Periodic Review Report

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

December 2018 0040-002-400

Prepared For:

Despatch Industries, Inc.

Prepared By:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

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PERIODIC REVIEW REPORT

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

EAST ROCHESTER, NEW YORK

December 2018 0040-002-400

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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 July 31, 2016 to December 31, 2018.

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 is presently vacant and unoccupied except for periodic maintenance by the building owner.

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.

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.

1.2.3 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] 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. 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).

1.3 Compliance and Recommendations

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.

A Corrective Action Plan was submitted and approved by the Department in April 2017 due to failure of the gPRO® system. The Corrective Action Plan identified the scope of planned corrective action 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. 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). Groundwater sampling results are discussed in Section 3.1.2.

The site photo log is included in Appendix B. At the time of the Site inspection (December 12, 2018), the Site remedial components were compliant with the Department's approved SMP and the gPRO® system was shut down due to clogging of the injection wells.

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.

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).

During the 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 C.

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 on November 2017, February 2018, June 2018, August 2018 (MW-6 only) and October 2018 (MW-6 only).

As indicated on Table 1, tetrachloroethene (PCE) and trichloroethene (TCE) levels have dropped off significantly following the February 2018 post injection sampling event. In response to the favorable data, the Department recommended a temporary shutdown of the groundwater pump and treat system to avoid removing any of the PlumeStop® amendment from the aquifer and to evaluate how the injection exclusively works. The groundwater collection and pretreatment systems were shut down in May 2018 and have remained off since that time. During the June 2018 sampling event, chlorinated volatile organic compound (cVOC) concentrations have remained non-detect or at low levels at MW-5 and PW-1R. An increase of cVOCs was observed in MW-6. However, concentrations remain below historic pre-injection levels.

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

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 December 12, 2018.

At the time of the inspection, the property was vacant. 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 B.

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.

- 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.

- Groundwater Monitoring – Groundwater monitoring (6 events) was completed between July 2017 and October 2018.

- 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 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

At the time of the Site inspection, the Site was 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:

- It is possible that the partial rebound in the source area may be attributable to water table recovery since the groundwater collection system was shut down, which would allow contact with overlying impacted overburden soils. Based on discussions with Regenesis Remedial Solutions, an additional 55 gallons of PlumeStop® will be introduced into MW-6, followed by a brief period (4 weeks +/-) of attenuation and then the addition of approximately 6 gallons of 2% calcium chloride to help break up colloids and assure that the PlumeStop clings to surrounding soil. Resampling of MW-5 and MW-6 will occur approximately 4 weeks following these steps.
- Decommissioning of gPRO reinjection system pending final approval.

5.0 DECLARATION/LIMITATION

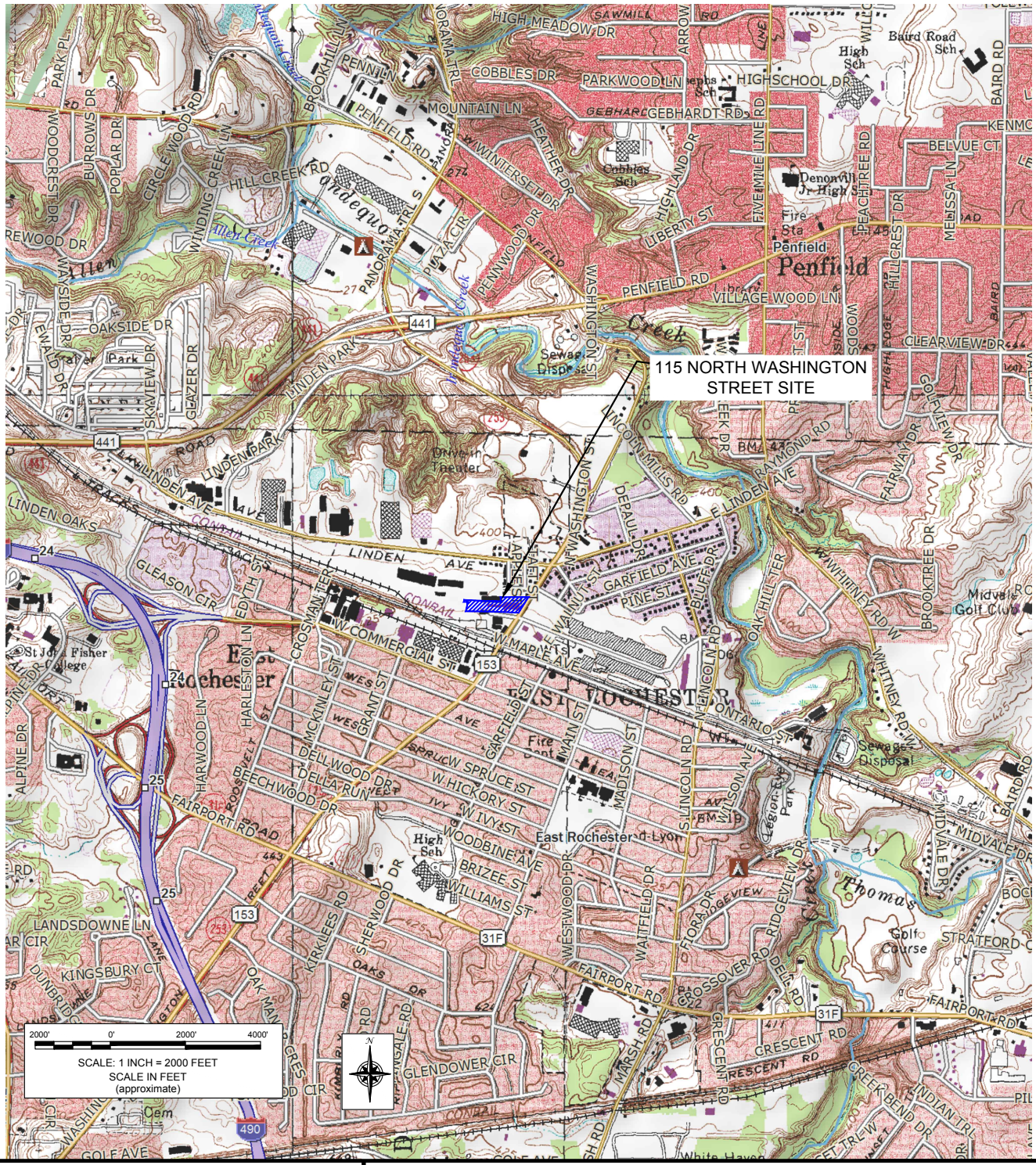
Benchmark Environmental Engineering and Science, PLLC, personnel conducted the annual site inspection for Voluntary Cleanup Program Site No. V00519-8, East Rochester, New York, according to generally accepted practices. This report complied with the scope of work provided to Despatch Industries, Inc.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

FIGURES

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

FIGURE 1



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PROJECT NO.: 0040-002-400

DATE: AUGUST 2016

DRAFTED BY: RFL

SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

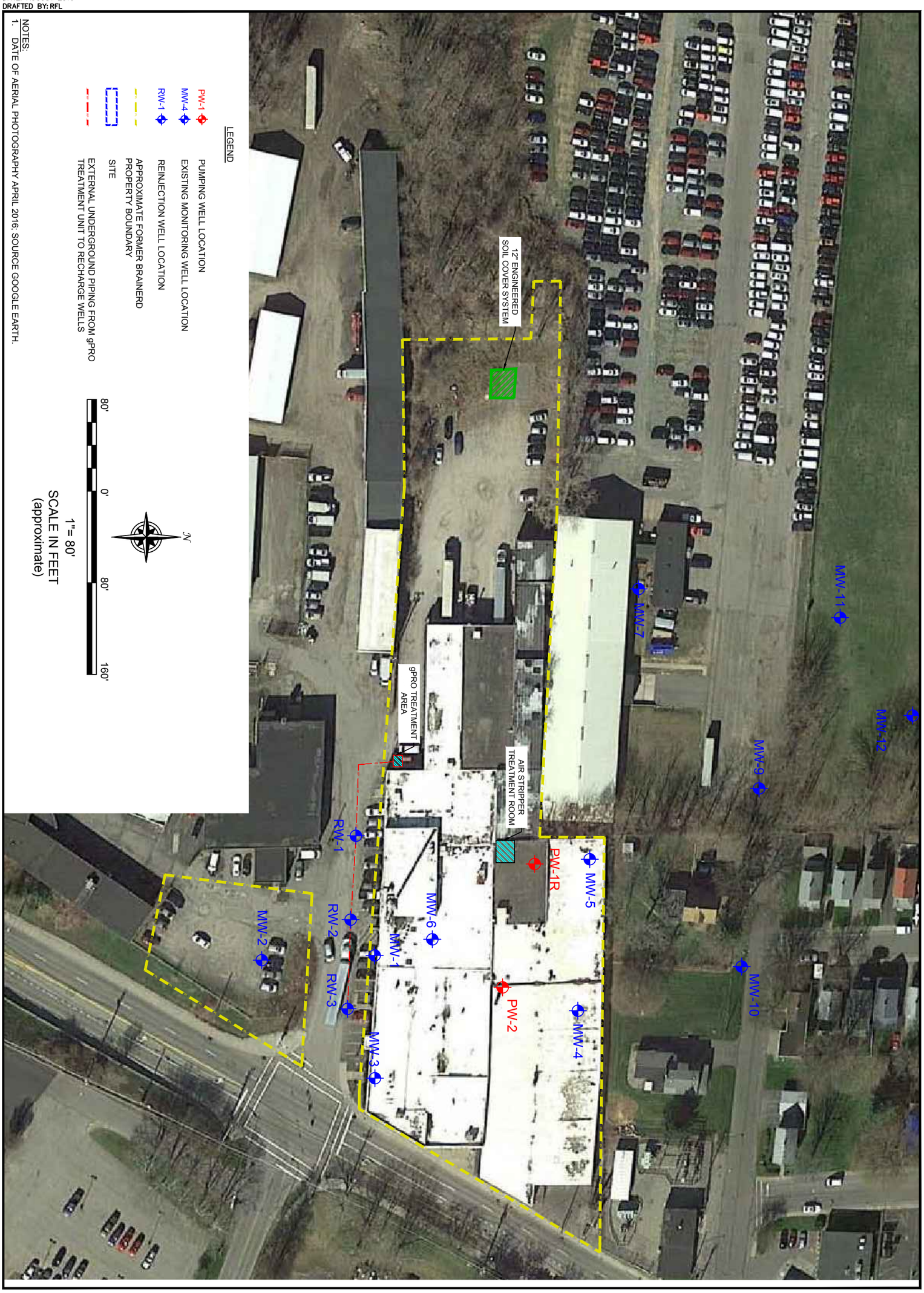
FORMER BRAINERD MANUFACTURING FACILITY
EAST ROCHESTER, NEW YORK
NYSDEC SITE NO. V00519-8

PREPARED FOR

DESPATCH INDUSTRIES, INC.

