminated groundwater from further impacts off-site. The IRM was constructed during the period of June through August 2004. The IRM groundwater collection and pretreatment system involves recovery of contaminated groundwater from a

pumping well with concurrent on-site batch treatment of the recovered groundwater via a low-profile air stripper with discharge of the pretreated water to the Monroe County Department of Environmental Services. Since August 2004, cVOC-impacted groundwater has been collected by pumping well PW-1 (PW-1R replaced PW-1 in this capacity in November 2011[1]) on a nearly continuous basis except for maintenance shutdowns and the issue with the pumping well PW-1. Since pumping began in August 2004 through May 2018, approximately 31,228,652 gallons of groundwater were collected, pre-treated, and discharged to the Monroe County Sewer System under Sewer Use Permit 883. Treated groundwater (effluent) from the air stripper has been tested monthly for PCE, toluene, and TCE and compared to the permitted discharge limit (PDL) of <2.13 mg/L. All effluent samples have been below the PDL. A comparison of influent to effluent concentrations indicates 90 to greater than 99% removal of VOCs. Monroe County routinely collects a split sample for verification of permit compliance. The system was temporarily shut down in May of 2018 to evaluate the efficacy of subsequent remedial measures as further discussed herein. The groundwater isopotential map for November 2019 water level measurements is shown on Figure 3.

1.2.2 Sub-Slab Depressurization

The second IRM involved installation of a sub-slab depressurization (SSD) system on a design-build basis with post-installation performance testing to confirm adequate system performance. Initial communication testing of the sub-slab was performed by Benchmark personnel to evaluate the number of extraction points and type of exhaust fans required to optimize the systems performance under the specific Site conditions. The SSD system was installed by Mitigation Tech, a Rochester, New York based vapor control (and radon) experienced contractor. The system consists of 28 extraction points (EP-1 through EP-28) and six RadonAway GP Series 501 fans distributed strategically throughout the building under the agreed design criteria established with the NYSDEC and NYSDOH. Six roof mounted fans fitted with interior manometers are visually inspected on a monthly basis. The system began operation in November 2010 and has operated continuously since that time.

[1] The PW-1 pump became lodged in the well during routine pump maintenance. Several attempts were made to recover the pump and repair the well. However, it became apparent that sand had intruded the well likely through the well screen suggesting that the well could not be repaired effectively.

1.2.3 Final Remedial Measure

The site was remediated in accordance with the preferred remedy and as approved by the NYSDEC in the RAWP dated December 2011. The following are the components of the selected remedy:

1. Construction and maintenance of a soil cover system consisting of a demarcation layer followed by a minimum of 12 inches of NYSDOT-approved type 2 backfill material to prevent human exposure to contaminated soil/fill remaining at the site;
2. Continued operation of a previously constructed IRM groundwater pump and treat system in which groundwater is transferred from a pumping well (PW-1R) to an influent storage tank. The untreated groundwater is then pumped into a low profile air stripper for treatment and subsequent discharge to the sanitary sewer.
3. Continued operation of a previously constructed IRM sub-slab depressurization system comprised of a series of fans mounted to sub-slab piping to prevent migration of VOC-impacted vapors into the building.
4. Enhancement of the IRM groundwater pump and treat system with a second pumping well (PW-2) and subsequent addition of sodium bisulfite (SBS) after air stripping to reduce the dissolved oxygen concentration. [Note: SBS addition is only required for the water to be recharged to the groundwater in order to promote the anaerobic degradation of the chlorinated VOCs.] Pretreated groundwater is then either discharged to the Monroe County sewer system or further treated by the addition of hydrogen gas via the groundwater Pressurized Remediation Optimizer Low Pressure system (gPRO® LP system) for reinjection of hydrogen gas upgradient of the source area. The hydrogenated water flows under gravity to the three upgradient reinjection wells (RW-1, RW-2, and RW-3) located along Monroe Street (Figure 3). The system was operated and monitored on a continuous basis beginning in early 2012 until 2016. It was shut down in mid-2016 due to clogging of the reinjection wells.
5. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
6. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
7. Periodic certification of the institutional and engineering controls listed above.

1.2.4 Corrective Measures

As per the SMP, if any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Plan will be submitted to the NYSDEC for approval.

Due to gPRO injection well failure, a Corrective Action Plan was submitted and approved by the Department in April 2017. The Corrective Action Plan identifies the scope of planned corrective actions and the method and means by which it will be completed. The planned corrective action chosen for the Site involved the remediation of chlorinated VOCs in groundwater in the vicinity of monitoring wells MW-6 and MW-5 and pumping well PW-1R by creating a continuous *in situ* passive barrier system with Regenesis' PlumeStop® liquid activated carbon. Groundwater flows through the barrier system while at the same time the barrier extracts and destroys contaminants from groundwater.

Injection of the liquid activated carbon occurred in October 2017. Details of the injection program were described in correspondence to the Department dated May 14, 2018. Post injection groundwater samples were collected from monitoring wells MW-5, MW-6 and pumping well PW-1R on November 2017, February 2018, June 2018, August 2018 (MW-6 only) and October 2018 (MW-6 only).

Benchmark performed additional corrective measure in the source area based on the post injection groundwater samples results collected between November 2017 and October 2018. On January 11 and 14, 2019, Benchmark injected directly into monitoring well MW-6 a total of 400 pounds (equivalent to 48 gallons) of PlumeStop mixed with water. Over a 13-hour period between these two days, a total of approximately 230 gallons of PlumeStop/water was injected. Injection over two days was necessary because of daylighting of the PlumeStop mixture. Benchmark redeveloped well MW-6 on February 8 and collected a sampled from MW-6 on February 22 for analysis of Target Compound List (TCL) volatile organic compounds (VOCs).

Routine post injection groundwater samples continued to be collected from monitoring wells MW-4, MW-5, MW-6 and pumping well PW-1R on July 2019, and November 2019 (except PW-1R). Source area well PW-1R was not sampled on November 25 due to a temporary power interruption associated with interior renovation activities; therefore, Benchmark returned on December 11 to resample the well via a bailer in lieu of running the well pump. MW-5 was also resampled at that time due to suspected anomalous data from the November 25 sample. Groundwater sampling results are discussed in Section 3.1.2.

On October 22, 2019, Nothnagel Drilling, Inc. decommissioned the gPro groundwater treatment systems and three associated reinjection wells (grouted in place) located along Monroe Street (Figure 2). Well decommission logs are included in Appendix B.

1.3 Compliance and Recommendations

The site was initially inspected on January 8, 2020, however at that time power interruptions related to interior renovation work affected some of the fans related to the ASD system, which did not allow for verification of ASD system operation. The fans were placed back into service during the first week of February 2020. At that time is was noted that one of the units required replacement. That work was completed on February 27, 2020 and the ASD system manometers were re-inspected at that time. A photo log is included in Appendix C. At the time of the Site inspection on February 27, 2020, the Site remedial components were compliant with the Department's approved SMP.

2.0 SITE OVERVIEW

The Site is located in East Rochester County of Monroe, New York and is identified as 115 North Washington Street (SBL Nos. 139.69-1-17 and 139.69-1-19) on the Monroe County Tax Map. An open gravel lot comprises the western side of the larger parcel, with the former manufacturing building situated on the eastern side of the parcel adjacent to North Washington Street. Surrounding property is mixed use, primarily characterized by light industrial and railroad properties, and residential properties. The Site is an approximately 3.3-acre area bounded by residential properties to the north/northeast; a Rochester Gas and Electric (RG&E) substation and a pre-cast concrete product manufacturing building owned by E.J. Delmonte to the northwest; Monroe Street to the south; North Washington Street to the east; and light industrial properties, railway, and green space to the west (see Figure 2).

In May 2002, Despatch Industries, Inc. signed a voluntary agreement with the NYSDEC to investigate and cleanup the Site (DEC Site No. VCP 00519-8). The investigations and IRMs were conducted through New York State's VCP (Index #B8-0609-02-02). Remedial activities were completed in 2013. The FER and SMP for the Site were approved by the Department in December 2013. The Release and Covenant Not to Sue was issued for the Site on November 24, 2014. On March 18, 2016, 107/115 North Washington Street, LLC purchased the Site from Despatch. Despatch remains responsible for environmental obligations at the Site as they pertain to the subject VCP, with access to the Site provided by the new owner to fulfill those obligations.

3.0 SITE MANAGEMENT PLAN

A SMP was prepared for the Site and approved by the Department in December 2013. The SMP includes an Operation, Monitoring and Maintenance (OM&M) Plan, a Soil/Fill Management Plan (SFMP), and a copy of the Environmental Easements. A brief description of the components of the SMP is presented below.

3.1 Operation, Monitoring and Maintenance Plan

The OM&M Plan consists of three major components: including the Active Sub-slab Depressurization System (ASD); the groundwater recovery, treatment, and reinjection system; and the Annual Inspection & Certification Program.

3.1.1 Active Sub-slab Depressurization System

An ASD system was installed within the existing building consisting of 28 extraction points (EP-1 through EP-28) and six RadonAway GP Series 501 fans distributed strategically throughout the building under the agreed design criteria established with the NYSDEC and NYSDOH. Six roof mounted fans outfitted with interior manometers are visually inspected on a monthly basis. The system began operation in November 2010 and has operated continuously since that time. As required by the Department-approved SMP, the ASD system must: (1) be operated continuously to maintain a negative pressure (below ambient atmospheric) under the floor slab; (2) be visually inspected monthly to verify proper operation; and (3) annually inspected and certified that the system is performing properly and remains an effective engineering control (EC).

As discussed in Section 1.3, the fans were temporarily inoperable at the time of the January 2020 inspection due to electrical disconnections associated with the building renovation work. (all other engineering and institutional controls were in place). During the subsequent annual Site Inspection, the inspector verified that the ASD system was operating properly, as indicated by the readings on the vacuum gauges. A summary of the ASD periodic inspection readings are included in Appendix D.

3.1.2 Groundwater Collection, Treatment, Discharge or Reinjection and Monitoring Data

Since injection of the Regenesis' PlumeStop®, post injection groundwater samples were collected from monitoring wells MW-5, MW-6 and pumping well PW-1R in November 2017, February 2018, June 2018, August 2018 (MW-6 only) and October 2018 (MW-6 only). In January 2019, Benchmark performed reinjection directly into monitoring well MW-6 and collected groundwater samples at MW-6 in February 2019. Routine post injection groundwater samples continued to be collected from monitoring wells MW-4, MW-5, MW-6 and pumping well PW-1R in July 2019, November 2019 (except PW-1R), and December 2019 (MW-5 and PW-1R only).

As indicated on Table 1, tetrachloroethene (PCE) and trichloroethene (TCE) were not detected during the most recent event at source area wells MW-5[2] and MW-6, decreased slightly from the July event at MW-4, and remained generally consistent at PW-1R. In addition, the detected cVOC concentrations at MW-5 and PW-1R fall within an order of magnitude of the NYSDEC Class GA standard. A minor increase of total cVOCs was observed in PW-1R; however, concentrations remain below historic pre-injection levels.

Charts illustrating total chlorinated VOC (cVOC) concentrations vs time from groundwater monitoring wells MW-4, MW-5, MW-6, and PW-1R are included in Appendix E.

Analytical data for the post injection groundwater sampling results not previously submitted to the NYSDEC is contained in Appendix F.

3.1.3 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines the requirements for the Site, to certify and attest that the institutional controls and/or engineering controls employed at the Site are unchanged from the previous certification. The Annual Certification will primarily consist of an annual Site Inspection to complete the NYSDEC's IC/EC Certification Form. The annual inspection was performed by Mr. Thomas Forbes, P.E. of Benchmark Environmental Engineering & Science, PLLC on January 8, 2020 and was repeated on February 28, 2020.

[2] November 25, 2019 data were deemed suspect for MW-5; resampling in December 2019 confirmed non-detect levels consistent with the prior post-injection events.

At the time of the January 8, 2020 inspection, the property was vacant but was undergoing buildout as a self-storage facility. No observable indication of ground-intrusive activities was noted during the Site inspection. The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A. A photolog of the Site inspection, including ASD manometers, is included in Appendix C.

3.2 Soil/Fill Management Plan

A SFMP was included in the approved-SMP for the Site. The SFMP provides guidelines for the management of soil and fill material during any future intrusive actives.

No intrusive activities requiring management of on-Site soil or fill material; or the placement of backfill materials occurred during the monitoring period.

3.3 Engineering and Institutional Control Requirements and Compliance

As detailed in the Environmental Easements, several IC/ECs need to be maintained as a requirement of the BCAs for the Site.

3.3.1 Institutional Controls

- Groundwater-Use Restriction – the use of groundwater for potable and non-potable purposes is prohibited; and
- Land-Use Restriction: The controlled property may be used for commercial and/or industrial use; and
- Implementation of the SMP including the OM&M Plan and SFMP.

3.3.2 Engineering Controls

- Vapor Mitigation – ASD System has been operated continuously with exception of a brief shutdown from February 2018 to March 2018 to replace two exhaust fans which were damaged during a loss of heat to the building, causing a sprinkler line to rupture and resulting in the flooding of the floor near some of the ASD extraction points, and from December 2019 to January 2020 due to building renovation work.

- Groundwater Collection and Pretreatment Systems – The groundwater collection and pretreatment systems have been operated continuously with minimal interruption for maintenance since they were first installed in 2004. The groundwater treatment system pumped 6,986,925 gallons of water between the prior PRR reporting period of June 10, 2016 and May 10, 2018. The system was shutdown down between January and March 2018 to replace the air stripper blower motor. The blower motor was damaged due to a frozen/ruptured sprinkler line in the building. The system was returned to service in April 2018. At the recommendation of the NYSDEC, the system was shut down in May 2018 avoid removing any of the PlumeStop® amendment from the aquifer. The system has remained shut down at the time of the Site Inspection.

- The gPRO reinjection system has remained shut down pending final approval for decommissioning, with the PlumeStop® injection employed as a corrective measure for source area control. Three reinjection wells located along Monroe Street were decommissioned in place on October 22, 2019.

- Groundwater Monitoring – Groundwater monitoring (10 events) was completed between July 2017 and December 2019.

- Cover System – The cover system, including building foundations, concrete sidewalks, asphalt and gravel driveways and parking areas, and a nominal 25-foot long by 20-foot wide engineered cover area are all being maintained in compliance with the SMP.

At the time of the February 27, 2020 site inspection, the Site was fully compliant with all institutional control requirements and all engineering controls (or NYSDEC-approved modifications thereto) as discussed above.

4.0 CONCLUSIONS AND RECOMMENDATIONS

As of the date of the most recent site inspection, the Site is fully compliant with the Institutional Controls including land-use restrictions, groundwater-use restrictions, and the soil/fill management plan component; and fully compliant with the Engineering Controls or approved modifications thereto. The following recommendations will be implemented with DEC approval:

- Decommissioning of remaining IRM pump and treat equipment and monitoring wells.
- Termination of groundwater monitoring in accordance with Section 2.2.2.1 of the 2013 Site Management Plan (SMP), and submission of a brief Work Plan for decommissioning of the remaining Interim Remedial Measure (IRM) pump and treat equipment and monitoring wells.

5.0 DECLARATION/LIMITATION

Benchmark Environmental Engineering and Science, PLLC, personnel conducted the annual site inspection for Voluntary Cleanup Program Site No. V00519-8, East Rochester, New York, according to generally accepted practices. This report complied with the scope of work provided to Despatch Industries, Inc. by Benchmark Environmental Engineering and Science, PLLC.

This report has been prepared for the exclusive use of Despatch Industries, Inc. 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 Despatch Industries, Inc. 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 and Science, PLLC.

TABLE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Periodic Review Report
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	MW-1							MW-2			MW-3				MW-4								
									Historic	Current						Historic							Current	
		08/18/06	01/31/12	09/25/13	12/04/13	6/4/14	6/4/15	6/28/16	08/18/06	07/30/19	11/25/19	08/21/06	6/4/14	6/4/15	6/28/16	08/22/06	01/30/12	09/25/13	12/04/13	6/4/2014	6/4/2015	6/28/2016	07/23/19	11/25/19
TCL Volatile Organic Compounds (ug/L)																								
Acetone	**50**	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	4.5 J	ND	ND
Bromodichloromethane	**5**	ND	ND	ND	ND	0.75	**11**	ND	ND	ND	ND	ND	1.4	1.4	1.2	ND	2.8	2.3	1.3	1.1	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	ND	ND	ND	ND	ND	**23**	ND	0.91 J	1.2	0.59 J	ND	7	6.3	4.7	0.86 J	**11**	**15**	**12**	6.5	1.2	1.3	3.2	6.5
Dibromochloromethane	**5**	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	**NR**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND
Toluene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND
Tetrachloroethene	**5**	3.1 J	**53**	**83**	**150**	**70**	**65**	ND	**8.2**	**11**	**10**	ND	2	3.5	2.6	**87**	**11**	**28**	**13**	**22**	**16**	**17**	**27**	**26**
Trichloroethene	**5**	0.78 J	**19**	**15**	**65**	**17**	**30**	0.91 J	**6.3**	2	1.9	**11**	2.5	3.2	3.1	**240**	**90**	**46**	**33**	**37**	**16**	**16**	**42**	**36**
Trichlorofluoromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	2.6 J	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	**1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	**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 Site COCs (cVOCs)[4]	NA	3.9	72	98	215	87	95	0.9	15	13	11.9	11	4.5	6.7	5.7	327	101	74	46	59	32	33	69	62

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. MS/MSD collected at PW-1.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

Definitions:

J = Estimated value; result is less than the sample quantitation limit but greater than zero.
ND = parameter not detected above laboratory detection limit.
NR = parameter not regulated by 6NYCRR TOGS 1.1.1 Part 703
NA = not available; parameter not included on tabulated summary provided by NYSDEC.
N* = Indicates the spike or duplicate analysis is not within the quality control limits
"--" = Not analyzed

BOLD = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Periodic Review Report
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	MW-5															
		Historic Groundwater Sampling Events									Pre-Injection	Post-Injection					
		08/22/06	01/30/12	03/05/13	06/26/13	9/25/13	12/04/13	06/04/14	06/04/15	06/28/16	07/10/17	11/30/17	02/27/18	06/04/18	07/23/19	11/25/19	12/11/19
TCL Volatile Organic Compounds (ug/L)																	
Acetone	**50**	ND	ND	ND	ND	ND	3.4 J	3.3 J	ND	ND	7.3 J	**200**	**200**	**63 J**	ND	ND	6.8 J
Bromodichloromethane	**5**	ND	ND	0.51 J	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**71 J**	**320**	45 J	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND
Chloroform	**7**	1.4 J	1.3	**18**	ND	ND	ND	ND	ND	0.98 J	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	**NR**	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**5**	ND	ND	ND	ND	ND	0.51 J	0.71 J	ND	ND	ND	ND < 5.1	ND < 5.1	*ND < 5.1*	ND	ND	ND
Tetrachloroethene	**5**	**1,600**	**2,800**	**590**	**400**	**150**	**110**	**50**	**40**	**530 D**	**14**	ND	ND	ND	ND	**45**	ND
Trichloroethene	**5**	**1,400**	**1,500**	**260**	**240**	**59**	**52**	**23**	**20**	**330 D**	**8.5**	ND	ND	ND	ND	**44**	ND
Trichlorofluoromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethene	**5**	0.56 J	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	**5**	0.80 J	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 9.0*	*ND < 9.0*	*ND < 9.0*	ND	ND	ND
1,1,1-Trichloroethane	**5**	**11**	**6.3 J**	1.3	ND	ND	ND	ND	ND	1.5	ND	*ND < 8.2*	*ND < 8.2*	*ND < 8.2*	ND	ND	ND
1,1,2-Trichloroethane	**1**	**1.5 J**	ND	ND	ND	ND	ND	ND	ND	0.57 J	ND	*ND < 2.3*	*ND < 2.3*	*ND < 2.3*	ND	ND	ND
1,1 Dichloroethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Site COCs (cVOCs)[4]	NA	3,000	4,302	850	640	209	162	73	60	860	23	0	0	0	0	89	0

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. MS/MSD collected at PW-1.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

Definitions:

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ND = parameter not detected above laboratory detection limit.
NR = parameter not regulated by 6NYCRR TOGS 1.1.1 Part 703
NA = not available; parameter not included on tabulated summary provided by NYSDEC.
N* = Indicates the spike or duplicate analysis is not within the quality control limits
"--" = Not analyzed

BOLD = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Periodic Review Report
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	MW-6																			MW-7	MW-8
		Historic Groundwater Sampling Events											Pre-Injection	Post-Injection								
		08/22/06	01/30/12	Blind Dup 1-30-12	03/05/13	06/26/13	09/25/13	12/04/13	06/04/14	Blind Dup 6-4-14	06/04/15	06/28/16	07/10/17	11/30/17	02/27/18	06/04/18	08/08/18	10/29/18	2/22/19 [5]	07/23/19	11/25/19	8/21/06	8/21/06
TCL Volatile Organic Compounds (ug/L)																							
Acetone	**50**	ND	ND	ND	ND	ND	ND	5.0 J	ND	ND	ND	ND	ND	*ND < 150*	49	12 J	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	**5**	ND	4.4	4.6	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 20*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	***ND < 120***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 66*	8.7 J	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	ND	**14**	**14**	2	ND	ND	0.51 J	ND	ND	ND	ND	ND	*ND < 17*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 16*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**5**	ND	ND	ND	ND	ND	ND	ND	**87**	**70**	ND	ND	ND	*ND < 22*	ND	ND	3.8 J	3.8 J	3.4 J	ND	ND	ND	ND
Methyl tert-butyl ether	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	**NR**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**5**	3.2 J	0.95 J	1	ND	ND	ND	1.6	ND	ND	ND	ND	ND	*ND < 26*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**5**	**3,100**	**1,700**	**1,700**	**410**	**1,600**	**1,300**	**1,600**	**1,500**	**1,500**	**570**	**1,200**	**390**	**90**	3.5 J	**120**	**290**	**170**	*ND<1.4*	0.45 J	ND	ND	**13**
Trichloroethene	**5**	**1,500**	**660**	**650**	**95**	**520**	**450**	**570**	**560**	**520**	**130**	**340**	**110**	**51**	4.9	**88**	**130**	**140**	*ND<1.8*	0.66 J	ND	**6.0**	**20**
Trichlorofluoromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 44*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 15*	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 41*	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 45*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	**5**	**16 J**	4	3.8	ND	ND	ND	3.8	ND	ND	ND	ND	ND	*ND < 41*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	**1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 12*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 19*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Site COCs (cVOCs)[4]	NA	4,600	2,360	2,350	505	2,120	1,750	2,170	2,060	2,020	700	1,540	500	141	8.4	208	420	310	0	1.1	0	6.0	33

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. MS/MSD collected at PW-1.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

Definitions:

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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Periodic Review Report
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	MW-9												MW-10	MW-11	MW-12		
		Historic											Current	Historic				Current
		8/21/06	Blind Dup 8-21-06	9/12/07	1/31/12	6/26/13	9/25/13	12/4/13	6/4/14	6/4/15	6/28/16	7/23/19	11/25/19	8/21/06	03/10/08	03/10/08	7/23/19	11/25/19
TCL Volatile Organic Compounds (ug/L)																		
Acetone	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1 J	4.8 J	ND	ND
Bromodichloromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99	0.82 J	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.94 J	ND	ND
Chloroform	**7**	2 J	2.1 J	0.9 J	ND	ND	ND	0.82 J	ND	ND	ND	ND	ND	ND	1.7	1.6	ND	ND
Dibromochloromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**5**	ND	ND	ND	ND	ND	ND	ND	**90**	ND	ND	ND	ND	ND	NA	ND	ND	ND
Methyl tert-butyl ether	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
Methyl Acetate	**NR**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
Toluene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
Tetrachloroethene	**5**	**3,100**	**2,800**	**2,600**	**390**	**870**	**900**	**1,000**	**1,300**	**920**	**300**	**33**	**51**	**17**	ND	**300 D**	**71**	**68**
Trichloroethene	**5**	**2,700**	**2,500**	**1,900**	**230**	**400**	**590**	**780**	**810**	**570**	**100**	4.7	**38**	**15**	ND	**270 D**	**14**	**12**
Trichlorofluoromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND
1,1 Dichloroethene	**5**	3.5 J	3.9 J	1.3	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	**5**	3.2 J	3.2 J	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66 J	ND	ND
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND
1,1,1-Trichloroethane	**5**	**34**	**36**	**12**	1.6	ND	ND	4.6	ND	ND	ND	ND	ND	0.60 J	ND	2.0	ND	ND
1,1,2-Trichloroethane	**1**	**3.8 J**	**3.7 J**	**1.9**	0.5 J	ND	ND	0.74 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	**5**	0.62 J	0.57 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Site COCs (cVOCs)[4]	NA	5,800	5,300	4,503	620	1,270	1,490	1,780	2,110	1,490	400	38	89	32	0	571	85	80

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. MS/MSD collected at PW-1.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

Definitions:

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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Periodic Review Report
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	PW-1[2]	PW-1R										PW-2				OW-1	OW-2
			Historic Groundwater Sampling Events				Pre-Injection	Post-Injection										
		8/22/06	1/30/12	6/4/14	6/4/15	6/28/16	07/10/17	11/30/17	02/27/18	06/04/18	07/23/19	12/11/19	1/30/12	6/4/14	6/4/15	6/28/16	8-22-06	8-22-06
TCL Volatile Organic Compounds (ug/L)																		
Acetone	**50**	ND	ND	ND	13	6.9 J	ND	30 J	6.0 J	8.2 J	ND	ND	8.1 J	0.46 J	12 J	8.7 J	ND	ND
Bromodichloromethane	**5**	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND	ND	**160**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	0.55 J	1.1	1.3 J	0.72 J	ND	ND	ND	0.44 J	ND	ND	ND	2.3	2.2	1.3	0.96 J	0.58 J	ND
Dibromochloromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**5**	ND	ND	**12**	ND	ND	ND	2.4 J	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND
Methyl tert-butyl ether	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.43 J	0.23 J	ND	ND
Methyl Acetate	**NR**	ND	ND	3.5 J	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND
Toluene	**5**	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	0.52	0.55 J	ND	ND
Tetrachloroethene	**5**	**780**	**360**	**92**	**160**	**120**	**100**	ND	0.74 J	2.9	**6.7**	**10**	1.3	**20**	**18**	**11**	**570**	0.82 J
Trichloroethene	**5**	**540**	**220**	**75**	**94**	**71**	**70**	ND	4.7	**13**	**18**	**22**	3.3	**25**	**16**	**12**	**470**	**320**
Trichlorofluoromethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND
cis-1,2-Dichlorethene	**5**	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	0.86 J	ND	ND	0.65 J	4 J
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J
1,1,1-Trichloroethane	**5**	3.6 J	0.96 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.4**	ND
1,1,2-Trichloroethane	**1**	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Site COCs (cVOCs)[4]	NA	1,320	580	167	254	191	170	0	5.4	16	27	32	4.6	46	34	23	1,040	321

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. MS/MSD collected at PW-1.
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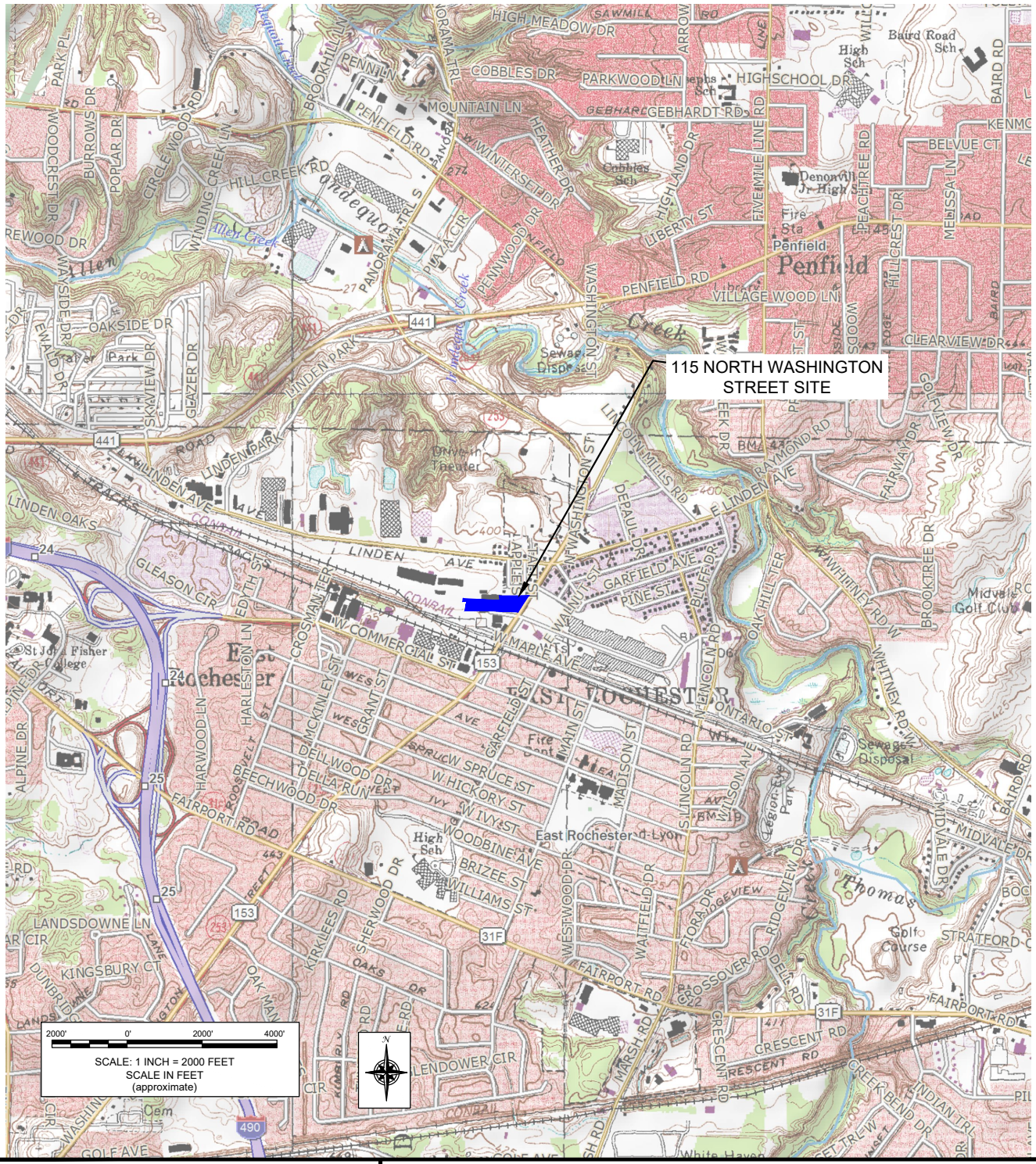
BOLD = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.

FIGURES

F:\CAD\Benchmark\Despatch\PRR\2019\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

FORMER BRAINERD MANUFACTURING FACILITY
EAST ROCHESTER, NEW YORK
NYSDEC SITE NO. V00519-8

PREPARED FOR

DESPATCH INDUSTRIES, INC.

PROJECT NO.: 0040-002-400

DATE: JANUARY 2020

DRAFTED BY: RFL/CCB

LEGEND

- PROPERTY BOUNDARY
- PW-1 PUMPING WELL LOCATION
- MW-4 EXISTING MONITORING WELL LOCATION
- RW-1 DECOMMISSIONED REINJECTION WELL LOCATION
- EXTERNAL UNDERGROUND PIPING FROM gPRO TREATMENT UNIT TO RECHARGE WELLS

N

80' 0' 80' 160'

1"= 80'
SCALE IN FEET
(approximate)

NOTES:
1. DATE OF AERIAL PHOTOGRAPHY APRIL 2016; SOURCE GOOGLE EARTH.

DATE: JANUARY 2020
DRAFTED BY: RFL/CCB

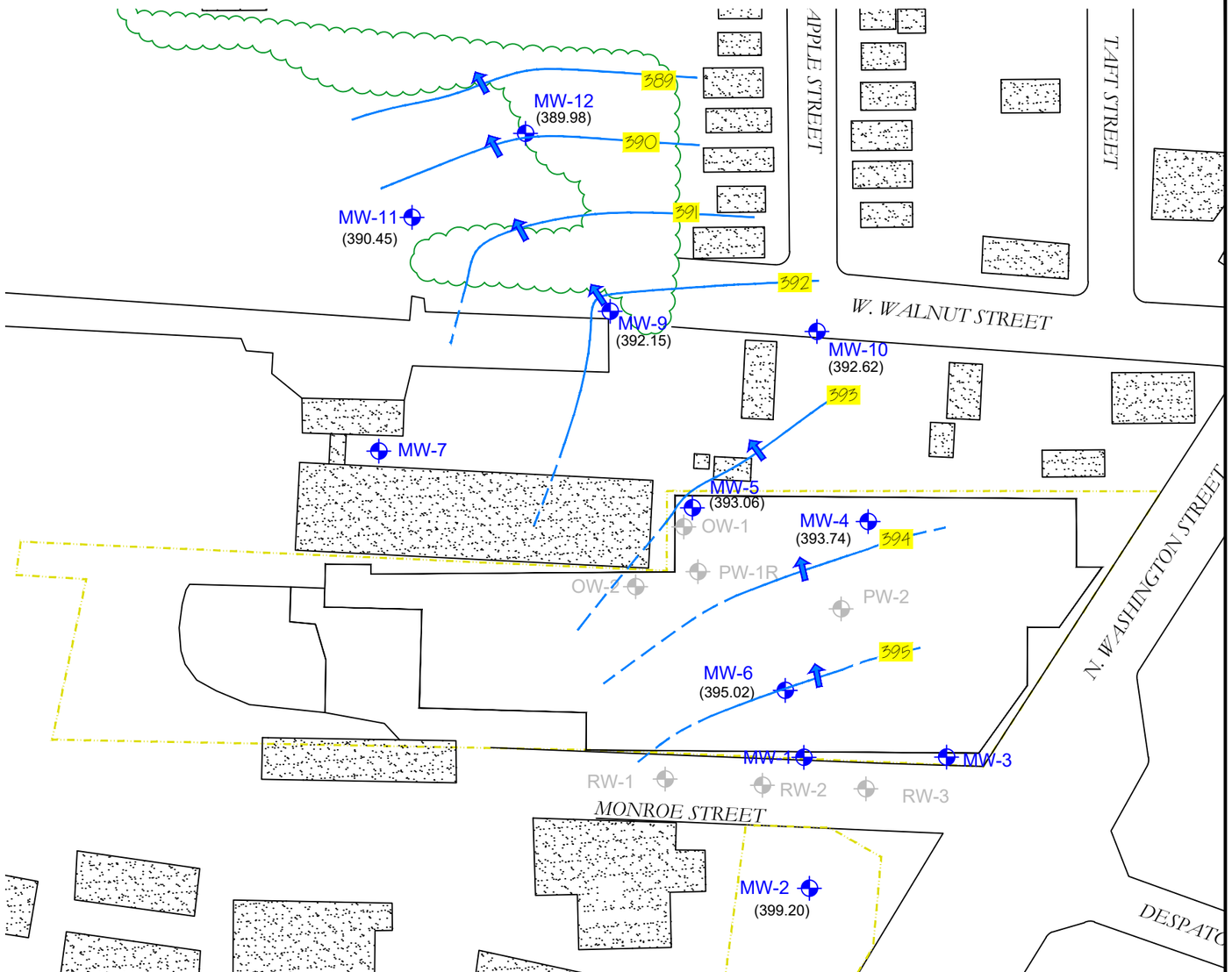
BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0040-002-400

SITE PLAN (AERIAL)

PERIODIC REVIEW REPORT
FORMER BRAINERD MANUFACURING FACILITY
EAST ROCHESTER, NEW YORK
NYSDEC SITE NO. V00519-8
PREPARED FOR
DESPATCH INDUSTRIES, INC.

FIGURE 2



EXPLANATION

- PROPERTY BOUNDARY
- OFF-SITE BUILDING STRUCTURE
- PW-1 — INACTIVE PUMPING WELL LOCATION
- OW-1 — OBSERVATION WELL LOCATION
- MW-4 — MONITORING WELL LOCATION
- RW-1 — DECOMMISSIONED REINJECTION WELL
- (396.24) — GROUNDWATER ELEVATION
- 392 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTE:
1. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION AND ENGINEERING JUDGEMENT FOR GROUNDWATER LEVELS MEASURED ON DATE INDICATED.

N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

DATE: JANUARY 2020
DRAFTED BY: CCB/RFL

GROUNDWATER ISOPOTENTIAL MAP [NOVEMBER 2019]

PERIODIC REVIEW REPORT
FORMER BRAINERD MANUFACTURING FACILITY
EAST ROCHESTER, NEW YORK
NYSDEC SITE NO. V00519-8
PREPARED FOR
DESPATCH INDUSTRIES, INC.

FIGURE 3

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

JOB NO.: 0040-002-400

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. **V00519**

Site Name Former Brainerd Manufacturing Site

Site Address: 115 North Washington Street Zip Code: 14445-
City/Town: East Rochester
County: Monroe
Site Acreage:

Reporting Period: January 31, 2019 to January 31, 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))?	☐	☑
changes not yet complete but will be consistent with land-use restrictions.		
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? Minor interior renovations	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? *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

SITE NO. V00519

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
139.69-1-17	~~Alan Shaffer~~ Sean Donohoe	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan
		Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan

Environmental Easement executed on 5/1/14.
Property use restricted to commercial or industrial.
Implement a Site management plan that includes periodic certification.
Groundwater shall not be used as a potable source of water.
Monitor groundwater on a regular basis as approved by the Department.

139.69-1-19	~~Alan Shaffer~~ Sean Donahoe	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan

Environmental Easement executed on 5/1/14.
Property use restricted to commercial or industrial.
Implement a Site management plan that includes periodic certification.
Groundwater shall not be used as a potable source of water.
Monitor groundwater on a regular basis as approved by the Department.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
139.69-1-17	Groundwater Treatment System Vapor Mitigation Groundwater Treatment System Vapor Mitigation Cover System Cover System

Operate, maintain, and monitor a hydrogen injection groundwater treatment system until the Department approves modification or shutdown.
Operate, maintain, and monitor a sub-slab depressurization system until the Department approves modification or shutdown.
Maintain site cover.