F:\CAD\Benchmark\Despatch\PRR\Figure 2; Site Plan.dwg

DATE: AUGUST 2016
DRAFTED BY: RFL



SITE PLAN AND AERIAL

PERIODIC REVIEW REPORT

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

PREPARED FOR

DESPATCH INDUSTRIES, INC.

FIGURE 2

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TABLES

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

CORRECTIVE ACTION PLAN
Former Brainerd Manufacturing Facility
East Rochester, New York

Parameter[1]	GWQS/GV[3]	Monitoring Well Location																																			
		MW-5													MW-6																		PW-1R							
		Historic Groundwater Sampling Events									Pre-Injection	Post-Injection	Post-Injection	Post-Injection	Historic Groundwater Sampling Events									Pre-Injection	Post-Injection						Historic Groundwater Sampling Events				Pre-Injection	Post-Injection	Post-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	08/22/06	01/30/12	03/05/13	06/26/13	09/25/13	12/04/13	06/04/14	06/04/15	06/28/16	07/10/17	11/30/17	02/27/18	06/04/18	08/08/18	10/29/18	1/30/12	6/4/14	6/4/15	6/28/16	07/10/17	11/30/17	02/27/18	06/04/18
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	ND	ND	ND	5.0 J	ND	ND	ND	ND	*ND < 150*	49	12 J	ND	ND	ND	ND	13	6.9 J	ND	30 J	6.0 J	8.2 J
Bromodichloromethane	**5**	ND	ND	0.51 J	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND	4.4	0.47 J	ND	ND	ND	ND	ND	ND	ND	*ND < 20*	ND	ND	ND	ND	ND	1.8 J	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	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	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 66*	8.7 J	ND	ND	ND	ND	ND	ND	ND	**160**	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	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	*ND < 16*	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	**87**	ND	ND	ND	*ND < 22*	ND	ND	3.8 J	3.8 J	ND	**12**	ND	ND	ND	2.4 J	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	**NR**	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	2 J	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	3.2 J	0.95 J	ND	ND	ND	1.6	ND	ND	ND	ND	*ND < 26*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	1.4 J	1.3	**18**	ND	ND	ND	ND	ND	0.98 J	ND	ND	ND	ND	ND	**14**	2	ND	ND	0.51 J	ND	ND	ND	ND	*ND < 17*	ND	ND	ND	ND	1.1	1.3 J	0.72 J	ND	ND	ND	0.44 J	ND
Tetrachloroethene	**5**	**1600**	**2800**	**590**	**400**	**150**	**110**	**50**	**40**	**530 D**	**14**	ND	ND	ND	**3100**	**1700**	**410**	**1600**	**1300**	**1600**	**1500**	**570**	**1200**	**390**	**90**	3.5 J	**120**	**290**	**170**	**360**	**92**	**160**	**120**	**100**	ND	0.74 J	2.9
Trichloroethene	**5**	**1400**	**1500**	**260**	**240**	**59**	**52**	**23**	**20**	**330 D**	**8.5**	ND	ND	ND	**1500**	**660**	**95**	**520**	**450**	**570**	**560**	**130**	**340**	**110**	**51**	4.9	**88**	**130**	**140**	**220**	**75**	**94**	**71**	**70**	ND	4.7	**13**
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	*ND < 44*	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	ND	ND	ND	ND	ND	ND	ND	*ND < 15*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**5**	0.80 J	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*ND < 41*	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	ND	ND	ND	ND	ND	ND	ND	*ND < 45*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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*	**16 J**	4	ND	ND	ND	3.8	ND	ND	ND	ND	*ND < 41*	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	*ND < 12*	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	*ND < 19*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	**5**	--	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	ND	*ND < 16*	ND	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND
Total Chlorinated VOCs[4]	**NA**	**3,000**	**4,302**	**850**	**640**	**209**	**162**	**73**	**60**	**860**	**23**	**0**	**0**	**0**	**4,600**	**2,360**	**505**	**2,120**	**1,750**	**2,170**	**2,060**	**700**	**1,540**	**500**	**141**	**8.4**	**208**	**420**	**310**	**580**	**167**	**254**	**191**	**170**	**0.0**	**5.4**	**16**

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. The enhanced hydrogen injection began operation in July 2012.

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
N* = Indicates the spike or duplicate analysis is not within the quality control limits
"--" = Not analyzed
" ** " = Field threshold value; when exceeded, field filtered metals sample is collected (i.e., dissolved metals).

BOLD = Analytical result exceeds individual GWQS/GV.

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: November 24, 2014 to December 31, 2018

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

Box 2

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

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	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	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
X	☐

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
X	☐

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 (print name) at 4420 Exeter Dr unit L206, Longboat Key FL 34228 (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] 12/21/18

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

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I Thomas Forbes at Benchmark Environmental Engineering 2558 Hamburg Turnpike

print name print business address

am certifying as a Professional Engineer for the Remedial Party

(Owner or Remedial Party)

STATE OF NEW YORK THOMAS H. FORBES LICENSED PROFESSIONAL ENGINEER

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

Stamp (Required for PE)

12-21-18

Date

APPENDIX B

SITE PHOTOGRAPHIC LOG

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	12/12/18

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	12/12/18

Direction Photo Taken:
East

Description:
West side of building.

Prepared By: *RLD*

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	12/12/18

Direction Photo Taken:
North

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

Photo No.	Date
4	12/12/18

Direction Photo Taken:
North

Description:
ASD Manometer and extraction point near hallway.

Prepared By: *RLD*

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	12/12/18

Direction Photo Taken:
North

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

Photo No.	Date
6	12/12/18

Direction Photo Taken:
South

Description:
ASD Manometer and extraction in office area.

Prepared By: *RLD*

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	12/12/18

Direction Photo Taken:
West

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

Photo No.	Date
8	12/12/18

Direction Photo Taken:
South

Description:
ASD Manometer and extraction in basement area.

Prepared By: *RLD*

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	12/12/18

Direction Photo Taken:
West

Description:
Groundwater treatment system.

Prepared By: *RLD*

APPENDIX C

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

APPENDIX D

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: 480-120860-1
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:
7/21/2017 11:39:15 AM
Ryan VanDette, Project Manager II
(716)504-9830
ryan.vandette@testamericainc.com

Designee for

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

Table of Contents

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.

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)

Case Narrative

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

TestAmerica Job ID: 480-120860-1

Job ID: 480-120860-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120860-1

Comments
No additional comments.

Receipt
The samples were received on 7/11/2017 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW-1R (480-120860-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-367785 recovered outside acceptance criteria, low biased, for Vinyl chloride, tert-Butylbenzene, Chloromethane, Methylcyclohexane and Trichlorofluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: PW-1R (480-120860-3).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-367785 recovered outside control limits for the following analytes: 2-Hexanone, 2-Butanone. 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: PW-1R (480-120860-3).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-6 (480-120860-2). Elevated reporting limits (RLs) are provided.