139.69-1-19	Cover System

Maintain site cover

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. V00519

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 Alan Shaffer at Despatch Industries, Inc. 4301 Military Rd. NW Apt. 312,Washington, DC 20015,

print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

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

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

2/26/20
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 Thomas Forbes (print name) at Benchmark Environmental Engineering 2558 Hamburg Turnpike, Buffalo NY 14218 (print business address),

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

STATE OF NEW YORK THOMAS H. FORBES No. 70950-1 LICENSED PROFESSIONAL ENGINEER

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

Stamp (Required for PE)

Date 2-28-20

APPENDIX B

WELL DECOMMISSION LOGS

WELL DECOMMISSIONING RECORD

RW-1

Site Name: FORMER BRAINERD SITE	Well I.D.: IW-1
Site Location: EAST ROCHESTER, N.Y.	Driller: Jeff SCHWEITZER
Drilling Co.: Northeastern DRILLING INC	Inspector: R. WABISZ
	Date: 10-22-19

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

CASING PULLING

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

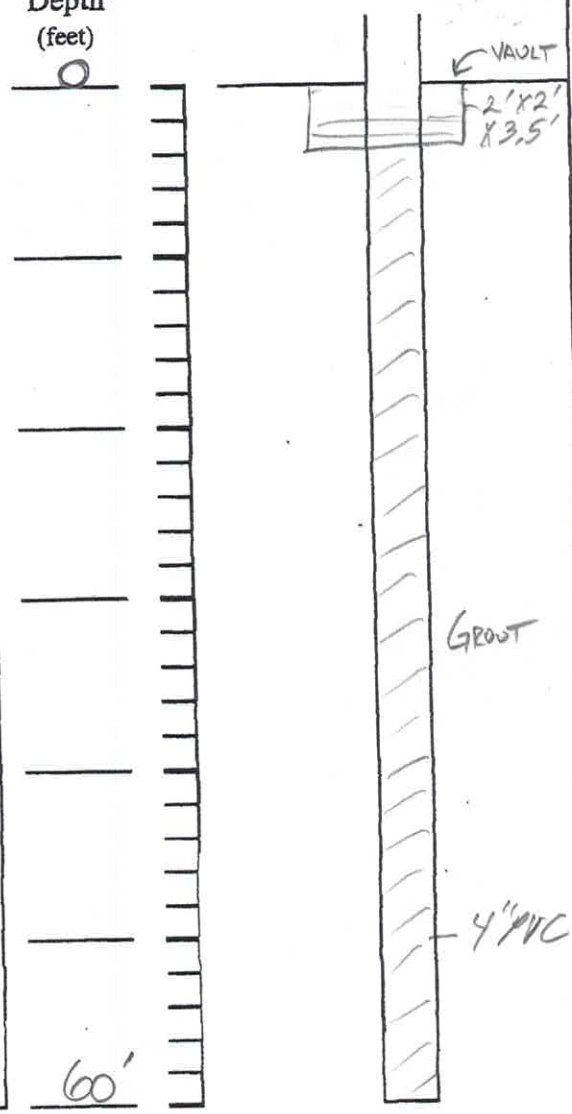
CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

GROUTING

Interval grouted (FBLS)	0-60'
# of batches prepared	4
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	I
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	11.5
Volume of grout used (gal.)	11.5

WELL SCHEMATIC*



COMMENTS: TREMIE GROUT ABANDON 4" PACWELL IN PLACE TO 3.0' BELOW GRADE AND REPLACED WELL VAULT COVER

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Department Representative

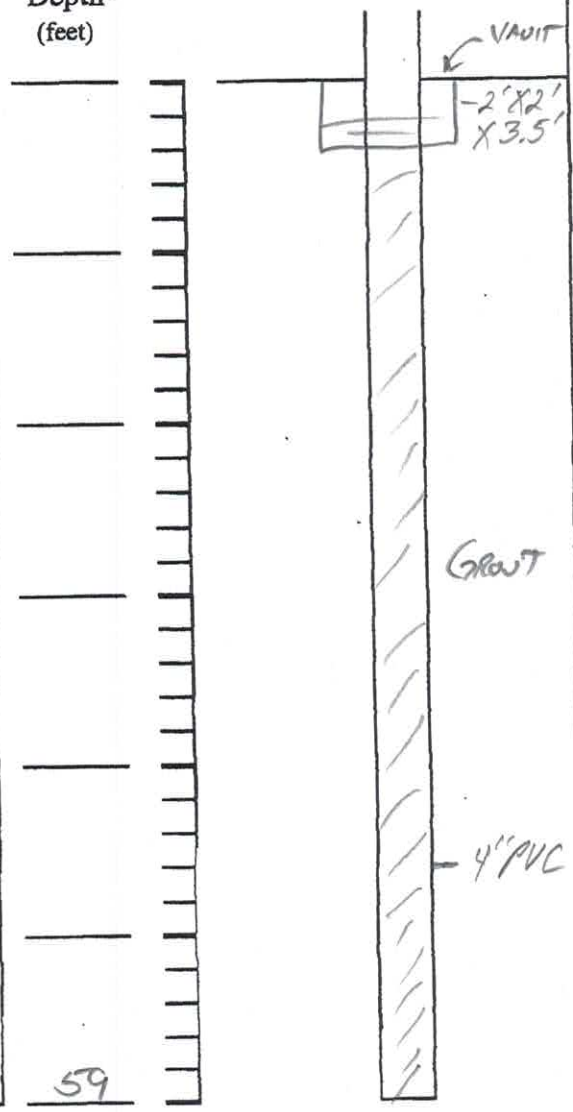
WELL DECOMMISSIONING RECORD

Site Name: FORMER BRAINERD SITE	Well I.D.: IW-2 RW-2
Site Location: EAST ROCHESTER, NY	Driller: Jeff SCHWEITZER
Drilling Co.: Northeast DRILLING, INC.	Inspector: R. PUBISZ
	Date: 10-22-19

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-59
# of batches prepared	4
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	1
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	11.5
Volume of grout used (gal.)	11.5

WELL SCHEMATIC*



COMMENTS: TREMIE GROUT ABANDON 4" PVC WELL IN PLACE TO 3.0' BELOW GRADE AND REPLACED WELL VAULT COVER

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Department Representative

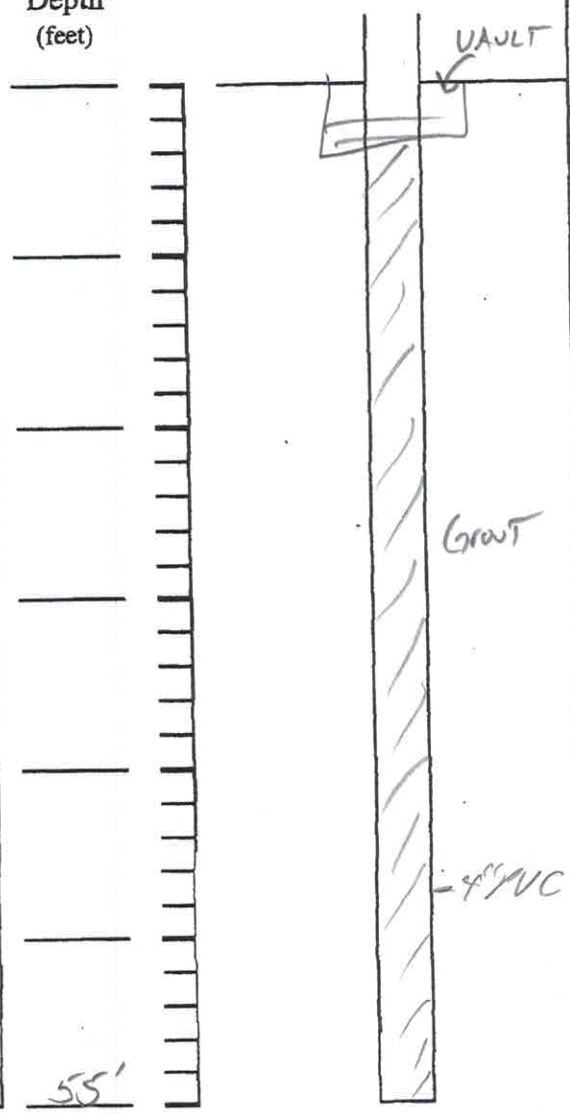
WELL DECOMMISSIONING RECORD

Site Name: FORMER BRAINERD SITE	Well I.D.: IW-3 RW-3
Site Location: EAST ROCHESTER, NY	Driller: JEFF SCHWEITZER
Drilling Co.: NOTHNAGLE DRILLING, INC.	Inspector: R. RUBISZ
	Date: 10-22-19

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-55
# of batches prepared	4
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	I
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	11.5
Volume of grout used (gal.)	11.5

WELL SCHEMATIC*



COMMENTS: TREMIE GROUT ABANDON 4" PVC WELL IN PLACE TO 3.0' BELOW GRADE AND REPLACE WELL COVER

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Department Representative

APPENDIX C

SITE PHOTOLOG

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Despatch Industries, Inc	East Rochester, NY	0040-002-400

Photo No.	Date
1	1/8/2020

Direction Photo Taken:
North

Description:
Back of building area with nominal 25 -foot x 20 foot engineered cover system in background.

Photo No.	Date
2	1/8/2020

Direction Photo Taken:
East

Description:
South side of building.

Prepared By: *THF*

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Despatch Industries, Inc	East Rochester, NY	0040-002-400

Photo No.	Date
3	2/27/2020

Direction Photo Taken:
North

Description:
ASD Manometer and extraction point near groundwater treatment system (Manometer 1).

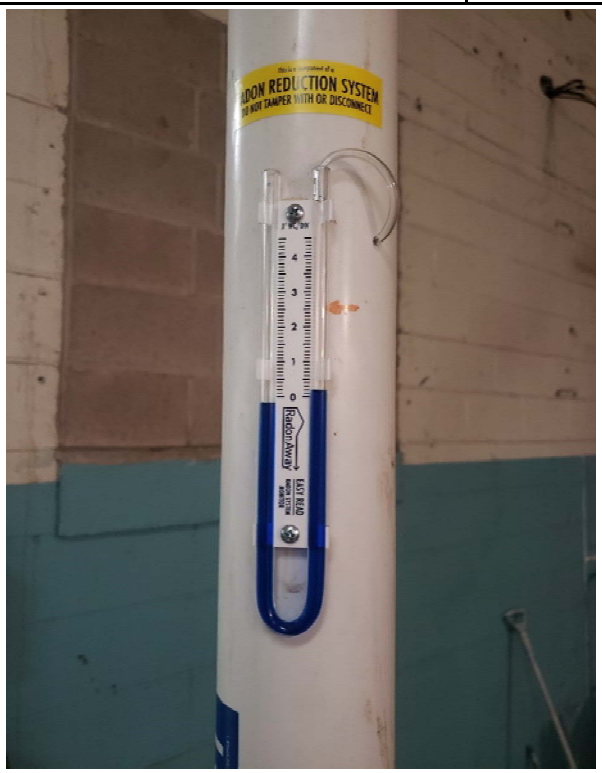


Photo No.	Date
4	2/27/2020

Direction Photo Taken:
North

Description:
ASD Manometer and extraction point near hallway (Manometer 3).

Prepared By: THF

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Despatch Industries, Inc	East Rochester, NY	0040-002-400

Photo No.	Date
5	2/27/2020

Direction Photo Taken:
North

Description:
ASD Manometer and extraction point near former paint room (Manometer 6).

Photo No.	Date
6	2/27/2020

Direction Photo Taken:
South

Description:
ASD Manometer and extraction in office area (Manometer 5).

Prepared By: THF

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Despatch Industries, Inc	East Rochester, NY	0040-002-400

Photo No.	Date
7	2/27/2020

Direction Photo Taken:
West

Description:
ASD Manometer and extraction point near wood shop area (Manometer 4).

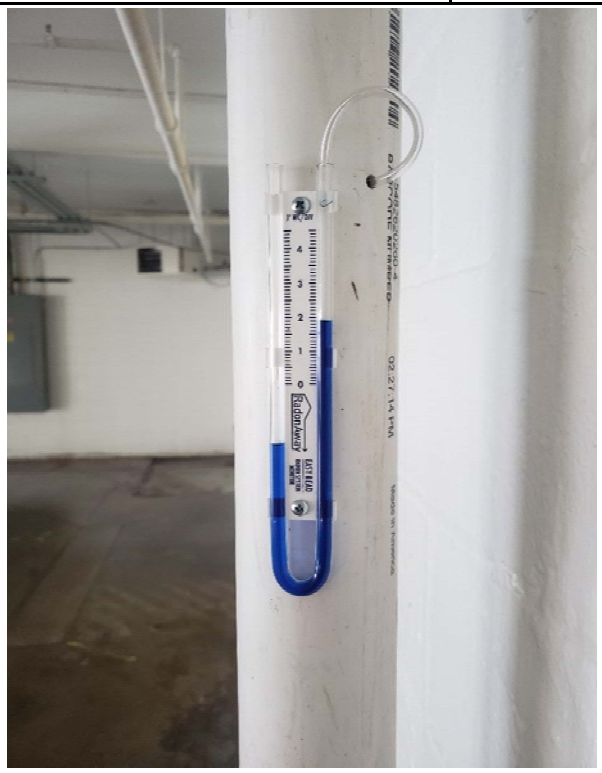
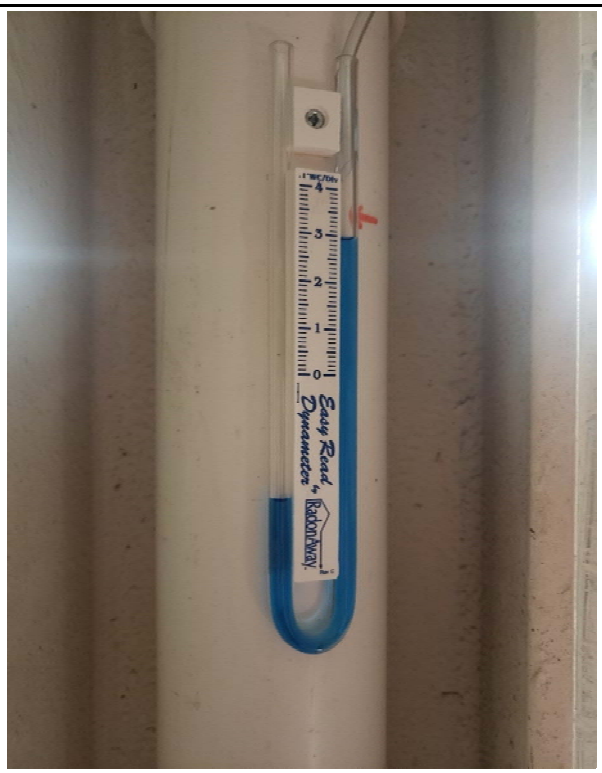


Photo No.	Date
8	2/27/2020

Direction Photo Taken:
South

Description:
ASD Manometer and extraction in basement area (Manometer 2).



Prepared By: THF

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Despatch Industries, Inc	East Rochester, NY	0040-002-400

Photo No.	Date
9	1/8/2020

Direction Photo Taken:
East

Description:
Interior building renovations.

Prepared By: THF

APPENDIX D

ASD PERIODIC INSPECTION LOGS

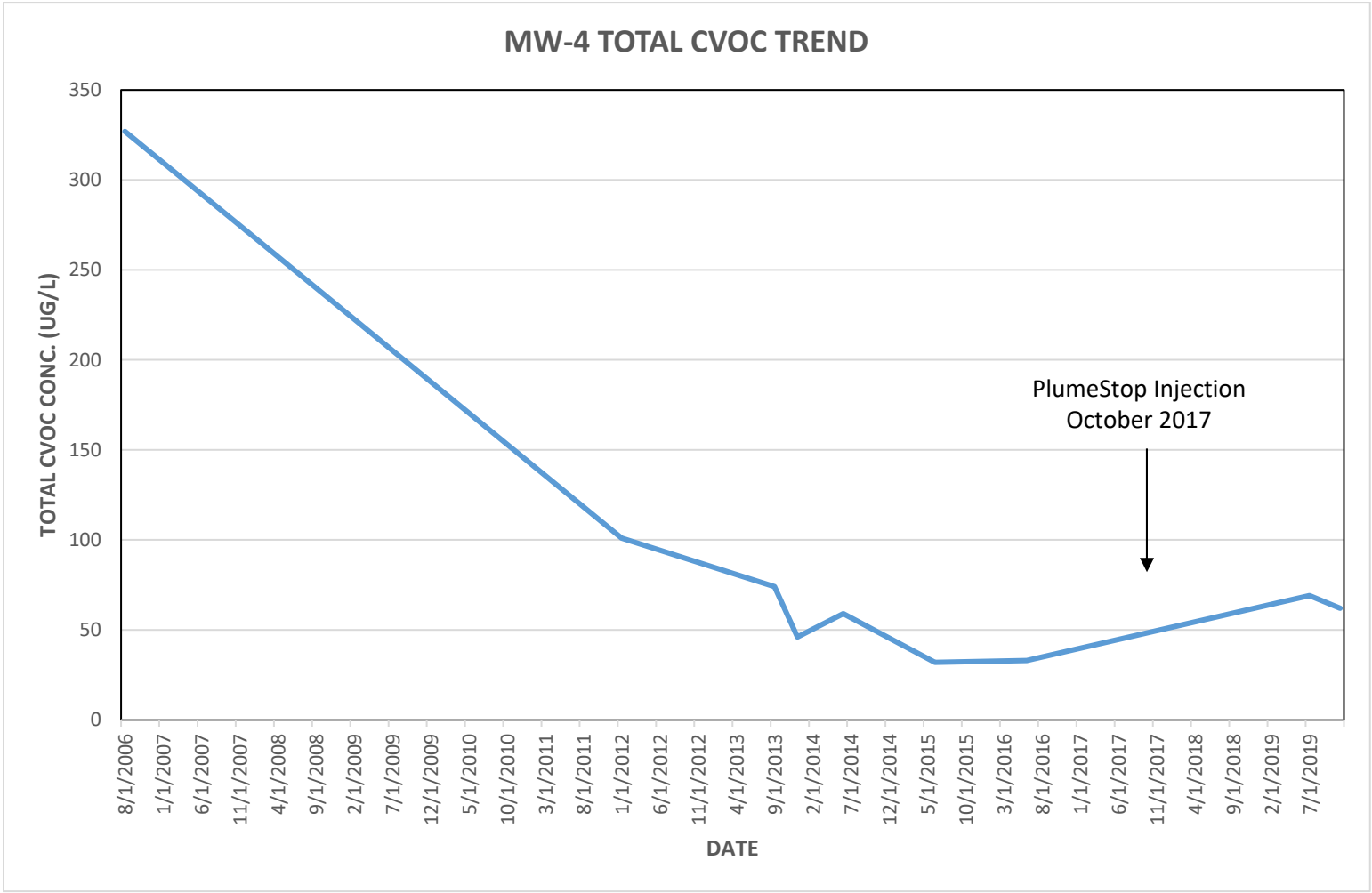
BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

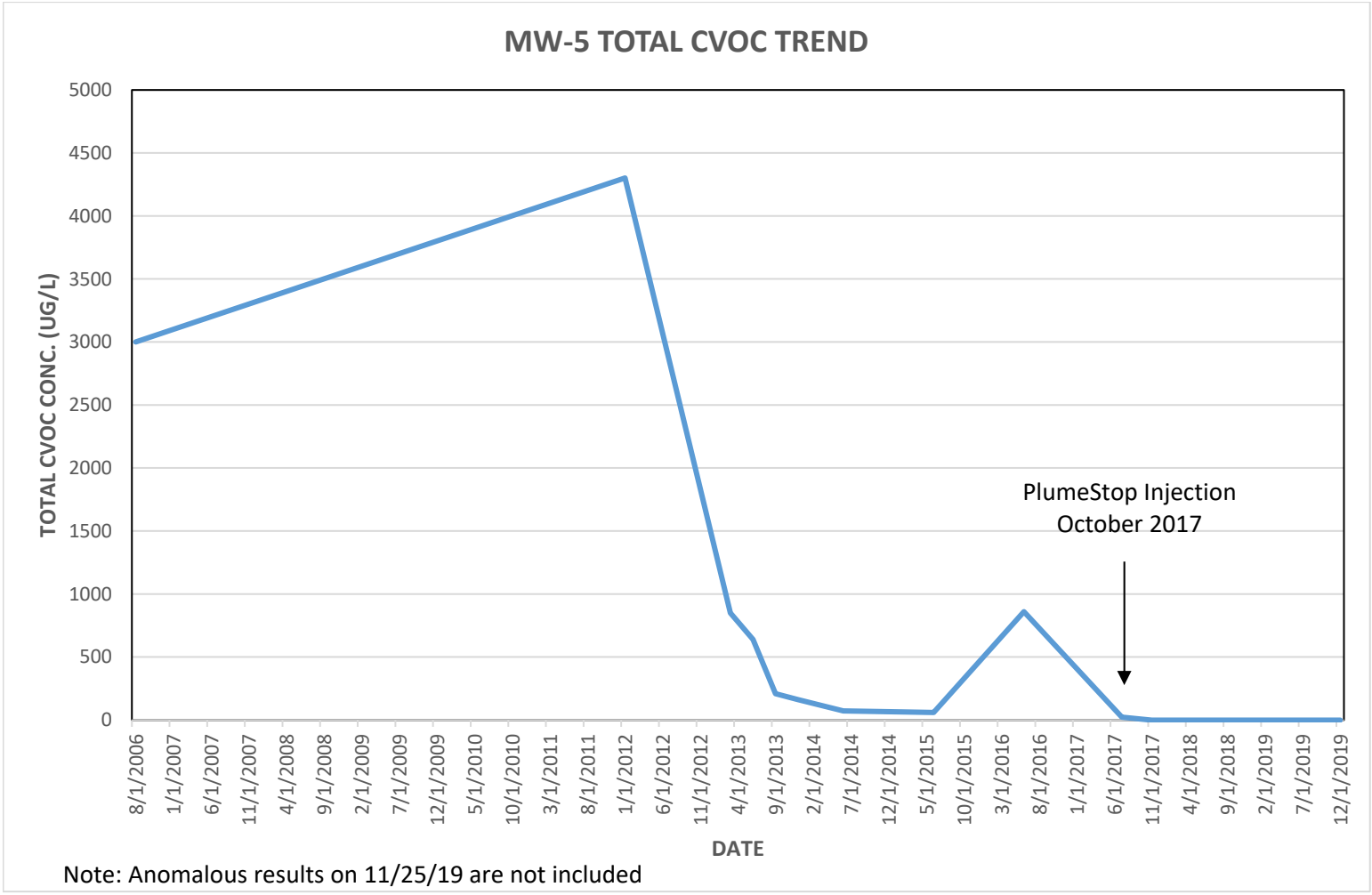
MONTHLY LOG SHEET
ASD SYSTEM
Former Brainerd Manufacturing Facility
East Rochester, NY

Date	Vacuum Gauge Number											
	Vacuum Gauge 1 Near Air Stripper		Vacuum Gauge 2 Basement		Vacuum Gauge 3 Hallway		Vacuum Gauge 4 Wood Shop		Vacuum Gauge 5 Office		Vacuum Gauge 6 Paint Room	
	Time of Reading	Vacuum Reading (in. Water)	Time of Reading	Vacuum Reading (in. Water)	Time of Reading	Vacuum Reading (in. Water)	Time of Reading	Vacuum Reading (in. Water)	Time of Reading	Vacuum Reading (in. Water)	Time of Reading	Vacuum Reading (in. Water)
7/25/16	11:12	1.2	11:15	3.5	11:12	3.4	11:13	2.1	11:14	1.0	11:13	2.2
8/11/16	10:00	1.2	10:15	3.6	10:05	3.3	10:10	2.1	10:14	0.9	10:13	2.2
9/2/16	11:00	1.2	11:06	3.6	11:01	3.4	11:03	2.1	11:04	1.0	11:02	2.2
10/18/16	10:30	1.2	10:38	3.6	10:32	3.4	10:36	2.1	10:35	1.0	10:34	2.1
11/28/16	12:30	1.2	12:35	3.5	12:31	3.4	12:34	2.1	12:33	1.0	12:32	2.2
12/5/16	12:00	1.1	12:06	3.5	12:02	3.4	12:05	2.1	12:04	0.9	12:03	2.0
3/1/17	11:30	1.1	11:36	3.3	11:31	3.4	11:35	2.1	11:33	0.9	11:32	2.0
5/23/17	11:00	1.3	11:06	3.5	11:01	3.4	11:37	2.0	11:38	1.0	11:02	2.0
7/26/17	10:30	1.2	10:35	3.5	10:31	3.4	10:37	2.0	10:33	1.0	10:32	2.0
10/20/17	10:30	1.2	10:35	3.5	10:31	3.4	10:37	2.0	10:33	1.0	10:32	2.0
11/30/17	12:29	1.2	12:35	3.5	12:31	3.4	12:34	2.0	12:33	1.0	12:32	2.1
2/27/18	13:28	1.2	13:35	3.5	13:31	3.4	13:34	2.0	13:33	1.0	13:32	2.1
4/30/18	13:28	0.4	13:35	3.0	13:31	3.0	13:34	2.0	13:33	0.8	13:32	1.0
12/12/18	10:45	0.25	10:40	2.75	10:55	3.0	10:59	1.9	10:35	0.8	10:56	1.0
1/11/19	9:25	0.30	12:01	2.70	9:24	3.0	9:21	1.9	9:22	0.8	9:23	1.0
2/27/2020	13:00	0.2	13:05	2.95	13:10	2.1	13:15	1.9	13:20	1.25	13:25	1.4

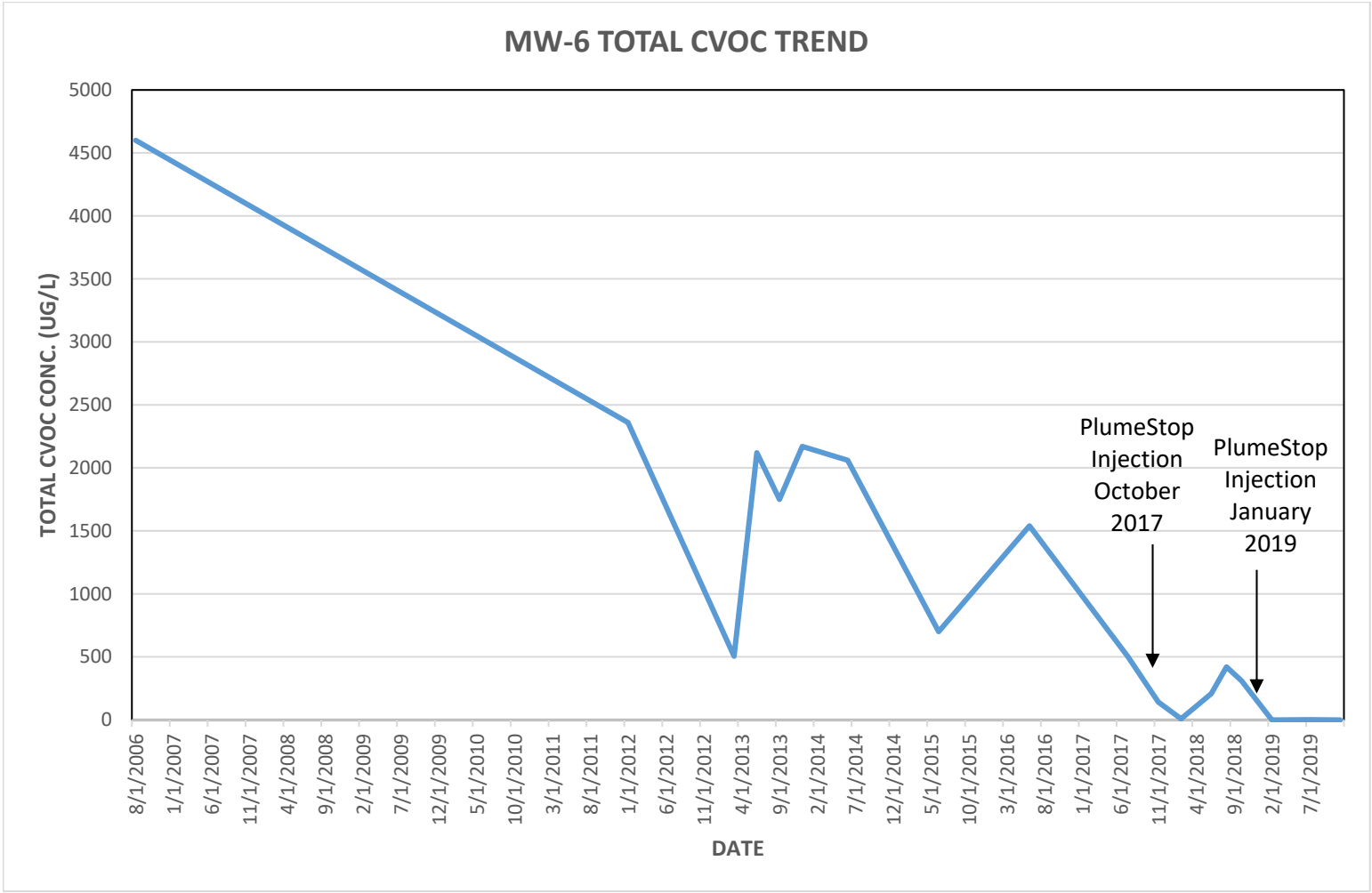
APPENDIX E

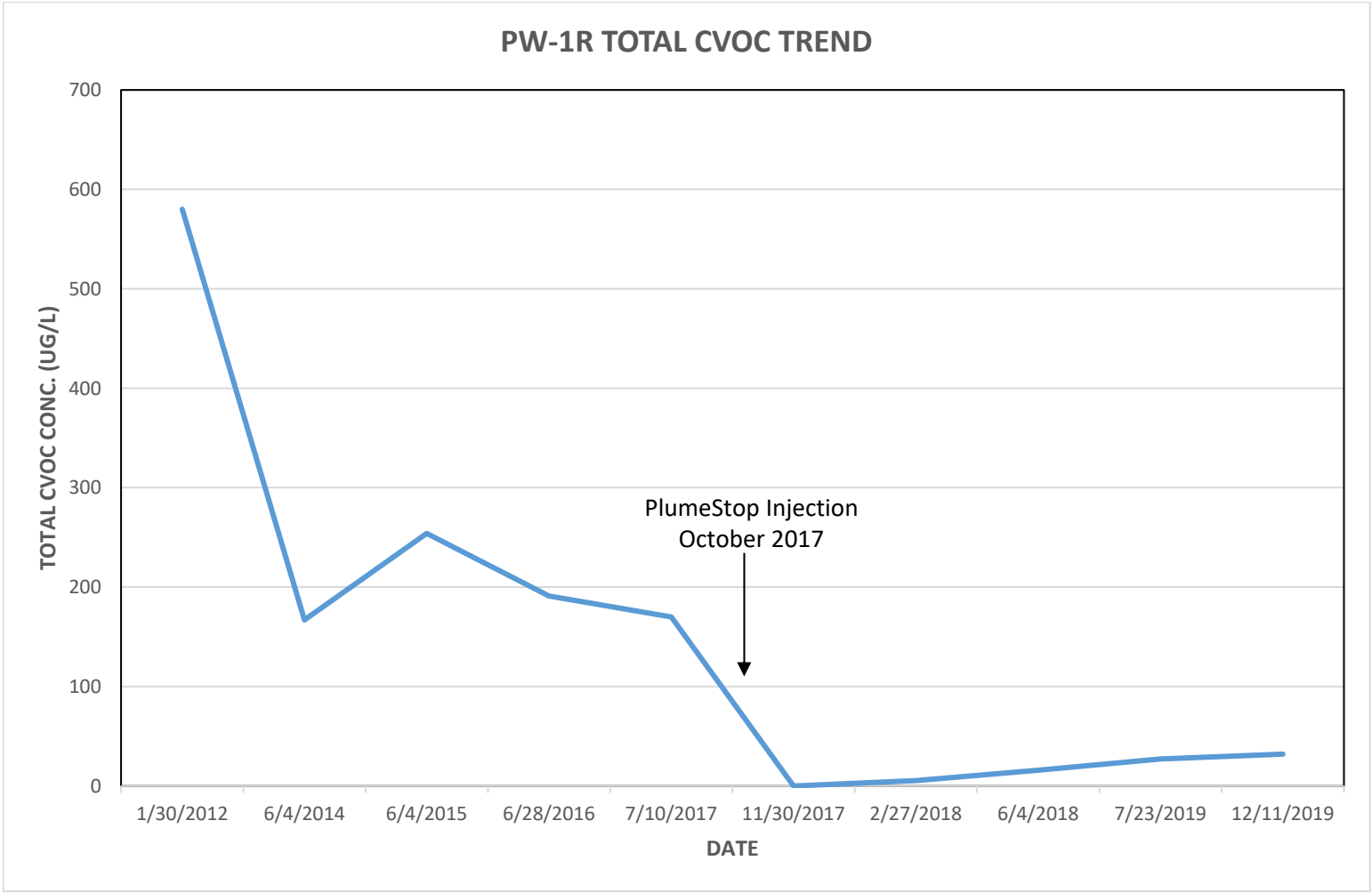
cVOC TREND CHARTS


MW-4 TOTAL CVOC TREND
TOTAL CVOC CONC. (UG/L)
350
300
250
200
150
100
50
0
PlumeStop Injection
October 2017
8/1/2006
1/1/2007
6/1/2007
11/1/2007
4/1/2008
9/1/2008
2/1/2009
7/1/2009
12/1/2009
5/1/2010
10/1/2010
3/1/2011
8/1/2011
1/1/2012
6/1/2012
11/1/2012
4/1/2013
9/1/2013
2/1/2014
7/1/2014
12/1/2014
5/1/2015
10/1/2015
3/1/2016
8/1/2016
1/1/2017
6/1/2017
11/1/2017
4/1/2018
9/1/2018
2/1/2019
7/1/2019
DATE



Note: Anomalous results on 11/25/19 are not included


MW-6 TOTAL CVOC TREND
TOTAL CVOC CONC. (UG/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
8/1/2006
1/1/2007
6/1/2007
11/1/2007
4/1/2008
9/1/2008
2/1/2009
7/1/2009
12/1/2009
5/1/2010
10/1/2010
3/1/2011
8/1/2011
1/1/2012
6/1/2012
11/1/2012
4/1/2013
9/1/2013
2/1/2014
7/1/2014
12/1/2014
5/1/2015
10/1/2015
3/1/2016
8/1/2016
1/1/2017
6/1/2017
11/1/2017
4/1/2018
9/1/2018
2/1/2019
7/1/2019
DATE
PlumeStop Injection October 2017
PlumeStop Injection January 2019


PW-1R TOTAL CVOC TREND
TOTAL CVOC CONC. (UG/L)
700
600
500
400
300
200
100
0
PlumeStop Injection
October 2017
1/30/2012
6/4/2014
6/4/2015
6/28/2016
7/10/2017
11/30/2017
2/27/2018
6/4/2018
7/23/2019
12/11/2019
DATE

APPENDIX F

GROUNDWATER ANALYTICAL LABORATORY REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-149615-1
Client Project/Site: Benchmark - Despatch site

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

Attn: Ms. Lori E. Riker

Authorized for release by:
3/8/2019 3:45:58 PM

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 480-149615-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-149615-1

Comments
No additional comments.

Receipt
The sample was received on 3/1/2019 1:15 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method(s) 8260C: The sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, when verified by the laboratory, the pH was greater than 2 and the following sample was analyzed after 7 days from sampling: MW-6 (480-149615-1).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-461382 recovered above the upper control limit for 1,1-Dichloroethene, Chloromethane, Dichlorodifluoromethane and Vinyl chloride. The sample associated with this CCV was non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-6 (480-149615-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-461382 recovered outside control limits for the following analytes: Chloromethane and Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: MW-6 (480-149615-1).

Method(s) 8260C: The following sample was diluted due to the nature of the sample matrix: MW-6 (480-149615-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard responses were outside of acceptance limits for the following sample: MW-6 (480-149615-1). The sample shows evidence of matrix interference.

Method(s) 8260C: Surrogate recovery for the following sample was outside control limits: MW-6 (480-149615-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Client Sample ID: MW-6

Lab Sample ID: 480-149615-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.4	J	4.0	1.8	ug/L	4		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Client Sample ID: MW-6
Date Collected: 02/22/19 15:00
Date Received: 03/01/19 13:15

Lab Sample ID: 480-149615-1
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		4.0	3.3	ug/L			03/04/19 11:22	4
1,1,2,2-Tetrachloroethane	ND	*	4.0	0.84	ug/L			03/04/19 11:22	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/04/19 11:22	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/04/19 11:22	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			03/04/19 11:22	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			03/04/19 11:22	4
1,2,4-Trichlorobenzene	ND	*	4.0	1.6	ug/L			03/04/19 11:22	4
1,2-Dibromo-3-Chloropropane	ND	*	4.0	1.6	ug/L			03/04/19 11:22	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/04/19 11:22	4
1,2-Dichlorobenzene	ND	*	4.0	3.2	ug/L			03/04/19 11:22	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			03/04/19 11:22	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/04/19 11:22	4
1,3-Dichlorobenzene	ND	*	4.0	3.1	ug/L			03/04/19 11:22	4
1,4-Dichlorobenzene	ND	*	4.0	3.4	ug/L			03/04/19 11:22	4
2-Butanone (MEK)	ND		40	5.3	ug/L			03/04/19 11:22	4
2-Hexanone	ND		20	5.0	ug/L			03/04/19 11:22	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/04/19 11:22	4
Acetone	ND		40	12	ug/L			03/04/19 11:22	4
Benzene	ND		4.0	1.6	ug/L			03/04/19 11:22	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/04/19 11:22	4
Bromoform	ND		4.0	1.0	ug/L			03/04/19 11:22	4
Bromomethane	ND		4.0	2.8	ug/L			03/04/19 11:22	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/04/19 11:22	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/04/19 11:22	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/04/19 11:22	4
Chloroethane	ND		4.0	1.3	ug/L			03/04/19 11:22	4
Chloroform	ND		4.0	1.4	ug/L			03/04/19 11:22	4
Chloromethane	ND	*	4.0	1.4	ug/L			03/04/19 11:22	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			03/04/19 11:22	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/04/19 11:22	4
Cyclohexane	ND		4.0	0.72	ug/L			03/04/19 11:22	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/04/19 11:22	4
Dichlorodifluoromethane	ND	*	4.0	2.7	ug/L			03/04/19 11:22	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/04/19 11:22	4
Isopropylbenzene	ND	*	4.0	3.2	ug/L			03/04/19 11:22	4
Methyl acetate	ND		10	5.2	ug/L			03/04/19 11:22	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/04/19 11:22	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/04/19 11:22	4
Methylene Chloride	**3.4**	**J**	4.0	1.8	ug/L			03/04/19 11:22	4
Styrene	ND		4.0	2.9	ug/L			03/04/19 11:22	4
Tetrachloroethene	ND		4.0	1.4	ug/L			03/04/19 11:22	4
Toluene	ND		4.0	2.0	ug/L			03/04/19 11:22	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/04/19 11:22	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/04/19 11:22	4
Trichloroethene	ND		4.0	1.8	ug/L			03/04/19 11:22	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/04/19 11:22	4
Vinyl chloride	ND		4.0	3.6	ug/L			03/04/19 11:22	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/04/19 11:22	4

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Client Sample ID: MW-6
Date Collected: 02/22/19 15:00
Date Received: 03/01/19 13:15

Lab Sample ID: 480-149615-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		77 - 120		03/04/19 11:22	4
4-Bromofluorobenzene (Surr)	69	X	73 - 120		03/04/19 11:22	4
Dibromofluoromethane (Surr)	95		75 - 123		03/04/19 11:22	4
Toluene-d8 (Surr)	103		80 - 120		03/04/19 11:22	4

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-149615-1	MW-6	94	69 X	95	103
LCS 480-461382/5	Lab Control Sample	89	90	94	93
MB 480-461382/7	Method Blank	92	92	88	88

Surrogate Legend

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

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

Lab Sample ID: MB 480-461382/7
Matrix: Water
Analysis Batch: 461382

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/04/19 10:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/04/19 10:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/04/19 10:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/04/19 10:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/04/19 10:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/04/19 10:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/04/19 10:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/04/19 10:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/04/19 10:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/04/19 10:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/04/19 10:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/04/19 10:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/04/19 10:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/04/19 10:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/04/19 10:47	1
2-Hexanone	ND		5.0	1.2	ug/L			03/04/19 10:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/04/19 10:47	1
Acetone	ND		10	3.0	ug/L			03/04/19 10:47	1
Benzene	ND		1.0	0.41	ug/L			03/04/19 10:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/04/19 10:47	1
Bromoform	ND		1.0	0.26	ug/L			03/04/19 10:47	1
Bromomethane	ND		1.0	0.69	ug/L			03/04/19 10:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/04/19 10:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/04/19 10:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/04/19 10:47	1
Chloroethane	ND		1.0	0.32	ug/L			03/04/19 10:47	1
Chloroform	ND		1.0	0.34	ug/L			03/04/19 10:47	1
Chloromethane	ND		1.0	0.35	ug/L			03/04/19 10:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/04/19 10:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/04/19 10:47	1
Cyclohexane	ND		1.0	0.18	ug/L			03/04/19 10:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/04/19 10:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/04/19 10:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/04/19 10:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/04/19 10:47	1
Methyl acetate	ND		2.5	1.3	ug/L			03/04/19 10:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/04/19 10:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/04/19 10:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/04/19 10:47	1
Styrene	ND		1.0	0.73	ug/L			03/04/19 10:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/04/19 10:47	1
Toluene	ND		1.0	0.51	ug/L			03/04/19 10:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/04/19 10:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/04/19 10:47	1
Trichloroethene	ND		1.0	0.46	ug/L			03/04/19 10:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/04/19 10:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/04/19 10:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/04/19 10:47	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		77 - 120		03/04/19 10:47	1
4-Bromofluorobenzene (Surr)	92		73 - 120		03/04/19 10:47	1
Dibromofluoromethane (Surr)	88		75 - 123		03/04/19 10:47	1
Toluene-d8 (Surr)	88		80 - 120		03/04/19 10:47	1