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

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

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

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

Detection Summary

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

TestAmerica Job ID: 480-120860-1

Client Sample ID: MW-5 — Lab Sample ID: 480-120860-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.3	J	10	3.0	ug/L	1		8260C	Total/NA
Tetrachloroethene	14		1.0	0.36	ug/L	1		8260C	Total/NA
Toluene	2.6		1.0	0.51	ug/L	1		8260C	Total/NA
Trichloroethene	8.5		1.0	0.46	ug/L	1		8260C	Total/NA
Iron	9.7		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	0.34		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon	2.3		1.0		mg/L	1		9060A	Total/NA
Sulfate	13.6		5.0		mg/L	1		D516-90, 02	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-120860-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	390	F1	10	3.6	ug/L	10		8260C	Total/NA
Trichloroethene	110		10	4.6	ug/L	10		8260C	Total/NA
Iron	3.4		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	2.5		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon	1.9		1.0		mg/L	1		9060A	Total/NA
Sulfate	530		75.0		mg/L	15		D516-90, 02	Total/NA

Client Sample ID: PW-1R — Lab Sample ID: 480-120860-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	100		4.0	1.4	ug/L	4		8260C	Total/NA
Trichloroethene	70		4.0	1.8	ug/L	4		8260C	Total/NA
Nitrate as N	2.6		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon	1.4		1.0		mg/L	1		9060A	Total/NA
Sulfate	148		25.0		mg/L	5		D516-90, 02	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: 480-120860-1

Client Sample ID: MW-5
Date Collected: 07/10/17 15:40
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-1
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			07/20/17 13:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/20/17 13:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/20/17 13:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/20/17 13:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/20/17 13:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/20/17 13:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/20/17 13:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/20/17 13:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/20/17 13:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/20/17 13:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/20/17 13:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/20/17 13:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/20/17 13:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/20/17 13:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/20/17 13:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/20/17 13:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/20/17 13:27	1
2-Hexanone	ND		5.0	1.2	ug/L			07/20/17 13:27	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			07/20/17 13:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/20/17 13:27	1
Acetone	**7.3**	**J**	10	3.0	ug/L			07/20/17 13:27	1
Benzene	ND		1.0	0.41	ug/L			07/20/17 13:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/20/17 13:27	1
Bromoform	ND		1.0	0.26	ug/L			07/20/17 13:27	1
Bromomethane	ND		1.0	0.69	ug/L			07/20/17 13:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/20/17 13:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/20/17 13:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/20/17 13:27	1
Chloroethane	ND		1.0	0.32	ug/L			07/20/17 13:27	1
Chloroform	ND		1.0	0.34	ug/L			07/20/17 13:27	1
Chloromethane	ND		1.0	0.35	ug/L			07/20/17 13:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/20/17 13:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/20/17 13:27	1
Cyclohexane	ND		1.0	0.18	ug/L			07/20/17 13:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/20/17 13:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/20/17 13:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/20/17 13:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/20/17 13:27	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/20/17 13:27	1
Methyl acetate	ND		2.5	1.3	ug/L			07/20/17 13:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/20/17 13:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/20/17 13:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/20/17 13:27	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/20/17 13:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/17 13:27	1
o-Xylene	ND		1.0	0.76	ug/L			07/20/17 13:27	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/20/17 13:27	1
Styrene	ND		1.0	0.73	ug/L			07/20/17 13:27	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/20/17 13:27	1

Client Sample ID: MW-5
Date Collected: 07/10/17 15:40
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**14**		1.0	0.36	ug/L			07/20/17 13:27	1
Toluene	**2.6**		1.0	0.51	ug/L			07/20/17 13:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/20/17 13:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/20/17 13:27	1
Trichloroethene	**8.5**		1.0	0.46	ug/L			07/20/17 13:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/20/17 13:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/20/17 13:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/20/17 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*07/20/17 13:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*07/20/17 13:27*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/17 13:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			07/12/17 08:15	1
Ethane	ND		7.5	1.5	ug/L			07/12/17 08:15	1
Ethene	ND		7.0	1.5	ug/L			07/12/17 08:15	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**9.7**		0.050		mg/L		07/12/17 09:58	07/12/17 20:08	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		07/13/17 10:50	07/13/17 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.34**		0.050		mg/L			07/11/17 21:55	1
Total Organic Carbon	**2.3**		1.0		mg/L			07/18/17 00:22	1
Sulfate	**13.6**		5.0		mg/L			07/17/17 13:01	1

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

TestAmerica Job ID: 480-120860-1

Client Sample ID: MW-6
Date Collected: 07/10/17 14:50
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-2
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		10	8.2	ug/L			07/20/17 13:54	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/20/17 13:54	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/20/17 13:54	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/20/17 13:54	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/20/17 13:54	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/20/17 13:54	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/20/17 13:54	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			07/20/17 13:54	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/20/17 13:54	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/20/17 13:54	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/20/17 13:54	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/20/17 13:54	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/20/17 13:54	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			07/20/17 13:54	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/20/17 13:54	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/20/17 13:54	10
2-Butanone (MEK)	ND		100	13	ug/L			07/20/17 13:54	10
2-Hexanone	ND		50	12	ug/L			07/20/17 13:54	10
4-Isopropyltoluene	ND		10	3.1	ug/L			07/20/17 13:54	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/20/17 13:54	10
Acetone	ND		100	30	ug/L			07/20/17 13:54	10
Benzene	ND		10	4.1	ug/L			07/20/17 13:54	10
Bromodichloromethane	ND		10	3.9	ug/L			07/20/17 13:54	10
Bromoform	ND		10	2.6	ug/L			07/20/17 13:54	10
Bromomethane	ND		10	6.9	ug/L			07/20/17 13:54	10
Carbon disulfide	ND		10	1.9	ug/L			07/20/17 13:54	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/20/17 13:54	10
Chlorobenzene	ND		10	7.5	ug/L			07/20/17 13:54	10
Chloroethane	ND		10	3.2	ug/L			07/20/17 13:54	10
Chloroform	ND		10	3.4	ug/L			07/20/17 13:54	10
Chloromethane	ND		10	3.5	ug/L			07/20/17 13:54	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/20/17 13:54	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/20/17 13:54	10
Cyclohexane	ND		10	1.8	ug/L			07/20/17 13:54	10
Dibromochloromethane	ND		10	3.2	ug/L			07/20/17 13:54	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/20/17 13:54	10
Ethylbenzene	ND		10	7.4	ug/L			07/20/17 13:54	10
Isopropylbenzene	ND		10	7.9	ug/L			07/20/17 13:54	10
m,p-Xylene	ND		20	6.6	ug/L			07/20/17 13:54	10
Methyl acetate	ND		25	13	ug/L			07/20/17 13:54	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/20/17 13:54	10
Methylcyclohexane	ND		10	1.6	ug/L			07/20/17 13:54	10
Methylene Chloride	ND		10	4.4	ug/L			07/20/17 13:54	10
n-Butylbenzene	ND		10	6.4	ug/L			07/20/17 13:54	10
N-Propylbenzene	ND		10	6.9	ug/L			07/20/17 13:54	10
o-Xylene	ND		10	7.6	ug/L			07/20/17 13:54	10
sec-Butylbenzene	ND		10	7.5	ug/L			07/20/17 13:54	10
Styrene	ND		10	7.3	ug/L			07/20/17 13:54	10
tert-Butylbenzene	ND		10	8.1	ug/L			07/20/17 13:54	10

Client Sample ID: MW-6
Date Collected: 07/10/17 14:50
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**390**	**F1**	10	3.6	ug/L			07/20/17 13:54	10
Toluene	ND		10	5.1	ug/L			07/20/17 13:54	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/20/17 13:54	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/20/17 13:54	10
Trichloroethene	**110**		10	4.6	ug/L			07/20/17 13:54	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/20/17 13:54	10
Vinyl chloride	ND		10	9.0	ug/L			07/20/17 13:54	10
Xylenes, Total	ND		20	6.6	ug/L			07/20/17 13:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*77 - 120*		*07/20/17 13:54*	*10*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/20/17 13:54*	*10*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/20/17 13:54*	*10*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			07/12/17 08:32	1
Ethane	ND		7.5	1.5	ug/L			07/12/17 08:32	1
Ethene	ND		7.0	1.5	ug/L			07/12/17 08:32	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.4**		0.050		mg/L		07/12/17 09:58	07/12/17 20:11	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		07/13/17 10:50	07/13/17 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**2.5**		0.050		mg/L			07/11/17 21:56	1
Total Organic Carbon	**1.9**		1.0		mg/L			07/17/17 07:13	1
Sulfate	**530**		75.0		mg/L			07/17/17 15:01	15

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

TestAmerica Job ID: 480-120860-1

Client Sample ID: PW-1R
Date Collected: 07/10/17 16:15
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			07/20/17 06:43	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			07/20/17 06:43	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			07/20/17 06:43	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			07/20/17 06:43	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			07/20/17 06:43	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			07/20/17 06:43	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			07/20/17 06:43	4
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			07/20/17 06:43	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			07/20/17 06:43	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			07/20/17 06:43	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			07/20/17 06:43	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			07/20/17 06:43	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			07/20/17 06:43	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			07/20/17 06:43	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			07/20/17 06:43	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			07/20/17 06:43	4
2-Butanone (MEK)	ND	*	40	5.3	ug/L			07/20/17 06:43	4
2-Hexanone	ND	*	20	5.0	ug/L			07/20/17 06:43	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			07/20/17 06:43	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			07/20/17 06:43	4
Acetone	ND		40	12	ug/L			07/20/17 06:43	4
Benzene	ND		4.0	1.6	ug/L			07/20/17 06:43	4
Bromodichloromethane	ND		4.0	1.6	ug/L			07/20/17 06:43	4
Bromoform	ND		4.0	1.0	ug/L			07/20/17 06:43	4
Bromomethane	ND		4.0	2.8	ug/L			07/20/17 06:43	4
Carbon disulfide	ND		4.0	0.76	ug/L			07/20/17 06:43	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			07/20/17 06:43	4
Chlorobenzene	ND		4.0	3.0	ug/L			07/20/17 06:43	4
Chloroethane	ND		4.0	1.3	ug/L			07/20/17 06:43	4
Chloroform	ND		4.0	1.4	ug/L			07/20/17 06:43	4
Chloromethane	ND		4.0	1.4	ug/L			07/20/17 06:43	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			07/20/17 06:43	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			07/20/17 06:43	4
Cyclohexane	ND		4.0	0.72	ug/L			07/20/17 06:43	4
Dibromochloromethane	ND		4.0	1.3	ug/L			07/20/17 06:43	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			07/20/17 06:43	4
Ethylbenzene	ND		4.0	3.0	ug/L			07/20/17 06:43	4
Isopropylbenzene	ND		4.0	3.2	ug/L			07/20/17 06:43	4
m,p-Xylene	ND		8.0	2.6	ug/L			07/20/17 06:43	4
Methyl acetate	ND		10	5.2	ug/L			07/20/17 06:43	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			07/20/17 06:43	4
Methylcyclohexane	ND		4.0	0.64	ug/L			07/20/17 06:43	4
Methylene Chloride	ND		4.0	1.8	ug/L			07/20/17 06:43	4
n-Butylbenzene	ND		4.0	2.6	ug/L			07/20/17 06:43	4
N-Propylbenzene	ND		4.0	2.8	ug/L			07/20/17 06:43	4
o-Xylene	ND		4.0	3.0	ug/L			07/20/17 06:43	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			07/20/17 06:43	4
Styrene	ND		4.0	2.9	ug/L			07/20/17 06:43	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			07/20/17 06:43	4

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

TestAmerica Job ID: 480-120860-1

Client Sample ID: PW-1R
Date Collected: 07/10/17 16:15
Date Received: 07/11/17 16:20

Lab Sample ID: 480-120860-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**100**		4.0	1.4	ug/L			07/20/17 06:43	4
Toluene	ND		4.0	2.0	ug/L			07/20/17 06:43	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			07/20/17 06:43	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			07/20/17 06:43	4
Trichloroethene	**70**		4.0	1.8	ug/L			07/20/17 06:43	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			07/20/17 06:43	4
Vinyl chloride	ND		4.0	3.6	ug/L			07/20/17 06:43	4
Xylenes, Total	ND		8.0	2.6	ug/L			07/20/17 06:43	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*07/20/17 06:43*	*4*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*07/20/17 06:43*	*4*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/20/17 06:43*	*4*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			07/12/17 08:50	1
Ethane	ND		7.5	1.5	ug/L			07/12/17 08:50	1
Ethene	ND		7.0	1.5	ug/L			07/12/17 08:50	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		07/12/17 09:58	07/12/17 20:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		07/13/17 10:50	07/13/17 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**2.6**		0.050		mg/L			07/11/17 21:57	1
Total Organic Carbon	**1.4**		1.0		mg/L			07/17/17 08:57	1
Sulfate	**148**		25.0		mg/L			07/18/17 14:30	5

Surrogate Summary

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

TestAmerica Job ID: 480-120860-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)								
		12DCE	BFB	TOL						
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)						
480-120860-1	MW-5	111	95	106						
480-120860-2	MW-6	112	92	104						
480-120860-3	PW-1R	99	95	100						
LCS 480-367785/4	Lab Control Sample	96	99	100						
LCS 480-367826/4	Lab Control Sample	109	94	108						
MB 480-367785/6	Method Blank	97	98	101						
MB 480-367826/6	Method Blank	112	94	108						

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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

TestAmerica Job ID: 480-120860-1

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

Lab Sample ID: MB 480-367785/6
Matrix: Water
Analysis Batch: 367785

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			07/19/17 23:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/19/17 23:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/19/17 23:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/19/17 23:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/19/17 23:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/19/17 23:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/19/17 23:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/19/17 23:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/19/17 23:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/19/17 23:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/19/17 23:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/19/17 23:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/19/17 23:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/19/17 23:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/19/17 23:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/19/17 23:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/19/17 23:19	1
2-Hexanone	ND		5.0	1.2	ug/L			07/19/17 23:19	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			07/19/17 23:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/19/17 23:19	1
Acetone	ND		10	3.0	ug/L			07/19/17 23:19	1
Benzene	ND		1.0	0.41	ug/L			07/19/17 23:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/19/17 23:19	1
Bromoform	ND		1.0	0.26	ug/L			07/19/17 23:19	1
Bromomethane	ND		1.0	0.69	ug/L			07/19/17 23:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/19/17 23:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/19/17 23:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/19/17 23:19	1
Chloroethane	ND		1.0	0.32	ug/L			07/19/17 23:19	1
Chloroform	ND		1.0	0.34	ug/L			07/19/17 23:19	1
Chloromethane	ND		1.0	0.35	ug/L			07/19/17 23:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/19/17 23:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/19/17 23:19	1
Cyclohexane	ND		1.0	0.18	ug/L			07/19/17 23:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/19/17 23:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/19/17 23:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/19/17 23:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/19/17 23:19	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/19/17 23:19	1
Methyl acetate	ND		2.5	1.3	ug/L			07/19/17 23:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/19/17 23:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/19/17 23:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/19/17 23:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/19/17 23:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/17 23:19	1
o-Xylene	ND		1.0	0.76	ug/L			07/19/17 23:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/19/17 23:19	1
Styrene	ND		1.0	0.73	ug/L			07/19/17 23:19	1

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

Lab Sample ID: MB 480-367785/6
Matrix: Water
Analysis Batch: 367785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/19/17 23:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/19/17 23:19	1
Toluene	ND		1.0	0.51	ug/L			07/19/17 23:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/19/17 23:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/19/17 23:19	1
Trichloroethene	ND		1.0	0.46	ug/L			07/19/17 23:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/19/17 23:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/19/17 23:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/19/17 23:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/19/17 23:19*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/19/17 23:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/19/17 23:19*	*1*

Lab Sample ID: LCS 480-367785/4
Matrix: Water
Analysis Batch: 367785

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	20.4		ug/L		82	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	20.1		ug/L		80	61 - 148
1,1,2-Trichloroethane	25.0	23.1		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	20.9		ug/L		84	77 - 120
1,1-Dichloroethene	25.0	19.4		ug/L		78	66 - 127
1,2,4-Trichlorobenzene	25.0	22.8		ug/L		91	79 - 122
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	56 - 134
1,2-Dibromoethane	25.0	23.4		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	20.8		ug/L		83	75 - 120
1,2-Dichloropropane	25.0	21.2		ug/L		85	76 - 120
1,3,5-Trimethylbenzene	25.0	23.1		ug/L		92	77 - 121
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.4		ug/L		93	80 - 120
2-Butanone (MEK)	125	197	*	ug/L		158	57 - 140
2-Hexanone	125	176	*	ug/L		141	65 - 127
4-Isopropyltoluene	25.0	23.6		ug/L		94	73 - 120
4-Methyl-2-pentanone (MIBK)	125	116		ug/L		93	71 - 125
Acetone	125	125		ug/L		100	56 - 142
Benzene	25.0	20.8		ug/L		83	71 - 124
Bromodichloromethane	25.0	21.5		ug/L		86	80 - 122
Bromoform	25.0	23.6		ug/L		94	61 - 132
Bromomethane	25.0	20.4		ug/L		82	55 - 144
Carbon disulfide	25.0	19.6		ug/L		79	59 - 134
Carbon tetrachloride	25.0	20.5		ug/L		82	72 - 134

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

Lab Sample ID: LCS 480-367785/4
Matrix: Water
Analysis Batch: 367785

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	23.5		ug/L		94	80 - 120
Chloroethane	25.0	19.9		ug/L		80	69 - 136
Chloroform	25.0	20.7		ug/L		83	73 - 127
Chloromethane	25.0	17.2		ug/L		69	68 - 124
cis-1,2-Dichloroethene	25.0	20.5		ug/L		82	74 - 124
cis-1,3-Dichloropropene	25.0	20.9		ug/L		84	74 - 124
Cyclohexane	25.0	20.1		ug/L		80	59 - 135
Dibromochloromethane	25.0	23.0		ug/L		92	75 - 125
Dichlorodifluoromethane	25.0	15.3		ug/L		61	59 - 135
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123
Isopropylbenzene	25.0	23.0		ug/L		92	77 - 122
m,p-Xylene	25.0	23.0		ug/L		92	76 - 122
Methyl acetate	125	105		ug/L		84	74 - 133
Methyl tert-butyl ether	25.0	20.8		ug/L		83	77 - 120
Methylcyclohexane	25.0	20.6		ug/L		82	68 - 134
Methylene Chloride	25.0	21.0		ug/L		84	75 - 124
n-Butylbenzene	25.0	23.4		ug/L		94	71 - 128
N-Propylbenzene	25.0	23.7		ug/L		95	75 - 127
o-Xylene	25.0	23.2		ug/L		93	76 - 122
sec-Butylbenzene	25.0	23.0		ug/L		92	74 - 127
Styrene	25.0	23.0		ug/L		92	80 - 120
tert-Butylbenzene	25.0	22.2		ug/L		89	75 - 123
Tetrachloroethene	25.0	29.5		ug/L		118	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	20.3		ug/L		81	73 - 127
trans-1,3-Dichloropropene	25.0	23.6		ug/L		94	80 - 120
Trichloroethene	25.0	20.9		ug/L		84	74 - 123
Trichlorofluoromethane	25.0	20.0		ug/L		80	62 - 150
Vinyl chloride	25.0	18.4		ug/L		74	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 480-367826/6
Matrix: Water
Analysis Batch: 367826

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			07/20/17 11:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/20/17 11:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/20/17 11:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/20/17 11:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/20/17 11:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/20/17 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/20/17 11:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/20/17 11:11	1