Lab Sample ID: LCS 480-461382/5
Matrix: Water
Analysis Batch: 461382

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.2		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	76 - 122
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	27.1		ug/L		108	66 - 127
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.8		ug/L		91	56 - 134
1,2-Dibromoethane	25.0	23.4		ug/L		94	77 - 120
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	25.8		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	24.6		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 120
2-Butanone (MEK)	125	133		ug/L		106	57 - 140
2-Hexanone	125	129		ug/L		104	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	26.3		ug/L		105	71 - 124
Bromodichloromethane	25.0	23.4		ug/L		94	80 - 122
Bromoform	25.0	24.2		ug/L		97	61 - 132
Bromomethane	25.0	24.3		ug/L		97	55 - 144
Carbon disulfide	25.0	28.8		ug/L		115	59 - 134
Carbon tetrachloride	25.0	22.6		ug/L		90	72 - 134
Chlorobenzene	25.0	24.0		ug/L		96	80 - 120
Chloroethane	25.0	27.1		ug/L		109	69 - 136
Chloroform	25.0	23.7		ug/L		95	73 - 127
Chloromethane	25.0	33.0	*	ug/L		132	68 - 124
cis-1,2-Dichloroethene	25.0	26.4		ug/L		105	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	26.8		ug/L		107	59 - 135
Dibromochloromethane	25.0	23.4		ug/L		94	75 - 125
Dichlorodifluoromethane	25.0	35.7	*	ug/L		143	59 - 135
Ethylbenzene	25.0	24.0		ug/L		96	77 - 123
Isopropylbenzene	25.0	25.1		ug/L		100	77 - 122
Methyl acetate	50.0	43.3		ug/L		87	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		105	68 - 134
Methylene Chloride	25.0	27.1		ug/L		108	75 - 124
Styrene	25.0	24.5		ug/L		98	80 - 120
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	73 - 127

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

Lab Sample ID: LCS 480-461382/5
Matrix: Water
Analysis Batch: 461382

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			25.0	25.0		ug/L		100	80 - 120		
Trichloroethene			25.0	27.1		ug/L		108	74 - 123		
Trichlorofluoromethane			25.0	24.9		ug/L		100	62 - 150		
Vinyl chloride			25.0	30.3		ug/L		121	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*75 - 123*
Toluene-d8 (Surr)	*93*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

GC/MS VOA

Analysis Batch: 461382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149615-1	MW-6	Total/NA	Water	8260C	
MB 480-461382/7	Method Blank	Total/NA	Water	8260C	
LCS 480-461382/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Client Sample ID: MW-6
Date Collected: 02/22/19 15:00
Date Received: 03/01/19 13:15

Lab Sample ID: 480-149615-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	461382	03/04/19 11:22	LCH	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
TestAmerica Job ID: 480-149615-1
Project/Site: Benchmark - Despatch site

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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 = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-149615-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149615-1	MW-6	Water	02/22/19 15:00	03/01/19 13:15

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

288818

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Lori Rikke	Site Contact: Nick Sorell	Date: 2/25/19	COC No:
Company Name: BMTC Turnkey ENV Restoration	Tel/Fax: 716-856-0599	Lab Contact: Brian Fischer	Carrier:	____ of ____ COCs
Address: 2558 Hamburg Turnpike	Analysis Turnaround Time			Sampler:
City/State/Zip: Buffalo, NY, 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 716-713-3427	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Despatch	☐ 1 week			
Site: Despatch, East Rochester	☐ 2 days			Job / SDG No.:
PO # B80040-002-400	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC's	Sample Specific Notes:
MW-6	2/22/19	15:00	G	GW	3			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Cat B, NYSDec Reqts

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.4 Corr'd: _____ | Therm ID No.: #1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	BMTC	2/25/19 14:00		TAS	2/27/19 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAS	2/27/19 13:15			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA	02/27/19 1315

480-149615 Chain of Custody

3/8/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-149615-1

Login Number: 149615

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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.	N/A	
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	bmtk
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-156744-1
Client Project/Site: Benchmark - Despatch site

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

Attn: Ms. Lori E. Riker

Authorized for release by:
8/1/2019 12:21:41 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
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable 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.

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)

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Job ID: 480-156744-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-156744-1

Comments
No additional comments.

Receipt
The samples were received on 7/25/2019 10:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-483899 recovered above the upper control limit for Methyl ethyl ketone (MEK) and Acetone. The samples associated with this CCV were non-detect above the Reporting Limit (RL) for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW-1R (480-156744-4) and TRIP BANK (480-156744-8).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-483899 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected above the reporting limit (RL) in the associated samples; therefore, the data have been reported. The following samples are impacted: PW-1R (480-156744-4) and TRIP BANK (480-156744-8).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-484067 recovered above the upper control limit for 2-Butanone and Acetone. 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-4 (480-156744-1), MW-5 (480-156744-2), MW-9 (480-156744-5) and MW-12 (480-156744-6).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-484067 recovered outside control limits for the following analytes: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted:MW-4 (480-156744-1), MW-5 (480-156744-2), MW-9 (480-156744-5) and MW-12 (480-156744-6).

Method(s) 8260C: Internal standard (ISTD) response for the following sample was outside control limits: MW-6 (480-156744-3). The sample was re-extracted and/or re-analyzed with concurring results, and the reanalysis has been reported.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

Client Sample ID: MW-4 — Lab Sample ID: 480-156744-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.2		1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	27		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	42		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 480-156744-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.50	J	1.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-156744-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.45	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.66	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: PW-1R — Lab Sample ID: 480-156744-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.5		1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	6.7		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	18		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 480-156744-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	33		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	4.7		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 480-156744-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	71		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	14		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: BLIND DUP — Lab Sample ID: 480-156744-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.62	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.58	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BANK — Lab Sample ID: 480-156744-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-4

Date Collected: 07/23/19 13:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-1

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			07/27/19 01:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 01:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 01:23	1
1,1,2-Trichloroethane	ND	F2	1.0	0.23	ug/L			07/27/19 01:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 01:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 01:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 01:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 01:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 01:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 01:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 01:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 01:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 01:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 01:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 01:23	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 01:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 01:23	1
Acetone	ND	*	10	3.0	ug/L			07/27/19 01:23	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 01:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 01:23	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 01:23	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 01:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 01:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 01:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 01:23	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 01:23	1
Chloroform	**3.2**		1.0	0.34	ug/L			07/27/19 01:23	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 01:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 01:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 01:23	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 01:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 01:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 01:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 01:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 01:23	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 01:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 01:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 01:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 01:23	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 01:23	1
Tetrachloroethene	**27**		1.0	0.36	ug/L			07/27/19 01:23	1
Toluene	ND	F2	1.0	0.51	ug/L			07/27/19 01:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 01:23	1
trans-1,3-Dichloropropene	ND	F2	1.0	0.37	ug/L			07/27/19 01:23	1
Trichloroethene	**42**		1.0	0.46	ug/L			07/27/19 01:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 01:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 01:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 01:23	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-4
Date Collected: 07/23/19 13:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 01:23	1
4-Bromofluorobenzene (Surr)	98		73 - 120		07/27/19 01:23	1
Dibromofluoromethane (Surr)	98		75 - 123		07/27/19 01:23	1
Toluene-d8 (Surr)	106		80 - 120		07/27/19 01:23	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-5
Date Collected: 07/23/19 12:00
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-2
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			07/27/19 01:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 01:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 01:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 01:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 01:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 01:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 01:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 01:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 01:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 01:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 01:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 01:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 01:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 01:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 01:46	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 01:46	1
Acetone	ND	*	10	3.0	ug/L			07/27/19 01:46	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 01:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 01:46	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 01:46	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 01:46	1
Carbon disulfide	**0.50**	**J**	1.0	0.19	ug/L			07/27/19 01:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 01:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 01:46	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 01:46	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 01:46	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 01:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 01:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 01:46	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 01:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 01:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 01:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 01:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 01:46	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 01:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 01:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 01:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 01:46	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 01:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/27/19 01:46	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 01:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 01:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 01:46	1
Trichloroethene	ND		1.0	0.46	ug/L			07/27/19 01:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 01:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 01:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 01:46	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-5
Date Collected: 07/23/19 12:00
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 01:46	1
4-Bromofluorobenzene (Surr)	91		73 - 120		07/27/19 01:46	1
Dibromofluoromethane (Surr)	98		75 - 123		07/27/19 01:46	1
Toluene-d8 (Surr)	103		80 - 120		07/27/19 01:46	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-6
Date Collected: 07/23/19 14:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-3
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		1.0	0.82	ug/L			07/27/19 14:52	1
1,1,2,2-Tetrachloroethane	ND	*	1.0	0.21	ug/L			07/27/19 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 14:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 14:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 14:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 14:52	1
1,2,4-Trichlorobenzene	ND	*	1.0	0.41	ug/L			07/27/19 14:52	1
1,2-Dibromo-3-Chloropropane	ND	*	1.0	0.39	ug/L			07/27/19 14:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 14:52	1
1,2-Dichlorobenzene	ND	*	1.0	0.79	ug/L			07/27/19 14:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 14:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 14:52	1
1,3-Dichlorobenzene	ND	*	1.0	0.78	ug/L			07/27/19 14:52	1
1,4-Dichlorobenzene	ND	*	1.0	0.84	ug/L			07/27/19 14:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 14:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 14:52	1
Acetone	ND		10	3.0	ug/L			07/27/19 14:52	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 14:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 14:52	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 14:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 14:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 14:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 14:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 14:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 14:52	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 14:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 14:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 14:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 14:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 14:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 14:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 14:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 14:52	1
Isopropylbenzene	ND	*	1.0	0.79	ug/L			07/27/19 14:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 14:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 14:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 14:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 14:52	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 14:52	1
Tetrachloroethene	**0.45**	**J**	1.0	0.36	ug/L			07/27/19 14:52	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 14:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 14:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 14:52	1
Trichloroethene	**0.66**	**J**	1.0	0.46	ug/L			07/27/19 14:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 14:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 14:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 14:52	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-6
Date Collected: 07/23/19 14:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		07/27/19 14:52	1
4-Bromofluorobenzene (Surr)	84		73 - 120		07/27/19 14:52	1
Dibromofluoromethane (Surr)	111		75 - 123		07/27/19 14:52	1
Toluene-d8 (Surr)	108		80 - 120		07/27/19 14:52	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: PW-1R
Date Collected: 07/23/19 13:45
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-4
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			07/26/19 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 13:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 13:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 13:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 13:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 13:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 13:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 13:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 13:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 13:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 13:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 13:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 13:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 13:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 13:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 13:52	1
Acetone	ND	*	10	3.0	ug/L			07/26/19 13:52	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 13:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 13:52	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 13:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 13:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 13:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 13:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 13:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 13:52	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 13:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 13:52	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.81	ug/L			07/26/19 13:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 13:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 13:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 13:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 13:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 13:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 13:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 13:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 13:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 13:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 13:52	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 13:52	1
Tetrachloroethene	**6.7**		1.0	0.36	ug/L			07/26/19 13:52	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 13:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 13:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 13:52	1
Trichloroethene	**18**		1.0	0.46	ug/L			07/26/19 13:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 13:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 13:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 13:52	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: PW-1R
Date Collected: 07/23/19 13:45
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/26/19 13:52	1
4-Bromofluorobenzene (Surr)	96		73 - 120		07/26/19 13:52	1
Dibromofluoromethane (Surr)	98		75 - 123		07/26/19 13:52	1
Toluene-d8 (Surr)	103		80 - 120		07/26/19 13:52	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-9

Date Collected: 07/23/19 15:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-5

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			07/27/19 02:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 02:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 02:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 02:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 02:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 02:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 02:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 02:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 02:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 02:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 02:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 02:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 02:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 02:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 02:32	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 02:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 02:32	1
Acetone	ND	*	10	3.0	ug/L			07/27/19 02:32	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 02:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 02:32	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 02:32	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 02:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 02:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 02:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 02:32	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 02:32	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 02:32	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 02:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 02:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 02:32	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 02:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 02:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 02:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 02:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 02:32	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 02:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 02:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 02:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 02:32	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 02:32	1
Tetrachloroethene	**33**		1.0	0.36	ug/L			07/27/19 02:32	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 02:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 02:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 02:32	1
Trichloroethene	**4.7**		1.0	0.46	ug/L			07/27/19 02:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 02:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 02:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 02:32	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-9
Date Collected: 07/23/19 15:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		07/27/19 02:32	1
4-Bromofluorobenzene (Surr)	91		73 - 120		07/27/19 02:32	1
Dibromofluoromethane (Surr)	101		75 - 123		07/27/19 02:32	1
Toluene-d8 (Surr)	103		80 - 120		07/27/19 02:32	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-12
Date Collected: 07/23/19 16:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-6
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		1.0	0.82	ug/L			07/27/19 02:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 02:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 02:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 02:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 02:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 02:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 02:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 02:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 02:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 02:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 02:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 02:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 02:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 02:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 02:55	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 02:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 02:55	1
Acetone	ND	*	10	3.0	ug/L			07/27/19 02:55	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 02:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 02:55	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 02:55	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 02:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 02:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 02:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 02:55	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 02:55	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 02:55	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 02:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 02:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 02:55	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 02:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 02:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 02:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 02:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 02:55	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 02:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 02:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 02:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 02:55	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 02:55	1
Tetrachloroethene	**71**		1.0	0.36	ug/L			07/27/19 02:55	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 02:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 02:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 02:55	1
Trichloroethene	**14**		1.0	0.46	ug/L			07/27/19 02:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 02:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 02:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 02:55	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: MW-12
Date Collected: 07/23/19 16:30
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 02:55	1
4-Bromofluorobenzene (Surr)	94		73 - 120		07/27/19 02:55	1
Dibromofluoromethane (Surr)	97		75 - 123		07/27/19 02:55	1
Toluene-d8 (Surr)	101		80 - 120		07/27/19 02:55	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: BLIND DUP
Date Collected: 07/23/19 14:35
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-7
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			07/27/19 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 15:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 15:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 15:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 15:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 15:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 15:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 15:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 15:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 15:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 15:16	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 15:16	1
Acetone	ND		10	3.0	ug/L			07/27/19 15:16	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 15:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 15:16	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 15:16	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 15:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 15:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 15:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 15:16	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 15:16	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 15:16	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 15:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 15:16	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 15:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 15:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 15:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 15:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 15:16	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 15:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 15:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 15:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 15:16	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 15:16	1
Tetrachloroethene	**0.62**	**J**	1.0	0.36	ug/L			07/27/19 15:16	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 15:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 15:16	1
Trichloroethene	**0.58**	**J**	1.0	0.46	ug/L			07/27/19 15:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 15:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 15:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 15:16	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: BLIND DUP
Date Collected: 07/23/19 14:35
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		07/27/19 15:16	1
4-Bromofluorobenzene (Surr)	84		73 - 120		07/27/19 15:16	1
Dibromofluoromethane (Surr)	107		75 - 123		07/27/19 15:16	1
Toluene-d8 (Surr)	110		80 - 120		07/27/19 15:16	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: TRIP BANK
Date Collected: 07/23/19 16:45
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-8
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			07/26/19 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 14:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 14:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 14:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 14:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 14:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 14:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 14:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 14:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 14:15	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 14:15	1
Acetone	ND	*	10	3.0	ug/L			07/26/19 14:15	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 14:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 14:15	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 14:15	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 14:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 14:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 14:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 14:15	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 14:15	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 14:15	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/26/19 14:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 14:15	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 14:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 14:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 14:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 14:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 14:15	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 14:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 14:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 14:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 14:15	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 14:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/26/19 14:15	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 14:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 14:15	1
Trichloroethene	ND		1.0	0.46	ug/L			07/26/19 14:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 14:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 14:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 14:15	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Client Sample ID: TRIP BANK
Date Collected: 07/23/19 16:45
Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		07/26/19 14:15	1
4-Bromofluorobenzene (Surr)	95		73 - 120		07/26/19 14:15	1
Dibromofluoromethane (Surr)	99		75 - 123		07/26/19 14:15	1
Toluene-d8 (Surr)	101		80 - 120		07/26/19 14:15	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-156744-1	MW-4	103	98	98	106
480-156744-1 MS	MW-4	100	97	98	102
480-156744-1 MSD	MW-4	103	96	100	106
480-156744-2	MW-5	103	91	98	103
480-156744-3	MW-6	111	84	111	108
480-156744-4	PW-1R	103	96	98	103
480-156744-5	MW-9	104	91	101	103
480-156744-6	MW-12	103	94	97	101
480-156744-7	BLIND DUP	108	84	107	110
480-156744-8	TRIP BANK	107	95	99	101
LCS 480-483899/5	Lab Control Sample	102	95	95	103
LCS 480-484067/5	Lab Control Sample	102	96	96	104
LCS 480-484093/5	Lab Control Sample	100	101	102	98
MB 480-483899/7	Method Blank	101	94	95	101
MB 480-484067/7	Method Blank	104	96	97	103
MB 480-484093/7	Method Blank	102	100	101	97

Surrogate Legend

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

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

Lab Sample ID: MB 480-483899/7
Matrix: Water
Analysis Batch: 483899

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/26/19 12:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 12:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 12:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 12:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 12:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 12:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 12:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 12:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 12:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 12:05	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 12:05	1
Acetone	ND		10	3.0	ug/L			07/26/19 12:05	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 12:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 12:05	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 12:05	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 12:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 12:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 12:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 12:05	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 12:05	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 12:05	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/26/19 12:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 12:05	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 12:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 12:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 12:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 12:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 12:05	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 12:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 12:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 12:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 12:05	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 12:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/26/19 12:05	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 12:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 12:05	1
Trichloroethene	ND		1.0	0.46	ug/L			07/26/19 12:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 12:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 12:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 12:05	1

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

Lab Sample ID: MB 480-483899/7
Matrix: Water
Analysis Batch: 483899

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		07/26/19 12:05	1
4-Bromofluorobenzene (Surr)	94		73 - 120		07/26/19 12:05	1
Dibromofluoromethane (Surr)	95		75 - 123		07/26/19 12:05	1
Toluene-d8 (Surr)	101		80 - 120		07/26/19 12:05	1

Lab Sample ID: LCS 480-483899/5
Matrix: Water
Analysis Batch: 483899

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.2		ug/L		89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	61 - 148
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	23.6		ug/L		94	77 - 120
1,1-Dichloroethene	25.0	21.8		ug/L		87	66 - 127
1,2,4-Trichlorobenzene	25.0	21.8		ug/L		87	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	56 - 134
1,2-Dibromoethane	25.0	24.3		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	25.7		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 120
2-Butanone (MEK)	125	159		ug/L		127	57 - 140
2-Hexanone	125	138		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125
Acetone	125	194	*	ug/L		155	56 - 142
Benzene	25.0	24.2		ug/L		97	71 - 124
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122
Bromoform	25.0	25.7		ug/L		103	61 - 132
Bromomethane	25.0	23.1		ug/L		92	55 - 144
Carbon disulfide	25.0	20.9		ug/L		84	59 - 134
Carbon tetrachloride	25.0	23.6		ug/L		94	72 - 134
Chlorobenzene	25.0	24.3		ug/L		97	80 - 120
Chloroethane	25.0	24.8		ug/L		99	69 - 136
Chloroform	25.0	21.6		ug/L		86	73 - 127
Chloromethane	25.0	23.2		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	22.5		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124
Cyclohexane	25.0	24.8		ug/L		99	59 - 135
Dibromochloromethane	25.0	24.8		ug/L		99	75 - 125
Dichlorodifluoromethane	25.0	21.3		ug/L		85	59 - 135
Ethylbenzene	25.0	23.8		ug/L		95	77 - 123
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122
Methyl acetate	50.0	57.7		ug/L		115	74 - 133
Methyl tert-butyl ether	25.0	23.6		ug/L		94	77 - 120
Methylcyclohexane	25.0	23.8		ug/L		95	68 - 134

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

Lab Sample ID: LCS 480-483899/5
Matrix: Water
Analysis Batch: 483899

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
Styrene	25.0	23.3		ug/L		93	80 - 120
Tetrachloroethene	25.0	23.1		ug/L		92	74 - 122
Toluene	25.0	23.8		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	73 - 127
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	80 - 120
Trichloroethene	25.0	23.4		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	23.9		ug/L		96	62 - 150
Vinyl chloride	25.0	23.8		ug/L		95	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 480-484067/7
Matrix: Water
Analysis Batch: 484067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 00:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 00:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 00:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 00:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 00:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 00:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 00:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 00:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 00:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 00:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 00:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 00:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 00:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 00:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 00:47	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 00:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 00:47	1
Acetone	ND		10	3.0	ug/L			07/27/19 00:47	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 00:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 00:47	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 00:47	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 00:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 00:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 00:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 00:47	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 00:47	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 00:47	1