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

Lab Sample ID: MB 480-367826/6
Matrix: Water
Analysis Batch: 367826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/20/17 11:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/20/17 11:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/20/17 11:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/20/17 11:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/20/17 11:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/20/17 11:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/20/17 11:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/20/17 11:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/20/17 11:11	1
2-Hexanone	ND		5.0	1.2	ug/L			07/20/17 11:11	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			07/20/17 11:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/20/17 11:11	1
Acetone	ND		10	3.0	ug/L			07/20/17 11:11	1
Benzene	ND		1.0	0.41	ug/L			07/20/17 11:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/20/17 11:11	1
Bromoform	ND		1.0	0.26	ug/L			07/20/17 11:11	1
Bromomethane	ND		1.0	0.69	ug/L			07/20/17 11:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/20/17 11:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/20/17 11:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/20/17 11:11	1
Chloroethane	ND		1.0	0.32	ug/L			07/20/17 11:11	1
Chloroform	ND		1.0	0.34	ug/L			07/20/17 11:11	1
Chloromethane	ND		1.0	0.35	ug/L			07/20/17 11:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/20/17 11:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/20/17 11:11	1
Cyclohexane	ND		1.0	0.18	ug/L			07/20/17 11:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/20/17 11:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/20/17 11:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/20/17 11:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/20/17 11:11	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/20/17 11:11	1
Methyl acetate	ND		2.5	1.3	ug/L			07/20/17 11:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/20/17 11:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/20/17 11:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/20/17 11:11	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/20/17 11:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/17 11:11	1
o-Xylene	ND		1.0	0.76	ug/L			07/20/17 11:11	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/20/17 11:11	1
Styrene	ND		1.0	0.73	ug/L			07/20/17 11:11	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/20/17 11:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/20/17 11:11	1
Toluene	ND		1.0	0.51	ug/L			07/20/17 11:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/20/17 11:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/20/17 11:11	1
Trichloroethene	ND		1.0	0.46	ug/L			07/20/17 11:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/20/17 11:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/20/17 11:11	1

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

Lab Sample ID: MB 480-367826/6
Matrix: Water
Analysis Batch: 367826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			07/20/17 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*77 - 120*		*07/20/17 11:11*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*07/20/17 11:11*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/20/17 11:11*	*1*

Lab Sample ID: LCS 480-367826/4
Matrix: Water
Analysis Batch: 367826

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	24.9		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.7		ug/L		107	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.5		ug/L		106	61 - 148
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	76 - 122
1,1-Dichloroethane	25.0	26.0		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	24.8		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	23.8		ug/L		95	79 - 122
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dibromoethane	25.0	26.0		ug/L		104	77 - 120
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,3,5-Trimethylbenzene	25.0	26.7		ug/L		107	77 - 121
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	141		ug/L		113	65 - 127
4-Isopropyltoluene	25.0	27.3		ug/L		109	73 - 120
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125
Acetone	125	149		ug/L		119	56 - 142
Benzene	25.0	25.7		ug/L		103	71 - 124
Bromodichloromethane	25.0	25.9		ug/L		104	80 - 122
Bromoform	25.0	26.3		ug/L		105	61 - 132
Bromomethane	25.0	24.2		ug/L		97	55 - 144
Carbon disulfide	25.0	26.0		ug/L		104	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	25.6		ug/L		102	80 - 120
Chloroethane	25.0	27.5		ug/L		110	69 - 136
Chloroform	25.0	25.6		ug/L		102	73 - 127
Chloromethane	25.0	26.8		ug/L		107	68 - 124
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		103	74 - 124
Cyclohexane	25.0	28.1		ug/L		112	59 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	75 - 125

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

Lab Sample ID: LCS 480-367826/4
Matrix: Water
Analysis Batch: 367826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	25.0	27.5		ug/L		110	59 - 135
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
Isopropylbenzene	25.0	26.6		ug/L		106	77 - 122
m,p-Xylene	25.0	26.6		ug/L		106	76 - 122
Methyl acetate	125	128		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	25.1		ug/L		100	77 - 120
Methylcyclohexane	25.0	27.3		ug/L		109	68 - 134
Methylene Chloride	25.0	24.4		ug/L		98	75 - 124
n-Butylbenzene	25.0	28.5		ug/L		114	71 - 128
N-Propylbenzene	25.0	27.2		ug/L		109	75 - 127
o-Xylene	25.0	26.4		ug/L		106	76 - 122
sec-Butylbenzene	25.0	27.4		ug/L		110	74 - 127
Styrene	25.0	27.2		ug/L		109	80 - 120
tert-Butylbenzene	25.0	26.7		ug/L		107	75 - 123
Tetrachloroethene	25.0	24.5		ug/L		98	74 - 122
Toluene	25.0	26.0		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	73 - 127
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	80 - 120
Trichloroethene	25.0	25.0		ug/L		100	74 - 123
Trichlorofluoromethane	25.0	26.2		ug/L		105	62 - 150
Vinyl chloride	25.0	27.6		ug/L		110	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-366467/3
Matrix: Water
Analysis Batch: 366467

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			07/12/17 06:45	1
Ethane	ND		7.5	1.5	ug/L			07/12/17 06:45	1
Ethene	ND		7.0	1.5	ug/L			07/12/17 06:45	1

Lab Sample ID: LCS 480-366467/4
Matrix: Water
Analysis Batch: 366467

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	7.77	6.97		ug/L		90	85 - 120
Ethane	14.6	12.3		ug/L		85	79 - 120
Ethene	13.6	11.8		ug/L		86	85 - 120

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 480-366467/6
Matrix: Water
Analysis Batch: 366467

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	7.77	8.23		ug/L		106	85 - 120	17	50
Ethane	14.6	14.1		ug/L		97	79 - 120	14	50
Ethene	13.6	13.6		ug/L		100	85 - 120	14	50

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-366507/1-A
Matrix: Water
Analysis Batch: 366741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		07/12/17 09:58	07/12/17 20:01	1

Lab Sample ID: LCS 480-366507/2-A
Matrix: Water
Analysis Batch: 366741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.58		mg/L		106	80 - 120

Lab Sample ID: MB 480-366535/1-B
Matrix: Water
Analysis Batch: 366924

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 366781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		07/13/17 10:50	07/13/17 17:34	1

Lab Sample ID: LCS 480-366535/2-B
Matrix: Water
Analysis Batch: 366924

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 366781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	10.0	10.11		mg/L		101	80 - 120

Lab Sample ID: 480-120860-1 MS
Matrix: Water
Analysis Batch: 366924

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 366781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	ND		10.0	9.94		mg/L		99	75 - 125

Lab Sample ID: 480-120860-1 MSD
Matrix: Water
Analysis Batch: 366924

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 366781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron, Dissolved	ND		10.0	10.08		mg/L		101	75 - 125	1	20

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-367335/4
Matrix: Water
Analysis Batch: 367335

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			07/16/17 18:19	1

Lab Sample ID: LCS 480-367335/5
Matrix: Water
Analysis Batch: 367335

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	64.06		mg/L		107	90 - 110

Lab Sample ID: 480-120860-3 MS
Matrix: Water
Analysis Batch: 367335

Client Sample ID: PW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.4		20.0	22.25		mg/L		104	54 - 131

Lab Sample ID: 480-120860-2 DU
Matrix: Water
Analysis Batch: 367335

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.9		1.93		mg/L		4	20

Lab Sample ID: MB 480-367394/4
Matrix: Water
Analysis Batch: 367394

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			07/17/17 19:20	1

Lab Sample ID: LCS 480-367394/5
Matrix: Water
Analysis Batch: 367394

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	64.19		mg/L		107	90 - 110

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-367369/12
Matrix: Water
Analysis Batch: 367369

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/17/17 13:01	1

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: MB 480-367369/70
Matrix: Water
Analysis Batch: 367369

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/17/17 14:55	1

Lab Sample ID: MB 480-367369/99
Matrix: Water
Analysis Batch: 367369

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/17/17 16:53	1

Lab Sample ID: LCS 480-367369/11
Matrix: Water
Analysis Batch: 367369

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	29.47		mg/L		98	90 - 110

Lab Sample ID: LCS 480-367369/69
Matrix: Water
Analysis Batch: 367369

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	29.85		mg/L		100	90 - 110

Lab Sample ID: LCS 480-367369/98
Matrix: Water
Analysis Batch: 367369

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	29.36		mg/L		98	90 - 110

Lab Sample ID: MB 480-367533/12
Matrix: Water
Analysis Batch: 367533

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/18/17 14:28	1

Lab Sample ID: LCS 480-367533/11
Matrix: Water
Analysis Batch: 367533

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.89		mg/L		103	90 - 110

GC/MS VOA

Analysis Batch: 367785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-3	PW-1R	Total/NA	Water	8260C	
MB 480-367785/6	Method Blank	Total/NA	Water	8260C	
LCS 480-367785/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 367826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	8260C	
480-120860-2	MW-6	Total/NA	Water	8260C	
MB 480-367826/6	Method Blank	Total/NA	Water	8260C	
LCS 480-367826/4	Lab Control Sample	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 366467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	RSK-175	
480-120860-2	MW-6	Total/NA	Water	RSK-175	
480-120860-3	PW-1R	Total/NA	Water	RSK-175	
MB 480-366467/3	Method Blank	Total/NA	Water	RSK-175	
LCS 480-366467/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-366467/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Metals

Prep Batch: 366507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	3005A	
480-120860-2	MW-6	Total/NA	Water	3005A	
480-120860-3	PW-1R	Total/NA	Water	3005A	
MB 480-366507/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-366507/2-A	Lab Control Sample	Total/NA	Water	3005A	

Filtration Batch: 366535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Dissolved	Water	FILTRATION	
480-120860-2	MW-6	Dissolved	Water	FILTRATION	
480-120860-3	PW-1R	Dissolved	Water	FILTRATION	
MB 480-366535/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-366535/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
480-120860-1 MS	MW-5	Dissolved	Water	FILTRATION	
480-120860-1 MSD	MW-5	Dissolved	Water	FILTRATION	