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

Lab Sample ID: MB 480-484067/7
Matrix: Water
Analysis Batch: 484067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 00:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 00:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 00:47	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 00:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 00:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 00:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 00:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 00:47	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 00:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 00:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 00:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 00:47	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 00:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/27/19 00:47	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 00:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 00:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 00:47	1
Trichloroethene	ND		1.0	0.46	ug/L			07/27/19 00:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 00:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 00:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 00:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*07/27/19 00:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/27/19 00:47*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/27/19 00:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/27/19 00:47*	*1*

Lab Sample ID: LCS 480-484067/5
Matrix: Water
Analysis Batch: 484067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.3		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	26.5		ug/L		106	76 - 122
1,1-Dichloroethane	25.0	26.0		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	56 - 134
1,2-Dibromoethane	25.0	25.3		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	26.8		ug/L		107	76 - 120
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.4		ug/L		101	80 - 120
2-Butanone (MEK)	125	165		ug/L		132	57 - 140

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

Lab Sample ID: LCS 480-484067/5
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 484067

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	125	142		ug/L		114	65 - 127
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	71 - 125
Acetone	125	206	*	ug/L		165	56 - 142
Benzene	25.0	26.7		ug/L		107	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	27.1		ug/L		108	61 - 132
Bromomethane	25.0	25.0		ug/L		100	55 - 144
Carbon disulfide	25.0	24.1		ug/L		96	59 - 134
Carbon tetrachloride	25.0	26.7		ug/L		107	72 - 134
Chlorobenzene	25.0	26.1		ug/L		104	80 - 120
Chloroethane	25.0	27.5		ug/L		110	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Cyclohexane	25.0	27.6		ug/L		110	59 - 135
Dibromochloromethane	25.0	26.4		ug/L		106	75 - 125
Dichlorodifluoromethane	25.0	22.7		ug/L		91	59 - 135
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 122
Methyl acetate	50.0	58.4		ug/L		117	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	26.6		ug/L		106	68 - 134
Methylene Chloride	25.0	25.6		ug/L		102	75 - 124
Styrene	25.0	25.2		ug/L		101	80 - 120
Tetrachloroethene	25.0	25.8		ug/L		103	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	25.4		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	26.8		ug/L		107	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 480-156744-1 MS
Client Sample ID: MW-4
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 484067

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	25.1		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	24.9		ug/L		99	61 - 148
1,1,2-Trichloroethane	ND	F2	25.0	23.9		ug/L		95	76 - 122

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

Lab Sample ID: 480-156744-1 MS
Matrix: Water
Analysis Batch: 484067

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		25.0	24.9		ug/L		100	77 - 120
1,1-Dichloroethene	ND		25.0	24.4		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	20.1		ug/L		80	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	22.4		ug/L		89	56 - 134
1,2-Dibromoethane	ND		25.0	22.5		ug/L		90	77 - 120
1,2-Dichlorobenzene	ND		25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	ND		25.0	22.9		ug/L		92	75 - 120
1,2-Dichloropropane	ND		25.0	25.1		ug/L		100	76 - 120
1,3-Dichlorobenzene	ND		25.0	23.5		ug/L		94	77 - 120
1,4-Dichlorobenzene	ND		25.0	23.5		ug/L		94	78 - 124
2-Butanone (MEK)	ND		125	136		ug/L		109	57 - 140
2-Hexanone	ND		125	123		ug/L		98	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		100	71 - 125
Acetone	ND	*	125	145		ug/L		116	56 - 142
Benzene	ND		25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	ND		25.0	24.5		ug/L		98	80 - 122
Bromoform	ND		25.0	24.5		ug/L		98	61 - 132
Bromomethane	ND		25.0	24.5		ug/L		98	55 - 144
Carbon disulfide	ND		25.0	22.7		ug/L		91	59 - 134
Carbon tetrachloride	ND		25.0	26.5		ug/L		106	72 - 134
Chlorobenzene	ND		25.0	23.7		ug/L		95	80 - 120
Chloroethane	ND		25.0	26.9		ug/L		107	69 - 136
Chloroform	3.2		25.0	24.9		ug/L		87	73 - 127
Chloromethane	ND		25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	74 - 124
cis-1,3-Dichloropropene	ND		25.0	23.5		ug/L		94	74 - 124
Cyclohexane	ND		25.0	26.6		ug/L		106	59 - 135
Dibromochloromethane	ND		25.0	23.8		ug/L		95	75 - 125
Dichlorodifluoromethane	ND		25.0	21.6		ug/L		86	59 - 135
Ethylbenzene	ND		25.0	24.3		ug/L		97	77 - 123
Isopropylbenzene	ND		25.0	25.4		ug/L		102	77 - 122
Methyl acetate	ND		50.0	50.0		ug/L		100	74 - 133
Methyl tert-butyl ether	ND		25.0	22.3		ug/L		89	77 - 120
Methylcyclohexane	ND		25.0	24.1		ug/L		97	68 - 134
Methylene Chloride	ND		25.0	24.2		ug/L		97	75 - 124
Styrene	ND		25.0	23.0		ug/L		92	80 - 120
Tetrachloroethene	27		25.0	49.2		ug/L		89	74 - 122
Toluene	ND	F2	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	73 - 127
trans-1,3-Dichloropropene	ND	F2	25.0	23.2		ug/L		93	80 - 120
Trichloroethene	42		25.0	64.5		ug/L		91	74 - 123
Trichlorofluoromethane	ND		25.0	25.4		ug/L		102	62 - 150
Vinyl chloride	ND		25.0	27.2		ug/L		109	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

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

Lab Sample ID: 480-156744-1 MS
Matrix: Water
Analysis Batch: 484067

Client Sample ID: MW-4
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: 480-156744-1 MSD
Matrix: Water
Analysis Batch: 484067

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	28.8		ug/L		115	73 - 126	14	15
1,1,2,2-Tetrachloroethane	ND		25.0	27.6		ug/L		110	76 - 120	14	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.9		ug/L		116	61 - 148	15	20
1,1,2-Trichloroethane	ND	F2	25.0	29.0	F2	ug/L		116	76 - 122	19	15
1,1-Dichloroethane	ND		25.0	29.0		ug/L		116	77 - 120	15	20
1,1-Dichloroethene	ND		25.0	28.5		ug/L		114	66 - 127	15	16
1,2,4-Trichlorobenzene	ND		25.0	21.7		ug/L		87	79 - 122	8	20
1,2-Dibromo-3-Chloropropane	ND		25.0	25.2		ug/L		101	56 - 134	12	15
1,2-Dibromoethane	ND		25.0	26.2		ug/L		105	77 - 120	15	15
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		102	80 - 124	12	20
1,2-Dichloroethane	ND		25.0	26.4		ug/L		105	75 - 120	14	20
1,2-Dichloropropane	ND		25.0	29.0		ug/L		116	76 - 120	14	20
1,3-Dichlorobenzene	ND		25.0	27.4		ug/L		109	77 - 120	15	20
1,4-Dichlorobenzene	ND		25.0	26.9		ug/L		108	78 - 124	13	20
2-Butanone (MEK)	ND		125	154		ug/L		123	57 - 140	12	20
2-Hexanone	ND		125	138		ug/L		110	65 - 127	11	15
4-Methyl-2-pentanone (MIBK)	ND		125	141		ug/L		113	71 - 125	12	35
Acetone	ND	*	125	156		ug/L		125	56 - 142	8	15
Benzene	ND		25.0	29.2		ug/L		117	71 - 124	13	13
Bromodichloromethane	ND		25.0	27.4		ug/L		110	80 - 122	11	15
Bromoform	ND		25.0	26.9		ug/L		108	61 - 132	9	15
Bromomethane	ND		25.0	27.5		ug/L		110	55 - 144	11	15
Carbon disulfide	ND		25.0	26.0		ug/L		104	59 - 134	14	15
Carbon tetrachloride	ND		25.0	30.4		ug/L		122	72 - 134	14	15
Chlorobenzene	ND		25.0	27.7		ug/L		111	80 - 120	15	25
Chloroethane	ND		25.0	30.9		ug/L		124	69 - 136	14	15
Chloroform	3.2		25.0	27.8		ug/L		98	73 - 127	11	20
Chloromethane	ND		25.0	28.1		ug/L		112	68 - 124	12	15
cis-1,2-Dichloroethene	ND		25.0	26.8		ug/L		107	74 - 124	14	15
cis-1,3-Dichloropropene	ND		25.0	27.4		ug/L		110	74 - 124	15	15
Cyclohexane	ND		25.0	29.7		ug/L		119	59 - 135	11	20
Dibromochloromethane	ND		25.0	26.7		ug/L		107	75 - 125	12	15
Dichlorodifluoromethane	ND		25.0	24.4		ug/L		97	59 - 135	12	20
Ethylbenzene	ND		25.0	27.9		ug/L		112	77 - 123	14	15
Isopropylbenzene	ND		25.0	29.8		ug/L		119	77 - 122	16	20
Methyl acetate	ND		50.0	57.5		ug/L		115	74 - 133	14	20
Methyl tert-butyl ether	ND		25.0	25.6		ug/L		102	77 - 120	14	37
Methylcyclohexane	ND		25.0	27.7		ug/L		111	68 - 134	14	20
Methylene Chloride	ND		25.0	27.4		ug/L		110	75 - 124	12	15
Styrene	ND		25.0	26.6		ug/L		106	80 - 120	15	20
Tetrachloroethene	27		25.0	52.7		ug/L		102	74 - 122	7	20

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

Lab Sample ID: 480-156744-1 MSD
Matrix: Water
Analysis Batch: 484067

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	ND	F2	25.0	28.4	F2	ug/L		113	80 - 122	16	15
trans-1,2-Dichloroethene	ND		25.0	29.2		ug/L		117	73 - 127	15	20
trans-1,3-Dichloropropene	ND	F2	25.0	27.6	F2	ug/L		110	80 - 120	17	15
Trichloroethene	42		25.0	66.8		ug/L		100	74 - 123	3	16
Trichlorofluoromethane	ND		25.0	29.5		ug/L		118	62 - 150	15	20
Vinyl chloride	ND		25.0	30.7		ug/L		123	65 - 133	12	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: MB 480-484093/7
Matrix: Water
Analysis Batch: 484093

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 11:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 11:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 11:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 11:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 11:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 11:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 11:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 11:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 11:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 11:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 11:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 11:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 11:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 11:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 11:03	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 11:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 11:03	1
Acetone	ND		10	3.0	ug/L			07/27/19 11:03	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 11:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 11:03	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 11:03	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 11:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 11:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 11:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 11:03	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 11:03	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 11:03	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 11:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 11:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 11:03	1

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

Lab Sample ID: MB 480-484093/7
Matrix: Water
Analysis Batch: 484093

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 11:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 11:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 11:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 11:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 11:03	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 11:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 11:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 11:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 11:03	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 11:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/27/19 11:03	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 11:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 11:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 11:03	1
Trichloroethene	ND		1.0	0.46	ug/L			07/27/19 11:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 11:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 11:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*07/27/19 11:03*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*07/27/19 11:03*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*07/27/19 11:03*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/27/19 11:03*	*1*

Lab Sample ID: LCS 480-484093/5
Matrix: Water
Analysis Batch: 484093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.1		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.8		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	76 - 122
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	26.7		ug/L		107	66 - 127
1,2,4-Trichlorobenzene	25.0	26.5		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.3		ug/L		101	56 - 134
1,2-Dibromoethane	25.0	26.5		ug/L		106	77 - 120
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	26.4		ug/L		105	76 - 120
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	77 - 120
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 120
2-Butanone (MEK)	125	128		ug/L		103	57 - 140
2-Hexanone	125	129		ug/L		103	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	134		ug/L		107	56 - 142

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

Lab Sample ID: LCS 480-484093/5
Matrix: Water
Analysis Batch: 484093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.4		ug/L		101	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	23.1		ug/L		92	61 - 132
Bromomethane	25.0	25.0		ug/L		100	55 - 144
Carbon disulfide	25.0	24.9		ug/L		100	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	26.0		ug/L		104	80 - 120
Chloroethane	25.0	25.7		ug/L		103	69 - 136
Chloroform	25.0	25.1		ug/L		100	73 - 127
Chloromethane	25.0	25.4		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	74 - 124
Cyclohexane	25.0	24.5		ug/L		98	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	27.6		ug/L		110	59 - 135
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123
Isopropylbenzene	25.0	26.4		ug/L		106	77 - 122
Methyl acetate	50.0	48.4		ug/L		97	74 - 133
Methyl tert-butyl ether	25.0	25.0		ug/L		100	77 - 120
Methylcyclohexane	25.0	25.7		ug/L		103	68 - 134
Methylene Chloride	25.0	25.1		ug/L		101	75 - 124
Styrene	25.0	27.0		ug/L		108	80 - 120
Tetrachloroethene	25.0	27.0		ug/L		108	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	27.3		ug/L		109	62 - 150
Vinyl chloride	25.0	26.5		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

GC/MS VOA

Analysis Batch: 483899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-4	PW-1R	Total/NA	Water	8260C	
480-156744-8	TRIP BANK	Total/NA	Water	8260C	
MB 480-483899/7	Method Blank	Total/NA	Water	8260C	
LCS 480-483899/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 484067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-1	MW-4	Total/NA	Water	8260C	
480-156744-2	MW-5	Total/NA	Water	8260C	
480-156744-5	MW-9	Total/NA	Water	8260C	
480-156744-6	MW-12	Total/NA	Water	8260C	
MB 480-484067/7	Method Blank	Total/NA	Water	8260C	
LCS 480-484067/5	Lab Control Sample	Total/NA	Water	8260C	
480-156744-1 MS	MW-4	Total/NA	Water	8260C	
480-156744-1 MSD	MW-4	Total/NA	Water	8260C	

Analysis Batch: 484093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-3	MW-6	Total/NA	Water	8260C	
480-156744-7	BLIND DUP	Total/NA	Water	8260C	
MB 480-484093/7	Method Blank	Total/NA	Water	8260C	
LCS 480-484093/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

Client Sample ID: MW-4
Lab Sample ID: 480-156744-1
Date Collected: 07/23/19 13:30
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 01:23	OMI	TAL BUF

Client Sample ID: MW-5
Lab Sample ID: 480-156744-2
Date Collected: 07/23/19 12:00
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 01:46	OMI	TAL BUF

Client Sample ID: MW-6
Lab Sample ID: 480-156744-3
Date Collected: 07/23/19 14:30
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484093	07/27/19 14:52	OMI	TAL BUF

Client Sample ID: PW-1R
Lab Sample ID: 480-156744-4
Date Collected: 07/23/19 13:45
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	483899	07/26/19 13:52	AEM	TAL BUF

Client Sample ID: MW-9
Lab Sample ID: 480-156744-5
Date Collected: 07/23/19 15:30
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 02:32	OMI	TAL BUF

Client Sample ID: MW-12
Lab Sample ID: 480-156744-6
Date Collected: 07/23/19 16:30
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 02:55	OMI	TAL BUF

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156744-7
Date Collected: 07/23/19 14:35
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484093	07/27/19 15:16	OMI	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

Client Sample ID: TRIP BANK
Lab Sample ID: 480-156744-8
Date Collected: 07/23/19 16:45
Matrix: Water
Date Received: 07/25/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	483899	07/26/19 14:15	AEM	TAL BUF

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: 480-156744-1
Project/Site: Benchmark - Despatch site

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156744-1
Project/Site: Benchmark - Despatch site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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 - Despatch site

Job ID: 480-156744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156744-1	MW-4	Water	07/23/19 13:30	07/25/19 10:35	
480-156744-2	MW-5	Water	07/23/19 12:00	07/25/19 10:35	
480-156744-3	MW-6	Water	07/23/19 14:30	07/25/19 10:35	
480-156744-4	PW-1R	Water	07/23/19 13:45	07/25/19 10:35	
480-156744-5	MW-9	Water	07/23/19 15:30	07/25/19 10:35	
480-156744-6	MW-12	Water	07/23/19 16:30	07/25/19 10:35	
480-156744-7	BLIND DUP	Water	07/23/19 14:35	07/25/19 10:35	
480-156744-8	TRIP BANK	Water	07/23/19 16:45	07/25/19 10:35	

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

240189

TestAmerica

480-156744 Chain of Custody

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Lori Riker	Site Contact: Nicole Scrac	Date: 7/
Company Name: Turnkey Env. Restoration	Tel/Fax: 716-856-0599	Lab Contact: Brian Fischer	Carrier:
Address: 2558 Hamburg Turnpike	Analysis Turnaround Time		
City/State/Zip: Buffalo, NY, 14218	☐ CALENDAR DAYS ☐ WORKING DAYS		
Phone: 716-713-3937	TAT if different from Below _____		
Fax:	☐ 2 weeks		
Project Name: Despatch	☐ 1 week		
Site: 115 North Washington Street	☐ 2 days		
P O # B0040-002-400	☐ 1 day		

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC's	Sample Specific Notes:
MW-4	7/23/19	13:30	G	AQ	3		X	X	
MW-5		12:00			3			X	
MW-6		14:30			3			X	
PW-1R		13:45			3			X	
MW-9		15:30			3			X	
MW-12		16:30			3			X	
Blind DUP	7/23/19	14:35	G	AQ	3			X	
Trip Blank	7/23/19	16:45	G	AQ	2			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Cat B, NYSDEC Levels

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.6 Corr'd:_____ | Therm ID No.: #1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	BATTK	7/24/19 15:00			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Unknown	TA	07/25/19 1035

8/1/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-156744-1

Login Number: 156744

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Stopa, Erik S

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	BMTK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-163304-1
Client Project/Site: Benchmark - Despatch site

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

Attn: Ms. Lori E. Riker

Joseph V. Giacomazza

Authorized for release by:
12/5/2019 11:58:20 AM
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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

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.

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: 480-163304-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-163304-1

Comments
No additional comments.

Receipt
The samples were received on 11/26/2019 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-507035 recovered outside acceptance criteria, low biased, for Chloromethane and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated sample(s) were non-detect for this analyte, the data have been reported. The following samples are impacted: MW-4 (480-163304-1), MW-5 (480-163304-2), MW-6 (480-163304-3), MW-9 (480-163304-4), MW-12 (480-163304-5), BD (480-163304-6) and MW-2 (480-163304-7).

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

Client Sample ID: MW-4 — Lab Sample ID: 480-163304-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	6.5		1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	26		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	36		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 480-163304-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	45		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	44		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-163304-3

No Detections.

Client Sample ID: MW-9 — Lab Sample ID: 480-163304-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	51		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	38		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 480-163304-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	68		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: BD — Lab Sample ID: 480-163304-6

No Detections.