Analysis Batch: 366741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	6010C	366507
480-120860-2	MW-6	Total/NA	Water	6010C	366507
480-120860-3	PW-1R	Total/NA	Water	6010C	366507
MB 480-366507/1-A	Method Blank	Total/NA	Water	6010C	366507
LCS 480-366507/2-A	Lab Control Sample	Total/NA	Water	6010C	366507

Metals (Continued)

Prep Batch: 366781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Dissolved	Water	3005A	366535
480-120860-2	MW-6	Dissolved	Water	3005A	366535
480-120860-3	PW-1R	Dissolved	Water	3005A	366535
MB 480-366535/1-B	Method Blank	Dissolved	Water	3005A	366535
LCS 480-366535/2-B	Lab Control Sample	Dissolved	Water	3005A	366535
480-120860-1 MS	MW-5	Dissolved	Water	3005A	366535
480-120860-1 MSD	MW-5	Dissolved	Water	3005A	366535

Analysis Batch: 366924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Dissolved	Water	6010C	366781
480-120860-2	MW-6	Dissolved	Water	6010C	366781
480-120860-3	PW-1R	Dissolved	Water	6010C	366781
MB 480-366535/1-B	Method Blank	Dissolved	Water	6010C	366781
LCS 480-366535/2-B	Lab Control Sample	Dissolved	Water	6010C	366781
480-120860-1 MS	MW-5	Dissolved	Water	6010C	366781
480-120860-1 MSD	MW-5	Dissolved	Water	6010C	366781

General Chemistry

Analysis Batch: 366457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	353.2	
480-120860-2	MW-6	Total/NA	Water	353.2	
480-120860-3	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 367335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-2	MW-6	Total/NA	Water	9060A	
480-120860-3	PW-1R	Total/NA	Water	9060A	
MB 480-367335/4	Method Blank	Total/NA	Water	9060A	
LCS 480-367335/5	Lab Control Sample	Total/NA	Water	9060A	
480-120860-3 MS	PW-1R	Total/NA	Water	9060A	
480-120860-2 DU	MW-6	Total/NA	Water	9060A	

Analysis Batch: 367369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	D516-90, 02	
480-120860-2	MW-6	Total/NA	Water	D516-90, 02	
MB 480-367369/12	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-367369/70	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-367369/99	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-367369/11	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-367369/69	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-367369/98	Lab Control Sample	Total/NA	Water	D516-90, 02	

Analysis Batch: 367394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-1	MW-5	Total/NA	Water	9060A	
MB 480-367394/4	Method Blank	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 367394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-367394/5	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 367533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120860-3	PW-1R	Total/NA	Water	D516-90, 02	
MB 480-367533/12	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-367533/11	Lab Control Sample	Total/NA	Water	D516-90, 02	

Client Sample ID: MW-5

Lab Sample ID: 480-120860-1

Date Collected: 07/10/17 15:40

Matrix: Water

Date Received: 07/11/17 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	367826	07/20/17 13:27	ARS	TAL BUF
Total/NA	Analysis	RSK-175		1	366467	07/12/17 08:15	TRG	TAL BUF
Dissolved	Filtration	FILTRATION			366535	07/12/17 09:46	EMB	TAL BUF
Dissolved	Prep	3005A			366781	07/13/17 10:50	EMB	TAL BUF
Dissolved	Analysis	6010C		1	366924	07/13/17 17:54	JRK	TAL BUF
Total/NA	Prep	3005A			366507	07/12/17 09:58	EMB	TAL BUF
Total/NA	Analysis	6010C		1	366741	07/12/17 20:08	LMH	TAL BUF
Total/NA	Analysis	353.2		1	366457	07/11/17 21:55	DCB	TAL BUF
Total/NA	Analysis	9060A		1	367394	07/18/17 00:22	EKB	TAL BUF
Total/NA	Analysis	D516-90, 02		1	367369	07/17/17 13:01	LED	TAL BUF

Client Sample ID: MW-6

Lab Sample ID: 480-120860-2

Date Collected: 07/10/17 14:50

Matrix: Water

Date Received: 07/11/17 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	367826	07/20/17 13:54	ARS	TAL BUF
Total/NA	Analysis	RSK-175		1	366467	07/12/17 08:32	TRG	TAL BUF
Dissolved	Filtration	FILTRATION			366535	07/12/17 09:46	EMB	TAL BUF
Dissolved	Prep	3005A			366781	07/13/17 10:50	EMB	TAL BUF
Dissolved	Analysis	6010C		1	366924	07/13/17 18:11	JRK	TAL BUF
Total/NA	Prep	3005A			366507	07/12/17 09:58	EMB	TAL BUF
Total/NA	Analysis	6010C		1	366741	07/12/17 20:11	LMH	TAL BUF
Total/NA	Analysis	353.2		1	366457	07/11/17 21:56	DCB	TAL BUF
Total/NA	Analysis	9060A		1	367335	07/17/17 07:13	EKB	TAL BUF
Total/NA	Analysis	D516-90, 02		15	367369	07/17/17 15:01	LED	TAL BUF

Client Sample ID: PW-1R

Lab Sample ID: 480-120860-3

Date Collected: 07/10/17 16:15

Matrix: Water

Date Received: 07/11/17 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	367785	07/20/17 06:43	NEA	TAL BUF
Total/NA	Analysis	RSK-175		1	366467	07/12/17 08:50	TRG	TAL BUF
Dissolved	Filtration	FILTRATION			366535	07/12/17 09:46	EMB	TAL BUF
Dissolved	Prep	3005A			366781	07/13/17 10:50	EMB	TAL BUF
Dissolved	Analysis	6010C		1	366924	07/13/17 18:15	JRK	TAL BUF
Total/NA	Prep	3005A			366507	07/12/17 09:58	EMB	TAL BUF
Total/NA	Analysis	6010C		1	366741	07/12/17 20:15	LMH	TAL BUF
Total/NA	Analysis	353.2		1	366457	07/11/17 21:57	DCB	TAL BUF
Total/NA	Analysis	9060A		1	367335	07/17/17 08:57	EKB	TAL BUF
Total/NA	Analysis	D516-90, 02		5	367533	07/18/17 14:30	LED	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-120860-1

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: 480-120860-1
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	03-31-18

Method Summary

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

TestAmerica Job ID: 480-120860-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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: 480-120860-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120860-1	MW-5	Water	07/10/17 15:40	07/11/17 16:20
480-120860-2	MW-6	Water	07/10/17 14:50	07/11/17 16:20
480-120860-3	PW-1R	Water	07/10/17 16:15	07/11/17 16:20

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

Chain of Custody Record 202547

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: Bethann	Date: 7/10/17	COC No: 1 of 1 COCs
Company Name: Benchmark EES, PLLC	Tel/Fax:	Lab Contact:	Carrier:	Sampler:
Address: 2558 Hamburg Turnpike, Ste 300	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Buffalo, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: (716) 856-0599	TAT if different from Below			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: Despatch	☒ 1 week Standard			Job / SDG:
Site:	☐ 2 days			
P O #	☐ 1 day			

480-120860 COC

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 + CP-51 VOCs	Diss. Gases (Methane Ethane, ethene)	TOC	Nitrate/Nitrite, Sulfate	T. Iron	Diss. Iron *
MW-5	7/10/17	1540	G	W		N	N	3	3	2	2	1	1
MW-6	↓	1450	G	W		N	N	3	3	2	2	1	1
PW-1R	↓	1615	G	W		N	N	3	3	2	2	1	1

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:
* Dissolved Iron to be lab filtered

3.0 ok

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 884679 | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	BMSTR	7/10/17 1930		TAL	7-11-17/1210
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL	7-11-17/1620			7/11/17 1620
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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7/21/2017

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-120860-1

Login Number: 120860

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl 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.	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	

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: 480-128297-1
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:
12/13/2017 2:26:10 PM
Joe Giacomazza, Project Management Assistant II
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Designee for

Brian Fischer, Manager of Project Management
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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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

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: 480-128297-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-128297-1

Comments
No additional comments.

Receipt
The samples were received on 12/1/2017 1:45 PM; 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(s) 8260C: The following volatiles samples was diluted due to foaming at the time of purging during the original sample analysis: MW-6 (480-128297-2), (480-128297-E-2 MS) and (480-128297-E-2 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-391272 recovered above the upper control limit for Methylcyclohexane, 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: MW-5 (480-128297-1) and PW-1R (480-128297-3).

Method(s) 8260C: The following volatiles samples was diluted due to foaming at the time of purging during the original sample analysis: MW-5 (480-128297-1) and PW-1R (480-128297-3). Elevated reporting limits (RLs) are provided.

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 samples was analyzed after 7 days from sampling: MW-5 (480-128297-1) and PW-1R (480-128297-3).

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

Metals
Method(s) 3005A: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: MW-5 (480-128297-1). The reporting limits (RLs) have been adjusted proportionately.