Client Sample ID: MW-2 — Lab Sample ID: 480-163304-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.59	J	1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	10		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	1.9		1.0	0.46	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-4
Date Collected: 11/25/19 10:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-1
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			11/27/19 15:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 15:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 15:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 15:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 15:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 15:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 15:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 15:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 15:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 15:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 15:13	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 15:13	1
Acetone	ND		10	3.0	ug/L			11/27/19 15:13	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 15:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 15:13	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 15:13	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 15:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 15:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 15:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 15:13	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 15:13	1
Chloroform	**6.5**		1.0	0.34	ug/L			11/27/19 15:13	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 15:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 15:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 15:13	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 15:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 15:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 15:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 15:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 15:13	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 15:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 15:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 15:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 15:13	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 15:13	1
Tetrachloroethene	**26**		1.0	0.36	ug/L			11/27/19 15:13	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 15:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 15:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 15:13	1
Trichloroethene	**36**		1.0	0.46	ug/L			11/27/19 15:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 15:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 15:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 15:13	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-4
Date Collected: 11/25/19 10:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		11/27/19 15:13	1
4-Bromofluorobenzene (Surr)	97		73 - 120		11/27/19 15:13	1
Dibromofluoromethane (Surr)	110		75 - 123		11/27/19 15:13	1
Toluene-d8 (Surr)	99		80 - 120		11/27/19 15:13	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-5
Date Collected: 11/25/19 09:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-2
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			11/27/19 15:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 15:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 15:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 15:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 15:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 15:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 15:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 15:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 15:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 15:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 15:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 15:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 15:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 15:37	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 15:37	1
Acetone	ND		10	3.0	ug/L			11/27/19 15:37	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 15:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 15:37	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 15:37	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 15:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 15:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 15:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 15:37	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 15:37	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 15:37	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 15:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 15:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 15:37	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 15:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 15:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 15:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 15:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 15:37	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 15:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 15:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 15:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 15:37	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 15:37	1
Tetrachloroethene	**45**		1.0	0.36	ug/L			11/27/19 15:37	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 15:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 15:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 15:37	1
Trichloroethene	**44**		1.0	0.46	ug/L			11/27/19 15:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 15:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 15:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 15:37	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-5
Date Collected: 11/25/19 09:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		11/27/19 15:37	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/27/19 15:37	1
Dibromofluoromethane (Surr)	116		75 - 123		11/27/19 15:37	1
Toluene-d8 (Surr)	100		80 - 120		11/27/19 15:37	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-6
Date Collected: 11/25/19 15:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-3
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		1.0	0.82	ug/L			11/27/19 16:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 16:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 16:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 16:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 16:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 16:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 16:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 16:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 16:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 16:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 16:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 16:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 16:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 16:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 16:01	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 16:01	1
Acetone	ND		10	3.0	ug/L			11/27/19 16:01	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 16:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 16:01	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 16:01	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 16:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 16:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 16:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 16:01	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 16:01	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 16:01	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 16:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 16:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 16:01	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 16:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 16:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 16:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 16:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 16:01	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 16:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 16:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 16:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 16:01	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 16:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/27/19 16:01	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 16:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 16:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 16:01	1
Trichloroethene	ND		1.0	0.46	ug/L			11/27/19 16:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 16:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 16:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 16:01	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-6
Date Collected: 11/25/19 15:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/27/19 16:01	1
4-Bromofluorobenzene (Surr)	85		73 - 120		11/27/19 16:01	1
Dibromofluoromethane (Surr)	106		75 - 123		11/27/19 16:01	1
Toluene-d8 (Surr)	101		80 - 120		11/27/19 16:01	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-9
Date Collected: 11/25/19 14:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-4
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			11/27/19 16:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 16:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 16:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 16:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 16:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 16:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 16:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 16:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 16:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 16:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 16:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 16:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 16:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 16:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 16:25	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 16:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 16:25	1
Acetone	ND		10	3.0	ug/L			11/27/19 16:25	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 16:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 16:25	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 16:25	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 16:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 16:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 16:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 16:25	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 16:25	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 16:25	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 16:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 16:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 16:25	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 16:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 16:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 16:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 16:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 16:25	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 16:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 16:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 16:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 16:25	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 16:25	1
Tetrachloroethene	**51**		1.0	0.36	ug/L			11/27/19 16:25	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 16:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 16:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 16:25	1
Trichloroethene	**38**		1.0	0.46	ug/L			11/27/19 16:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 16:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 16:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 16:25	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-9
Date Collected: 11/25/19 14:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/27/19 16:25	1
4-Bromofluorobenzene (Surr)	102		73 - 120		11/27/19 16:25	1
Dibromofluoromethane (Surr)	122		75 - 123		11/27/19 16:25	1
Toluene-d8 (Surr)	98		80 - 120		11/27/19 16:25	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-12
Date Collected: 11/25/19 11:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-5
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			11/27/19 16:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 16:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 16:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 16:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 16:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 16:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 16:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 16:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 16:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 16:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 16:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 16:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 16:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 16:49	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 16:49	1
Acetone	ND		10	3.0	ug/L			11/27/19 16:49	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 16:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 16:49	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 16:49	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 16:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 16:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 16:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 16:49	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 16:49	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 16:49	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 16:49	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 16:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 16:49	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 16:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 16:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 16:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 16:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 16:49	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 16:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 16:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 16:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 16:49	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 16:49	1
Tetrachloroethene	**68**		1.0	0.36	ug/L			11/27/19 16:49	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 16:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 16:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 16:49	1
Trichloroethene	**12**		1.0	0.46	ug/L			11/27/19 16:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 16:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 16:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 16:49	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-12
Date Collected: 11/25/19 11:30
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		11/27/19 16:49	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/27/19 16:49	1
Dibromofluoromethane (Surr)	121		75 - 123		11/27/19 16:49	1
Toluene-d8 (Surr)	93		80 - 120		11/27/19 16:49	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: BD
Date Collected: 11/25/19 15:05
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-6
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		1.0	0.82	ug/L			11/27/19 17:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 17:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 17:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 17:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 17:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 17:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 17:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 17:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 17:12	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 17:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 17:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 17:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 17:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 17:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 17:12	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 17:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 17:12	1
Acetone	ND		10	3.0	ug/L			11/27/19 17:12	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 17:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 17:12	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 17:12	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 17:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 17:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 17:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 17:12	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 17:12	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 17:12	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 17:12	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 17:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 17:12	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 17:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 17:12	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 17:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 17:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 17:12	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 17:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 17:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 17:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 17:12	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 17:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/27/19 17:12	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 17:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 17:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 17:12	1
Trichloroethene	ND		1.0	0.46	ug/L			11/27/19 17:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 17:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 17:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 17:12	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: BD
Date Collected: 11/25/19 15:05
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		11/27/19 17:12	1
4-Bromofluorobenzene (Surr)	83		73 - 120		11/27/19 17:12	1
Dibromofluoromethane (Surr)	120		75 - 123		11/27/19 17:12	1
Toluene-d8 (Surr)	93		80 - 120		11/27/19 17:12	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-2

Date Collected: 11/25/19 13:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-7

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			11/27/19 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 17:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 17:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 17:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 17:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 17:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 17:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 17:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 17:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 17:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 17:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 17:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 17:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 17:36	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 17:36	1
Acetone	ND		10	3.0	ug/L			11/27/19 17:36	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 17:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 17:36	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 17:36	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 17:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 17:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 17:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 17:36	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 17:36	1
Chloroform	**0.59**	**J**	1.0	0.34	ug/L			11/27/19 17:36	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 17:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 17:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 17:36	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 17:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 17:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 17:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 17:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 17:36	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 17:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 17:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 17:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 17:36	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 17:36	1
Tetrachloroethene	**10**		1.0	0.36	ug/L			11/27/19 17:36	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 17:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 17:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 17:36	1
Trichloroethene	**1.9**		1.0	0.46	ug/L			11/27/19 17:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 17:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 17:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 17:36	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

Client Sample ID: MW-2
Date Collected: 11/25/19 13:00
Date Received: 11/26/19 15:30

Lab Sample ID: 480-163304-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/27/19 17:36	1
4-Bromofluorobenzene (Surr)	96		73 - 120		11/27/19 17:36	1
Dibromofluoromethane (Surr)	117		75 - 123		11/27/19 17:36	1
Toluene-d8 (Surr)	95		80 - 120		11/27/19 17:36	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-163304-1	MW-4	106	97	110	99
480-163304-2	MW-5	112	101	116	100
480-163304-2 MS	MW-5	97	97	98	97
480-163304-2 MSD	MW-5	107	103	111	103
480-163304-3	MW-6	107	85	106	101
480-163304-4	MW-9	107	102	122	98
480-163304-5	MW-12	112	100	121	93
480-163304-6	BD	109	83	120	93
480-163304-7	MW-2	107	96	117	95
LCS 480-507035/5	Lab Control Sample	101	103	101	97
LCS 480-507223/4	Lab Control Sample	97	96	101	95
MB 480-507035/7	Method Blank	100	101	102	99
MB 480-507223/6	Method Blank	102	103	102	102

Surrogate Legend

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

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

Lab Sample ID: MB 480-507035/7
Matrix: Water
Analysis Batch: 507035

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/27/19 11:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 11:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 11:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 11:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 11:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 11:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 11:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 11:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 11:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 11:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 11:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 11:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 11:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 11:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 11:24	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 11:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 11:24	1
Acetone	ND		10	3.0	ug/L			11/27/19 11:24	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 11:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 11:24	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 11:24	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 11:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 11:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 11:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 11:24	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 11:24	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 11:24	1
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 11:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 11:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 11:24	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 11:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 11:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 11:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 11:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 11:24	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 11:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 11:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 11:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 11:24	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 11:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/27/19 11:24	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 11:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 11:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 11:24	1
Trichloroethene	ND		1.0	0.46	ug/L			11/27/19 11:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 11:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 11:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 11:24	1

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

Lab Sample ID: MB 480-507035/7
Matrix: Water
Analysis Batch: 507035

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/27/19 11:24	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/27/19 11:24	1
Dibromofluoromethane (Surr)	102		75 - 123		11/27/19 11:24	1
Toluene-d8 (Surr)	99		80 - 120		11/27/19 11:24	1

Lab Sample ID: LCS 480-507035/5
Matrix: Water
Analysis Batch: 507035

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.3		ug/L		89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.0		ug/L		84	61 - 148
1,1,2-Trichloroethane	25.0	22.6		ug/L		90	76 - 122
1,1-Dichloroethane	25.0	21.1		ug/L		84	77 - 120
1,1-Dichloroethene	25.0	21.0		ug/L		84	66 - 127
1,2,4-Trichlorobenzene	25.0	20.7		ug/L		83	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/L		100	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	21.4		ug/L		86	80 - 124
1,2-Dichloroethane	25.0	21.5		ug/L		86	75 - 120
1,2-Dichloropropane	25.0	22.4		ug/L		90	76 - 120
1,3-Dichlorobenzene	25.0	21.6		ug/L		86	77 - 120
1,4-Dichlorobenzene	25.0	21.3		ug/L		85	80 - 120
2-Butanone (MEK)	125	131		ug/L		105	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	71 - 125
Acetone	125	127		ug/L		102	56 - 142
Benzene	25.0	22.6		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.6		ug/L		94	80 - 122
Bromoform	25.0	23.1		ug/L		92	61 - 132
Bromomethane	25.0	19.6		ug/L		79	55 - 144
Carbon disulfide	25.0	21.7		ug/L		87	59 - 134
Carbon tetrachloride	25.0	22.3		ug/L		89	72 - 134
Chlorobenzene	25.0	21.5		ug/L		86	80 - 120
Chloroethane	25.0	20.1		ug/L		80	69 - 136
Chloroform	25.0	22.7		ug/L		91	73 - 127
Chloromethane	25.0	18.1		ug/L		72	68 - 124
cis-1,2-Dichloroethene	25.0	21.7		ug/L		87	74 - 124
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	74 - 124
Cyclohexane	25.0	20.8		ug/L		83	59 - 135
Dibromochloromethane	25.0	25.5		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	17.5		ug/L		70	59 - 135
Ethylbenzene	25.0	22.1		ug/L		88	77 - 123
Isopropylbenzene	25.0	22.7		ug/L		91	77 - 122
Methyl acetate	50.0	45.1		ug/L		90	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		92	77 - 120
Methylcyclohexane	25.0	21.5		ug/L		86	68 - 134

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

Lab Sample ID: LCS 480-507035/5
Matrix: Water
Analysis Batch: 507035

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	23.4		ug/L		94	75 - 124
Styrene	25.0	23.1		ug/L		93	80 - 120
Tetrachloroethene	25.0	22.1		ug/L		88	74 - 122
Toluene	25.0	22.1		ug/L		88	80 - 122
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	73 - 127
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	80 - 120
Trichloroethene	25.0	21.1		ug/L		84	74 - 123
Trichlorofluoromethane	25.0	19.9		ug/L		79	62 - 150
Vinyl chloride	25.0	18.9		ug/L		76	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-507223/6
Matrix: Water
Analysis Batch: 507223

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/27/19 22:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/27/19 22:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/27/19 22:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/27/19 22:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/27/19 22:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/27/19 22:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/27/19 22:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/27/19 22:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/27/19 22:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/27/19 22:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/27/19 22:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/27/19 22:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/27/19 22:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/27/19 22:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/27/19 22:01	1
2-Hexanone	ND		5.0	1.2	ug/L			11/27/19 22:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/27/19 22:01	1
Acetone	ND		10	3.0	ug/L			11/27/19 22:01	1
Benzene	ND		1.0	0.41	ug/L			11/27/19 22:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/27/19 22:01	1
Bromoform	ND		1.0	0.26	ug/L			11/27/19 22:01	1
Bromomethane	ND		1.0	0.69	ug/L			11/27/19 22:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/27/19 22:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/27/19 22:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/27/19 22:01	1
Chloroethane	ND		1.0	0.32	ug/L			11/27/19 22:01	1
Chloroform	ND		1.0	0.34	ug/L			11/27/19 22:01	1

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

Lab Sample ID: MB 480-507223/6
Matrix: Water
Analysis Batch: 507223

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			11/27/19 22:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/27/19 22:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/27/19 22:01	1
Cyclohexane	ND		1.0	0.18	ug/L			11/27/19 22:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/27/19 22:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/27/19 22:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/27/19 22:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/27/19 22:01	1
Methyl acetate	ND		2.5	1.3	ug/L			11/27/19 22:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/27/19 22:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/27/19 22:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/27/19 22:01	1
Styrene	ND		1.0	0.73	ug/L			11/27/19 22:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/27/19 22:01	1
Toluene	ND		1.0	0.51	ug/L			11/27/19 22:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/27/19 22:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/27/19 22:01	1
Trichloroethene	ND		1.0	0.46	ug/L			11/27/19 22:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/27/19 22:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/27/19 22:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/27/19 22:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*11/27/19 22:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*11/27/19 22:01*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*11/27/19 22:01*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/27/19 22:01*	*1*

Lab Sample ID: LCS 480-507223/4
Matrix: Water
Analysis Batch: 507223

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.4		ug/L		114	61 - 148
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	24.7		ug/L		99	77 - 120
1,1-Dichloroethene	25.0	26.0		ug/L		104	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.0		ug/L		104	56 - 134
1,2-Dibromoethane	25.0	25.5		ug/L		102	77 - 120
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	23.5		ug/L		94	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 120
2-Butanone (MEK)	125	139		ug/L		111	57 - 140

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

Lab Sample ID: LCS 480-507223/4
Matrix: Water
Analysis Batch: 507223

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	125	132		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	71 - 125
Acetone	125	139		ug/L		112	56 - 142
Benzene	25.0	26.4		ug/L		106	71 - 124
Bromodichloromethane	25.0	26.5		ug/L		106	80 - 122
Bromoform	25.0	23.8		ug/L		95	61 - 132
Bromomethane	25.0	23.2		ug/L		93	55 - 144
Carbon disulfide	25.0	26.8		ug/L		107	59 - 134
Carbon tetrachloride	25.0	28.3		ug/L		113	72 - 134
Chlorobenzene	25.0	24.1		ug/L		96	80 - 120
Chloroethane	25.0	24.4		ug/L		97	69 - 136
Chloroform	25.0	26.1		ug/L		104	73 - 127
Chloromethane	25.0	22.1		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	27.4		ug/L		109	74 - 124
Cyclohexane	25.0	27.8		ug/L		111	59 - 135
Dibromochloromethane	25.0	26.8		ug/L		107	75 - 125
Dichlorodifluoromethane	25.0	25.0		ug/L		100	59 - 135
Ethylbenzene	25.0	24.6		ug/L		98	77 - 123
Isopropylbenzene	25.0	27.7		ug/L		111	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	26.4		ug/L		106	77 - 120
Methylcyclohexane	25.0	29.2		ug/L		117	68 - 134
Methylene Chloride	25.0	27.9		ug/L		112	75 - 124
Styrene	25.0	24.7		ug/L		99	80 - 120
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	24.8		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	25.5		ug/L		102	62 - 150
Vinyl chloride	25.0	24.0		ug/L		96	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: 480-163304-2 MS
Matrix: Water
Analysis Batch: 507223

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	28.0		ug/L		112	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		25.0	27.2		ug/L		109	61 - 148
1,1,2-Trichloroethane	ND		25.0	25.3		ug/L		101	76 - 122

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-163304-1

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

Lab Sample ID: 480-163304-2 MS
Matrix: Water
Analysis Batch: 507223

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		25.0	26.1		ug/L		105	77 - 120
1,1-Dichloroethene	ND		25.0	27.5		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	27.8		ug/L		111	56 - 134
1,2-Dibromoethane	ND		25.0	27.1		ug/L		108	77 - 120
1,2-Dichlorobenzene	ND		25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	75 - 120
1,2-Dichloropropane	ND		25.0	26.4		ug/L		106	76 - 120
1,3-Dichlorobenzene	ND		25.0	24.6		ug/L		98	77 - 120
1,4-Dichlorobenzene	ND		25.0	24.3		ug/L		97	78 - 124
2-Butanone (MEK)	ND		125	135		ug/L		108	57 - 140
2-Hexanone	ND		125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	131		ug/L		105	71 - 125
Acetone	ND		125	117		ug/L		94	56 - 142
Benzene	ND		25.0	27.3		ug/L		109	71 - 124
Bromodichloromethane	ND		25.0	27.4		ug/L		110	80 - 122
Bromoform	ND		25.0	24.6		ug/L		98	61 - 132
Bromomethane	ND		25.0	25.5		ug/L		102	55 - 144
Carbon disulfide	ND		25.0	27.2		ug/L		109	59 - 134
Carbon tetrachloride	ND		25.0	28.5		ug/L		114	72 - 134
Chlorobenzene	ND		25.0	24.9		ug/L		100	80 - 120
Chloroethane	ND		25.0	25.2		ug/L		101	69 - 136
Chloroform	ND		25.0	27.9		ug/L		112	73 - 127
Chloromethane	ND		25.0	23.5		ug/L		94	68 - 124
cis-1,2-Dichloroethene	ND		25.0	25.5		ug/L		102	74 - 124
cis-1,3-Dichloropropene	ND		25.0	26.5		ug/L		106	74 - 124
Cyclohexane	ND		25.0	26.2		ug/L		105	59 - 135
Dibromochloromethane	ND		25.0	28.1		ug/L		112	75 - 125
Dichlorodifluoromethane	ND		25.0	24.1		ug/L		96	59 - 135
Ethylbenzene	ND		25.0	25.7		ug/L		103	77 - 123
Isopropylbenzene	ND		25.0	26.3		ug/L		105	77 - 122
Methyl acetate	ND		50.0	48.1		ug/L		96	74 - 133
Methyl tert-butyl ether	ND		25.0	26.5		ug/L		106	77 - 120
Methylcyclohexane	ND		25.0	26.8		ug/L		107	68 - 134
Methylene Chloride	ND		25.0	27.6		ug/L		110	75 - 124
Styrene	ND		25.0	26.1		ug/L		104	80 - 120
Tetrachloroethene	45		25.0	64.4		ug/L		77	74 - 122
Toluene	ND		25.0	26.7		ug/L		107	80 - 122
trans-1,2-Dichloroethene	ND		25.0	26.9		ug/L		108	73 - 127
trans-1,3-Dichloropropene	ND		25.0	26.8		ug/L		107	80 - 120
Trichloroethene	44		25.0	63.4		ug/L		77	74 - 123
Trichlorofluoromethane	ND		25.0	26.6		ug/L		106	62 - 150
Vinyl chloride	ND		25.0	26.4		ug/L		105	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

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

Lab Sample ID: 480-163304-2 MS
Matrix: Water
Analysis Batch: 507223

Client Sample ID: MW-5
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 480-163304-2 MSD
Matrix: Water
Analysis Batch: 507223