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

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

Detection Summary

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: MW-5 — Lab Sample ID: 480-128297-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	71	J	100	13	ug/L	10		8260C	Total/NA
Acetone	200		100	30	ug/L	10		8260C	Total/NA
Iron	53.8		0.10		mg/L	1		6010C	Total/NA
Iron, Dissolved	17.2		0.050		mg/L	1		6010C	Dissolved
Sulfate	16.0		5.0		mg/L	1		D516-90, 02	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-128297-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	90		50	18	ug/L	50		8260C	Total/NA
Trichloroethene	51		50	23	ug/L	50		8260C	Total/NA
Iron	1.9		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	1.9		0.050		mg/L	1		353.2	Total/NA
Nitrite as N	0.070		0.050		mg/L	1		353.2	Total/NA
Sulfate	1420		250		mg/L	50		D516-90, 02	Total/NA

Client Sample ID: PW-1R — Lab Sample ID: 480-128297-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	160		40	5.3	ug/L	4		8260C	Total/NA
Acetone	30	J	40	12	ug/L	4		8260C	Total/NA
Methylene Chloride	2.4	J	4.0	1.8	ug/L	4		8260C	Total/NA
Iron	42.1		0.050		mg/L	1		6010C	Total/NA
Iron, Dissolved	4.1		0.050		mg/L	1		6010C	Dissolved
Nitrate as N	0.081		0.050		mg/L	1		353.2	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: 480-128297-1

Client Sample ID: MW-5
Date Collected: 11/30/17 11:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-1
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		10	8.2	ug/L			12/09/17 12:58	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/09/17 12:58	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/09/17 12:58	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/09/17 12:58	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/09/17 12:58	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/09/17 12:58	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/09/17 12:58	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			12/09/17 12:58	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/09/17 12:58	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/09/17 12:58	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/09/17 12:58	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/09/17 12:58	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/09/17 12:58	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			12/09/17 12:58	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/09/17 12:58	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/09/17 12:58	10
2-Butanone (MEK)	**71**	**J**	100	13	ug/L			12/09/17 12:58	10
2-Hexanone	ND		50	12	ug/L			12/09/17 12:58	10
4-Isopropyltoluene	ND		10	3.1	ug/L			12/09/17 12:58	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/09/17 12:58	10
Acetone	**200**		100	30	ug/L			12/09/17 12:58	10
Benzene	ND		10	4.1	ug/L			12/09/17 12:58	10
Bromodichloromethane	ND		10	3.9	ug/L			12/09/17 12:58	10
Bromoform	ND		10	2.6	ug/L			12/09/17 12:58	10
Bromomethane	ND		10	6.9	ug/L			12/09/17 12:58	10
Carbon disulfide	ND		10	1.9	ug/L			12/09/17 12:58	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/09/17 12:58	10
Chlorobenzene	ND		10	7.5	ug/L			12/09/17 12:58	10
Chloroethane	ND		10	3.2	ug/L			12/09/17 12:58	10
Chloroform	ND		10	3.4	ug/L			12/09/17 12:58	10
Chloromethane	ND		10	3.5	ug/L			12/09/17 12:58	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			12/09/17 12:58	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/09/17 12:58	10
Cyclohexane	ND		10	1.8	ug/L			12/09/17 12:58	10
Dibromochloromethane	ND		10	3.2	ug/L			12/09/17 12:58	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/09/17 12:58	10
Ethylbenzene	ND		10	7.4	ug/L			12/09/17 12:58	10
Isopropylbenzene	ND		10	7.9	ug/L			12/09/17 12:58	10
m,p-Xylene	ND		20	6.6	ug/L			12/09/17 12:58	10
Methyl acetate	ND		25	13	ug/L			12/09/17 12:58	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/09/17 12:58	10
Methylcyclohexane	ND		10	1.6	ug/L			12/09/17 12:58	10
Methylene Chloride	ND		10	4.4	ug/L			12/09/17 12:58	10
n-Butylbenzene	ND		10	6.4	ug/L			12/09/17 12:58	10
N-Propylbenzene	ND		10	6.9	ug/L			12/09/17 12:58	10
o-Xylene	ND		10	7.6	ug/L			12/09/17 12:58	10
sec-Butylbenzene	ND		10	7.5	ug/L			12/09/17 12:58	10
Styrene	ND		10	7.3	ug/L			12/09/17 12:58	10
tert-Butylbenzene	ND		10	8.1	ug/L			12/09/17 12:58	10

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: MW-5
Date Collected: 11/30/17 11:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		10	3.6	ug/L			12/09/17 12:58	10
Toluene	ND		10	5.1	ug/L			12/09/17 12:58	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/09/17 12:58	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/09/17 12:58	10
Trichloroethene	ND		10	4.6	ug/L			12/09/17 12:58	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/09/17 12:58	10
Vinyl chloride	ND		10	9.0	ug/L			12/09/17 12:58	10
Xylenes, Total	ND		20	6.6	ug/L			12/09/17 12:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*12/09/17 12:58*	*10*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*12/09/17 12:58*	*10*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/09/17 12:58*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**53.8**		0.10		mg/L		12/04/17 10:40	12/06/17 01:30	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**17.2**		0.050		mg/L		12/06/17 08:38	12/06/17 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050		mg/L			12/01/17 18:08	1
Nitrite as N	ND		0.050		mg/L			12/01/17 18:08	1
Sulfate	**16.0**		5.0		mg/L			12/05/17 14:41	1

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: MW-6
Date Collected: 11/30/17 10:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-2
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		50	41	ug/L			12/07/17 13:57	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			12/07/17 13:57	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			12/07/17 13:57	50
1,1,2-Trichloroethane	ND		50	12	ug/L			12/07/17 13:57	50
1,1-Dichloroethane	ND		50	19	ug/L			12/07/17 13:57	50
1,1-Dichloroethene	ND		50	15	ug/L			12/07/17 13:57	50
1,2,4-Trichlorobenzene	ND	F1	50	21	ug/L			12/07/17 13:57	50
1,2,4-Trimethylbenzene	ND		50	38	ug/L			12/07/17 13:57	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			12/07/17 13:57	50
1,2-Dibromoethane	ND		50	37	ug/L			12/07/17 13:57	50
1,2-Dichlorobenzene	ND		50	40	ug/L			12/07/17 13:57	50
1,2-Dichloroethane	ND		50	11	ug/L			12/07/17 13:57	50
1,2-Dichloropropane	ND		50	36	ug/L			12/07/17 13:57	50
1,3,5-Trimethylbenzene	ND		50	39	ug/L			12/07/17 13:57	50
1,3-Dichlorobenzene	ND		50	39	ug/L			12/07/17 13:57	50
1,4-Dichlorobenzene	ND		50	42	ug/L			12/07/17 13:57	50
2-Butanone (MEK)	ND		500	66	ug/L			12/07/17 13:57	50
2-Hexanone	ND		250	62	ug/L			12/07/17 13:57	50
4-Isopropyltoluene	ND		50	16	ug/L			12/07/17 13:57	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			12/07/17 13:57	50
Acetone	ND		500	150	ug/L			12/07/17 13:57	50
Benzene	ND		50	21	ug/L			12/07/17 13:57	50
Bromodichloromethane	ND		50	20	ug/L			12/07/17 13:57	50
Bromoform	ND		50	13	ug/L			12/07/17 13:57	50
Bromomethane	ND		50	35	ug/L			12/07/17 13:57	50
Carbon disulfide	ND		50	9.5	ug/L			12/07/17 13:57	50
Carbon tetrachloride	ND		50	14	ug/L			12/07/17 13:57	50
Chlorobenzene	ND		50	38	ug/L			12/07/17 13:57	50
Chloroethane	ND		50	16	ug/L			12/07/17 13:57	50
Chloroform	ND		50	17	ug/L			12/07/17 13:57	50
Chloromethane	ND		50	18	ug/L			12/07/17 13:57	50
cis-1,2-Dichloroethene	ND		50	41	ug/L			12/07/17 13:57	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			12/07/17 13:57	50
Cyclohexane	ND		50	9.0	ug/L			12/07/17 13:57	50
Dibromochloromethane	ND		50	16	ug/L			12/07/17 13:57	50
Dichlorodifluoromethane	ND		50	34	ug/L			12/07/17 13:57	50
Ethylbenzene	ND		50	37	ug/L			12/07/17 13:57	50
Isopropylbenzene	ND		50	40	ug/L			12/07/17 13:57	50
m,p-Xylene	ND		100	33	ug/L			12/07/17 13:57	50
Methyl acetate	ND		130	65	ug/L			12/07/17 13:57	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			12/07/17 13:57	50
Methylcyclohexane	ND		50	8.0	ug/L			12/07/17 13:57	50
Methylene Chloride	ND		50	22	ug/L			12/07/17 13:57	50
n-Butylbenzene	ND		50	32	ug/L			12/07/17 13:57	50
N-Propylbenzene	ND		50	35	ug/L			12/07/17 13:57	50
o-Xylene	ND		50	38	ug/L			12/07/17 13:57	50
sec-Butylbenzene	ND		50	38	ug/L			12/07/17 13:57	50
Styrene	ND		50	37	ug/L			12/07/17 13:57	50
tert-Butylbenzene	ND		50	41	ug/L			12/07/17 13:57	50

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: MW-6
Date Collected: 11/30/17 10:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**90**		50	18	ug/L			12/07/17 13:57	50
Toluene	ND		50	26	ug/L			12/07/17 13:57	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			12/07/17 13:57	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			12/07/17 13:57	50
Trichloroethene	**51**		50	23	ug/L			12/07/17 13:57	50
Trichlorofluoromethane	ND		50	44	ug/L			12/07/17 13:57	50
Vinyl chloride	ND		50	45	ug/L			12/07/17 13:57	50
Xylenes, Total	ND		100	33	ug/L			12/07/17 13:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*12/07/17 13:57*	*50*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*12/07/17 13:57*	*50*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/07/17 13:57*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.9**		0.050		mg/L		12/04/17 10:40	12/06/17 01:33	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		12/06/17 08:38	12/06/17 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.9**		0.050		mg/L			12/01/17 19:20	1
Nitrite as N	**0.070**		0.050		mg/L			12/01/17 19:20	1
Sulfate	**1420**		250		mg/L			12/06/17 11:08	50