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	29.7		ug/L		119	73 - 126	6	15
1,1,2,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	76 - 120	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.1		ug/L		113	61 - 148	3	20
1,1,2-Trichloroethane	ND		25.0	27.2		ug/L		109	76 - 122	7	15
1,1-Dichloroethane	ND		25.0	28.2		ug/L		113	77 - 120	8	20
1,1-Dichloroethene	ND		25.0	29.2		ug/L		117	66 - 127	6	16
1,2,4-Trichlorobenzene	ND		25.0	22.7		ug/L		91	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	27.7		ug/L		111	56 - 134	0	15
1,2-Dibromoethane	ND		25.0	27.5		ug/L		110	77 - 120	2	15
1,2-Dichlorobenzene	ND		25.0	24.3		ug/L		97	80 - 124	1	20
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	75 - 120	8	20
1,2-Dichloropropane	ND		25.0	28.5		ug/L		114	76 - 120	8	20
1,3-Dichlorobenzene	ND		25.0	24.8		ug/L		99	77 - 120	1	20
1,4-Dichlorobenzene	ND		25.0	24.6		ug/L		98	78 - 124	1	20
2-Butanone (MEK)	ND		125	148		ug/L		118	57 - 140	9	20
2-Hexanone	ND		125	143		ug/L		114	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)	ND		125	138		ug/L		110	71 - 125	5	35
Acetone	ND		125	132		ug/L		106	56 - 142	12	15
Benzene	ND		25.0	29.5		ug/L		118	71 - 124	8	13
Bromodichloromethane	ND		25.0	29.8		ug/L		119	80 - 122	8	15
Bromoform	ND		25.0	26.4		ug/L		106	61 - 132	7	15
Bromomethane	ND		25.0	27.5		ug/L		110	55 - 144	8	15
Carbon disulfide	ND		25.0	28.9		ug/L		116	59 - 134	6	15
Carbon tetrachloride	ND		25.0	30.0		ug/L		120	72 - 134	5	15
Chlorobenzene	ND		25.0	26.1		ug/L		104	80 - 120	5	25
Chloroethane	ND		25.0	27.2		ug/L		109	69 - 136	8	15
Chloroform	ND		25.0	29.4		ug/L		118	73 - 127	5	20
Chloromethane	ND		25.0	26.1		ug/L		104	68 - 124	10	15
cis-1,2-Dichloroethene	ND		25.0	28.3		ug/L		113	74 - 124	10	15
cis-1,3-Dichloropropene	ND		25.0	29.4		ug/L		118	74 - 124	10	15
Cyclohexane	ND		25.0	27.2		ug/L		109	59 - 135	4	20
Dibromochloromethane	ND		25.0	30.6		ug/L		122	75 - 125	8	15
Dichlorodifluoromethane	ND		25.0	24.5		ug/L		98	59 - 135	2	20
Ethylbenzene	ND		25.0	26.7		ug/L		107	77 - 123	4	15
Isopropylbenzene	ND		25.0	27.0		ug/L		108	77 - 122	3	20
Methyl acetate	ND		50.0	51.3		ug/L		103	74 - 133	6	20
Methyl tert-butyl ether	ND		25.0	28.4		ug/L		114	77 - 120	7	37
Methylcyclohexane	ND		25.0	27.7		ug/L		111	68 - 134	3	20
Methylene Chloride	ND		25.0	30.1		ug/L		120	75 - 124	9	15
Styrene	ND		25.0	26.8		ug/L		107	80 - 120	3	20
Tetrachloroethene	45		25.0	67.4		ug/L		89	74 - 122	5	20

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

Lab Sample ID: 480-163304-2 MSD
Client Sample ID: MW-5
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 507223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	ND		25.0	27.3		ug/L		109	80 - 122	2	15
trans-1,2-Dichloroethene	ND		25.0	29.3		ug/L		117	73 - 127	8	20
trans-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	80 - 120	6	15
Trichloroethene	44		25.0	68.3		ug/L		96	74 - 123	7	16
Trichlorofluoromethane	ND		25.0	27.9		ug/L		112	62 - 150	5	20
Vinyl chloride	ND		25.0	28.6		ug/L		114	65 - 133	8	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*111*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

GC/MS VOA

Analysis Batch: 507035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-163304-1	MW-4	Total/NA	Water	8260C	
480-163304-2	MW-5	Total/NA	Water	8260C	
480-163304-3	MW-6	Total/NA	Water	8260C	
480-163304-4	MW-9	Total/NA	Water	8260C	
480-163304-5	MW-12	Total/NA	Water	8260C	
480-163304-6	BD	Total/NA	Water	8260C	
480-163304-7	MW-2	Total/NA	Water	8260C	
MB 480-507035/7	Method Blank	Total/NA	Water	8260C	
LCS 480-507035/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 507223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-507223/6	Method Blank	Total/NA	Water	8260C	
LCS 480-507223/4	Lab Control Sample	Total/NA	Water	8260C	
480-163304-2 MS	MW-5	Total/NA	Water	8260C	
480-163304-2 MSD	MW-5	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

Client Sample ID: MW-4
Lab Sample ID: 480-163304-1
Date Collected: 11/25/19 10:30
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 15:13	CDC	TAL BUF

Client Sample ID: MW-5
Lab Sample ID: 480-163304-2
Date Collected: 11/25/19 09:30
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 15:37	CDC	TAL BUF

Client Sample ID: MW-6
Lab Sample ID: 480-163304-3
Date Collected: 11/25/19 15:00
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 16:01	CDC	TAL BUF

Client Sample ID: MW-9
Lab Sample ID: 480-163304-4
Date Collected: 11/25/19 14:00
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 16:25	CDC	TAL BUF

Client Sample ID: MW-12
Lab Sample ID: 480-163304-5
Date Collected: 11/25/19 11:30
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 16:49	CDC	TAL BUF

Client Sample ID: BD
Lab Sample ID: 480-163304-6
Date Collected: 11/25/19 15:05
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 17:12	CDC	TAL BUF

Client Sample ID: MW-2
Lab Sample ID: 480-163304-7
Date Collected: 11/25/19 13:00
Matrix: Water
Date Received: 11/26/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	507035	11/27/19 17:36	CDC	TAL BUF

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: 480-163304-1
Project/Site: Benchmark - Despatch 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: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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
Job ID: 480-163304-1
Project/Site: Benchmark - Despatch site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-163304-1	MW-4	Water	11/25/19 10:30	11/26/19 15:30	
480-163304-2	MW-5	Water	11/25/19 09:30	11/26/19 15:30	
480-163304-3	MW-6	Water	11/25/19 15:00	11/26/19 15:30	
480-163304-4	MW-9	Water	11/25/19 14:00	11/26/19 15:30	
480-163304-5	MW-12	Water	11/25/19 11:30	11/26/19 15:30	
480-163304-6	BD	Water	11/25/19 15:05	11/26/19 15:30	
480-163304-7	MW-2	Water	11/25/19 13:00	11/26/19 15:30	

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

288876

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Lori Riker	Site Contact: Vicki Sutton	Date: 11/25/19	COC No:
Company Name: Benchmark EES	Tel/Fax: 716-713-3437	Lab Contact: Brian Fisher	Carrier: BMTK	____ of ____ COCs
Address: 2558 Hamburg Pike	Analysis Turnaround Time			Sampler:
City/State/Zip: Buffalo, NY, 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 716-713-3437	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Sampling:
Project Name: Despatch	☐ 1 week			
Site:	☐ 2 days			/ SDG No.:
P O # 60040-002-400	☐ 1 day			

480-163304 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC's	Sample Specific Notes:
MW-4	11/25/19	10:30	G	Aq	3			X	
MW-5		9:30			8		X	X	
MW-6		15:00			3			X	
MW-9		14:00			3			X	
MW-12		11:30			3			X	
~~DUP~~ BD		15:05			3			X	
MW-2		13:00			3			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____ 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for____ Months

Special Instructions/QC Requirements & Comments:
Cat B, NYSDEC Equis 1.6 #1

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:____ Corr'd:____	Therm ID No.:____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	BMTK	11/26/19 15:15		TAB	11-26-19 15:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

12/5/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-163304-1

Login Number: 163304

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Harper, Marcus D

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 | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-164310-1
Client Project/Site: Benchmark - Despatch site

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

Attn: Ms. Lori E. Riker

Authorized for release by:
12/24/2019 11:28:22 AM

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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 480-164310-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-164310-1

Comments
No additional comments.

Receipt
The samples were received on 12/16/2019 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
Method 8260C: The laboratory control sample (LCS) for analytical batch 480-510697 recovered outside control limits for the following analyte: 1,2,4-Trichlorobenzene. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-510697 recovered above the upper control limit for Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW-1R (480-164310-1) and MW-5 (480-164310-2).

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

Client Sample ID: PW-1R
Lab Sample ID: 480-164310-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	3.0	ug/L	1		8260C	Total/NA
Tetrachloroethene	10		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	22		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5
Lab Sample ID: 480-164310-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.8	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

Client Sample ID: PW-1R
Date Collected: 12/11/19 14:00
Date Received: 12/16/19 11:00

Lab Sample ID: 480-164310-1
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			12/19/19 01:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/19 01:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/19/19 01:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/19 01:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/19 01:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/19 01:23	1
1,2,4-Trichlorobenzene	ND	*	1.0	0.41	ug/L			12/19/19 01:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/19/19 01:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/19/19 01:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/19/19 01:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/19 01:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/19 01:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/19/19 01:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/19/19 01:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/19 01:23	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/19 01:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/19 01:23	1
Acetone	**4.1**	**J**	10	3.0	ug/L			12/19/19 01:23	1
Benzene	ND		1.0	0.41	ug/L			12/19/19 01:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/19 01:23	1
Bromoform	ND		1.0	0.26	ug/L			12/19/19 01:23	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/19 01:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/19 01:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/19 01:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/19 01:23	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/19 01:23	1
Chloroform	ND		1.0	0.34	ug/L			12/19/19 01:23	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/19 01:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/19/19 01:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/19 01:23	1
Cyclohexane	ND		1.0	0.18	ug/L			12/19/19 01:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/19 01:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/19/19 01:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/19 01:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/19/19 01:23	1
Methyl acetate	ND		2.5	1.3	ug/L			12/19/19 01:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/19/19 01:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/19/19 01:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/19 01:23	1
Styrene	ND		1.0	0.73	ug/L			12/19/19 01:23	1
Tetrachloroethene	**10**		1.0	0.36	ug/L			12/19/19 01:23	1
Toluene	ND		1.0	0.51	ug/L			12/19/19 01:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/19/19 01:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/19 01:23	1
Trichloroethene	**22**		1.0	0.46	ug/L			12/19/19 01:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/19/19 01:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/19 01:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/19 01:23	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

Client Sample ID: PW-1R
Date Collected: 12/11/19 14:00
Date Received: 12/16/19 11:00

Lab Sample ID: 480-164310-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		77 - 120		12/19/19 01:23	1
4-Bromofluorobenzene (Surr)	112		73 - 120		12/19/19 01:23	1
Dibromofluoromethane (Surr)	111		75 - 123		12/19/19 01:23	1
Toluene-d8 (Surr)	97		80 - 120		12/19/19 01:23	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

Client Sample ID: MW-5
Date Collected: 12/11/19 15:00
Date Received: 12/16/19 11:00

Lab Sample ID: 480-164310-2
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			12/19/19 01:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/19 01:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/19/19 01:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/19 01:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/19 01:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/19 01:48	1
1,2,4-Trichlorobenzene	ND	*	1.0	0.41	ug/L			12/19/19 01:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/19/19 01:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/19/19 01:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/19/19 01:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/19 01:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/19 01:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/19/19 01:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/19/19 01:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/19 01:48	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/19 01:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/19 01:48	1
Acetone	**6.8**	**J**	10	3.0	ug/L			12/19/19 01:48	1
Benzene	ND		1.0	0.41	ug/L			12/19/19 01:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/19 01:48	1
Bromoform	ND		1.0	0.26	ug/L			12/19/19 01:48	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/19 01:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/19 01:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/19 01:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/19 01:48	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/19 01:48	1
Chloroform	ND		1.0	0.34	ug/L			12/19/19 01:48	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/19 01:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/19/19 01:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/19 01:48	1
Cyclohexane	ND		1.0	0.18	ug/L			12/19/19 01:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/19 01:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/19/19 01:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/19 01:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/19/19 01:48	1
Methyl acetate	ND		2.5	1.3	ug/L			12/19/19 01:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/19/19 01:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/19/19 01:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/19 01:48	1
Styrene	ND		1.0	0.73	ug/L			12/19/19 01:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/19 01:48	1
Toluene	ND		1.0	0.51	ug/L			12/19/19 01:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/19/19 01:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/19 01:48	1
Trichloroethene	ND		1.0	0.46	ug/L			12/19/19 01:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/19/19 01:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/19 01:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/19 01:48	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

Client Sample ID: MW-5
Date Collected: 12/11/19 15:00
Date Received: 12/16/19 11:00

Lab Sample ID: 480-164310-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		77 - 120		12/19/19 01:48	1
4-Bromofluorobenzene (Surr)	108		73 - 120		12/19/19 01:48	1
Dibromofluoromethane (Surr)	108		75 - 123		12/19/19 01:48	1
Toluene-d8 (Surr)	103		80 - 120		12/19/19 01:48	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-164310-1	PW-1R	114	112	111	97
480-164310-2	MW-5	113	108	108	103
LCS 480-510697/5	Lab Control Sample	109	115	102	101
MB 480-510697/7	Method Blank	112	108	104	98

Surrogate Legend

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

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

Lab Sample ID: MB 480-510697/7
Matrix: Water
Analysis Batch: 510697

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/18/19 21:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/18/19 21:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/18/19 21:08	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/18/19 21:08	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/18/19 21:08	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/18/19 21:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/18/19 21:08	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/18/19 21:08	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/18/19 21:08	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/18/19 21:08	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/18/19 21:08	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/18/19 21:08	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/18/19 21:08	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/18/19 21:08	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/18/19 21:08	1
2-Hexanone	ND		5.0	1.2	ug/L			12/18/19 21:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/18/19 21:08	1
Acetone	ND		10	3.0	ug/L			12/18/19 21:08	1
Benzene	ND		1.0	0.41	ug/L			12/18/19 21:08	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/18/19 21:08	1
Bromoform	ND		1.0	0.26	ug/L			12/18/19 21:08	1
Bromomethane	ND		1.0	0.69	ug/L			12/18/19 21:08	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/18/19 21:08	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/18/19 21:08	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/18/19 21:08	1
Chloroethane	ND		1.0	0.32	ug/L			12/18/19 21:08	1
Chloroform	ND		1.0	0.34	ug/L			12/18/19 21:08	1
Chloromethane	ND		1.0	0.35	ug/L			12/18/19 21:08	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/18/19 21:08	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/18/19 21:08	1
Cyclohexane	ND		1.0	0.18	ug/L			12/18/19 21:08	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/18/19 21:08	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/18/19 21:08	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/18/19 21:08	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/18/19 21:08	1
Methyl acetate	ND		2.5	1.3	ug/L			12/18/19 21:08	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/18/19 21:08	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/18/19 21:08	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/18/19 21:08	1
Styrene	ND		1.0	0.73	ug/L			12/18/19 21:08	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/18/19 21:08	1
Toluene	ND		1.0	0.51	ug/L			12/18/19 21:08	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/18/19 21:08	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/18/19 21:08	1
Trichloroethene	ND		1.0	0.46	ug/L			12/18/19 21:08	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/18/19 21:08	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/18/19 21:08	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/18/19 21:08	1

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

Lab Sample ID: MB 480-510697/7
Matrix: Water
Analysis Batch: 510697

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		12/18/19 21:08	1
4-Bromofluorobenzene (Surr)	108		73 - 120		12/18/19 21:08	1
Dibromofluoromethane (Surr)	104		75 - 123		12/18/19 21:08	1
Toluene-d8 (Surr)	98		80 - 120		12/18/19 21:08	1

Lab Sample ID: LCS 480-510697/5
Matrix: Water
Analysis Batch: 510697

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	29.7		ug/L		119	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.9		ug/L		111	61 - 148
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	76 - 122
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.8		ug/L		103	66 - 127
1,2,4-Trichlorobenzene	25.0	32.4	*	ug/L		130	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.8		ug/L		103	56 - 134
1,2-Dibromoethane	25.0	27.8		ug/L		111	77 - 120
1,2-Dichlorobenzene	25.0	30.0		ug/L		120	80 - 124
1,2-Dichloroethane	25.0	27.6		ug/L		110	75 - 120
1,2-Dichloropropane	25.0	23.5		ug/L		94	76 - 120
1,3-Dichlorobenzene	25.0	29.4		ug/L		118	77 - 120
1,4-Dichlorobenzene	25.0	29.2		ug/L		117	80 - 120
2-Butanone (MEK)	125	110		ug/L		88	57 - 140
2-Hexanone	125	119		ug/L		95	65 - 127
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		94	71 - 125
Acetone	125	114		ug/L		91	56 - 142
Benzene	25.0	25.0		ug/L		100	71 - 124
Bromodichloromethane	25.0	28.1		ug/L		112	80 - 122
Bromoform	25.0	30.7		ug/L		123	61 - 132
Bromomethane	25.0	27.8		ug/L		111	55 - 144
Carbon disulfide	25.0	25.0		ug/L		100	59 - 134
Carbon tetrachloride	25.0	30.3		ug/L		121	72 - 134
Chlorobenzene	25.0	27.6		ug/L		110	80 - 120
Chloroethane	25.0	24.1		ug/L		96	69 - 136
Chloroform	25.0	26.6		ug/L		106	73 - 127
Chloromethane	25.0	22.1		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	74 - 124
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124
Cyclohexane	25.0	24.3		ug/L		97	59 - 135
Dibromochloromethane	25.0	30.2		ug/L		121	75 - 125
Dichlorodifluoromethane	25.0	32.5		ug/L		130	59 - 135
Ethylbenzene	25.0	27.3		ug/L		109	77 - 123
Isopropylbenzene	25.0	28.8		ug/L		115	77 - 122
Methyl acetate	50.0	43.7		ug/L		87	74 - 133
Methyl tert-butyl ether	25.0	27.6		ug/L		111	77 - 120
Methylcyclohexane	25.0	26.8		ug/L		107	68 - 134

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Despatch site

Job ID: 480-164310-1

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

Lab Sample ID: LCS 480-510697/5
Matrix: Water
Analysis Batch: 510697

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	26.3		ug/L		105	75 - 124
Styrene	25.0	29.5		ug/L		118	80 - 120
Tetrachloroethene	25.0	30.4		ug/L		122	74 - 122
Toluene	25.0	26.9		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
trans-1,3-Dichloropropene	25.0	28.4		ug/L		114	80 - 120
Trichloroethene	25.0	26.4		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	32.2		ug/L		129	62 - 150
Vinyl chloride	25.0	26.1		ug/L		104	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*
4-Bromofluorobenzene (Surr)	*115*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

GC/MS VOA

Analysis Batch: 510697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-164310-1	PW-1R	Total/NA	Water	8260C	
480-164310-2	MW-5	Total/NA	Water	8260C	
MB 480-510697/7	Method Blank	Total/NA	Water	8260C	
LCS 480-510697/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

Client Sample ID: PW-1R
Lab Sample ID: 480-164310-1
Date Collected: 12/11/19 14:00
Matrix: Water
Date Received: 12/16/19 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	510697	12/19/19 01:23	LCH	TAL BUF

Client Sample ID: MW-5
Lab Sample ID: 480-164310-2
Date Collected: 12/11/19 15:00
Matrix: Water
Date Received: 12/16/19 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	510697	12/19/19 01:48	LCH	TAL BUF

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: 480-164310-1
Project/Site: Benchmark - Despatch 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: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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
Job ID: 480-164310-1
Project/Site: Benchmark - Despatch site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-164310-1	PW-1R	Water	12/11/19 14:00	12/16/19 11:00	
480-164310-2	MW-5	Water	12/11/19 15:00	12/16/19 11:00	

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

306184

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	
Company Name:	BenchMark EES
Address:	2558 Hamburg Tpke
City/State/Zip:	Buffalo, NY 14218
Phone:	716-713-3937
Fax:	
Project Name:	DesPatch
Site:	Despatch, East Rochester
P O #	B0040-032-400

Project Manager: Lori Riker/
Tel/Fax: 716-713-3937
Site Contact: Nick Schmitt
Lab Contact: Brian Fischer
Date:
Carrier:
COC No: ____ of ____ COCs
Sampler:
For Lab Use Only:
n Client:
ampling:
SDG No.:

480-164310 Chain of Custody

Analysis Turnaround Time
☐ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below ______
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC's	Sample Specific Notes:
PW-1R	12/11/19	14:00	G	GW	3			X	
MW-5	12/11/19	15:00	G	GW	3			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for______ Months

Special Instructions/QC Requirements & Comments:
Cat B, NYSDEC EQuIS
2.0 #1

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temp. (°C): Obs'd:______ Corr'd:______ Therm ID No.:______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	BenchMark	12/16/19 11:00	C Walker	TAB	12/16/19 1100
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-164310-1

Login Number: 164310

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Harper, Marcus D

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	