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: PW-1R
Date Collected: 11/30/17 12:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			12/09/17 13:21	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			12/09/17 13:21	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			12/09/17 13:21	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			12/09/17 13:21	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			12/09/17 13:21	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			12/09/17 13:21	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			12/09/17 13:21	4
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			12/09/17 13:21	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/09/17 13:21	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/09/17 13:21	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/09/17 13:21	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			12/09/17 13:21	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/09/17 13:21	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			12/09/17 13:21	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/09/17 13:21	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/09/17 13:21	4
2-Butanone (MEK)	**160**		40	5.3	ug/L			12/09/17 13:21	4
2-Hexanone	ND		20	5.0	ug/L			12/09/17 13:21	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			12/09/17 13:21	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/09/17 13:21	4
Acetone	**30**	**J**	40	12	ug/L			12/09/17 13:21	4
Benzene	ND		4.0	1.6	ug/L			12/09/17 13:21	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/09/17 13:21	4
Bromoform	ND		4.0	1.0	ug/L			12/09/17 13:21	4
Bromomethane	ND		4.0	2.8	ug/L			12/09/17 13:21	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/09/17 13:21	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/09/17 13:21	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/09/17 13:21	4
Chloroethane	ND		4.0	1.3	ug/L			12/09/17 13:21	4
Chloroform	ND		4.0	1.4	ug/L			12/09/17 13:21	4
Chloromethane	ND		4.0	1.4	ug/L			12/09/17 13:21	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			12/09/17 13:21	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/09/17 13:21	4
Cyclohexane	ND		4.0	0.72	ug/L			12/09/17 13:21	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/09/17 13:21	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/09/17 13:21	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/09/17 13:21	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/09/17 13:21	4
m,p-Xylene	ND		8.0	2.6	ug/L			12/09/17 13:21	4
Methyl acetate	ND		10	5.2	ug/L			12/09/17 13:21	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/09/17 13:21	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/09/17 13:21	4
Methylene Chloride	**2.4**	**J**	4.0	1.8	ug/L			12/09/17 13:21	4
n-Butylbenzene	ND		4.0	2.6	ug/L			12/09/17 13:21	4
N-Propylbenzene	ND		4.0	2.8	ug/L			12/09/17 13:21	4
o-Xylene	ND		4.0	3.0	ug/L			12/09/17 13:21	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			12/09/17 13:21	4
Styrene	ND		4.0	2.9	ug/L			12/09/17 13:21	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			12/09/17 13:21	4

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: PW-1R
Date Collected: 11/30/17 12:00
Date Received: 12/01/17 13:45

Lab Sample ID: 480-128297-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		4.0	1.4	ug/L			12/09/17 13:21	4
Toluene	ND		4.0	2.0	ug/L			12/09/17 13:21	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/09/17 13:21	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/09/17 13:21	4
Trichloroethene	ND		4.0	1.8	ug/L			12/09/17 13:21	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/09/17 13:21	4
Vinyl chloride	ND		4.0	3.6	ug/L			12/09/17 13:21	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/09/17 13:21	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*12/09/17 13:21*	*4*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*12/09/17 13:21*	*4*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/09/17 13:21*	*4*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**42.1**		0.050		mg/L		12/04/17 10:40	12/06/17 01:37	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**4.1**		0.050		mg/L		12/06/17 08:38	12/06/17 20:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.081**		0.050		mg/L			12/01/17 20:17	1
Nitrite as N	ND		0.050		mg/L			12/01/17 20:17	1
Sulfate	ND		5.0		mg/L			12/05/17 14:41	1

Surrogate Summary

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

TestAmerica Job ID: 480-128297-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA	BFB	TOL						
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)						
480-128297-1	MW-5	103	95	102						
480-128297-2	MW-6	107	97	97						
480-128297-2 MS	MW-6	97	103	98						
480-128297-2 MSD	MW-6	98	103	101						
480-128297-3	PW-1R	100	97	99						
LCS 480-390875/5	Lab Control Sample	100	98	99						
LCS 480-391272/5	Lab Control Sample	98	100	102						
MB 480-390875/7	Method Blank	101	99	100						
MB 480-391272/7	Method Blank	96	98	102						

Surrogate Legend

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

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

Lab Sample ID: MB 480-390875/7
Matrix: Water
Analysis Batch: 390875

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			12/07/17 11:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/07/17 11:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/07/17 11:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/07/17 11:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/07/17 11:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/07/17 11:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/07/17 11:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/07/17 11:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/07/17 11:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/17 11:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/07/17 11:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/07/17 11:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/07/17 11:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/07/17 11:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/07/17 11:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/07/17 11:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/07/17 11:00	1
2-Hexanone	ND		5.0	1.2	ug/L			12/07/17 11:00	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/07/17 11:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/07/17 11:00	1
Acetone	ND		10	3.0	ug/L			12/07/17 11:00	1
Benzene	ND		1.0	0.41	ug/L			12/07/17 11:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/17 11:00	1
Bromoform	ND		1.0	0.26	ug/L			12/07/17 11:00	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/17 11:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/17 11:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/17 11:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/17 11:00	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/17 11:00	1
Chloroform	ND		1.0	0.34	ug/L			12/07/17 11:00	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/17 11:00	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/07/17 11:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/17 11:00	1
Cyclohexane	ND		1.0	0.18	ug/L			12/07/17 11:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/17 11:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/17 11:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/17 11:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/17 11:00	1
m,p-Xylene	ND		2.0	0.66	ug/L			12/07/17 11:00	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/17 11:00	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/07/17 11:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/07/17 11:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/07/17 11:00	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/07/17 11:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/07/17 11:00	1
o-Xylene	ND		1.0	0.76	ug/L			12/07/17 11:00	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/07/17 11:00	1
Styrene	ND		1.0	0.73	ug/L			12/07/17 11:00	1

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

Lab Sample ID: MB 480-390875/7
Matrix: Water
Analysis Batch: 390875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/07/17 11:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/07/17 11:00	1
Toluene	ND		1.0	0.51	ug/L			12/07/17 11:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/07/17 11:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/07/17 11:00	1
Trichloroethene	ND		1.0	0.46	ug/L			12/07/17 11:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/07/17 11:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/07/17 11:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/07/17 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*12/07/17 11:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*12/07/17 11:00*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/07/17 11:00*	*1*

Lab Sample ID: LCS 480-390875/5
Matrix: Water
Analysis Batch: 390875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	23.3		ug/L		93	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.2		ug/L		93	61 - 148
1,1,2-Trichloroethane	25.0	22.9		ug/L		91	76 - 122
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	23.6		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	23.4		ug/L		94	79 - 122
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	24.5		ug/L		98	76 - 120
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		102	77 - 121
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	124		ug/L		99	57 - 140
2-Hexanone	125	129		ug/L		103	65 - 127
4-Isopropyltoluene	25.0	25.1		ug/L		100	73 - 120
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	127		ug/L		102	56 - 142
Benzene	25.0	23.7		ug/L		95	71 - 124
Bromodichloromethane	25.0	25.6		ug/L		102	80 - 122
Bromoform	25.0	25.2		ug/L		101	61 - 132
Bromomethane	25.0	21.1		ug/L		84	55 - 144
Carbon disulfide	25.0	23.5		ug/L		94	59 - 134
Carbon tetrachloride	25.0	24.2		ug/L		97	72 - 134

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

Lab Sample ID: LCS 480-390875/5
Matrix: Water
Analysis Batch: 390875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	19.2		ug/L		77	68 - 124
cis-1,2-Dichloroethene	25.0	23.2		ug/L		93	74 - 124
cis-1,3-Dichloropropene	25.0	24.6		ug/L		98	74 - 124
Cyclohexane	25.0	23.1		ug/L		92	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	16.4		ug/L		66	59 - 135
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123
Isopropylbenzene	25.0	25.4		ug/L		102	77 - 122
m,p-Xylene	25.0	25.6		ug/L		102	76 - 122
Methyl acetate	50.0	46.6		ug/L		93	74 - 133
Methyl tert-butyl ether	25.0	23.8		ug/L		95	77 - 120
Methylcyclohexane	25.0	23.5		ug/L		94	68 - 134
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
n-Butylbenzene	25.0	25.4		ug/L		102	71 - 128
N-Propylbenzene	25.0	24.9		ug/L		100	75 - 127
o-Xylene	25.0	24.6		ug/L		98	76 - 122
sec-Butylbenzene	25.0	25.0		ug/L		100	74 - 127
Styrene	25.0	25.4		ug/L		101	80 - 120
tert-Butylbenzene	25.0	24.8		ug/L		99	75 - 123
Tetrachloroethene	25.0	25.1		ug/L		101	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	23.6		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	21.9		ug/L		88	62 - 150
Vinyl chloride	25.0	20.1		ug/L		81	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 480-128297-2 MS
Matrix: Water
Analysis Batch: 390875

Client Sample ID: MW-6
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		1250	1200		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	ND		1250	1160		ug/L		93	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		1250	1120		ug/L		90	61 - 148
1,1,2-Trichloroethane	ND		1250	1150		ug/L		92	76 - 122
1,1-Dichloroethane	ND		1250	1170		ug/L		93	77 - 120
1,1-Dichloroethene	ND		1250	1160		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	ND	F1	1250	1010		ug/L		80	79 - 122

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

Lab Sample ID: 480-128297-2 MS
Matrix: Water
Analysis Batch: 390875

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	ND		1250	1180		ug/L		94	76 - 121
1,2-Dibromo-3-Chloropropane	ND		1250	1140		ug/L		91	56 - 134
1,2-Dibromoethane	ND		1250	1210		ug/L		97	77 - 120
1,2-Dichlorobenzene	ND		1250	1150		ug/L		92	80 - 124
1,2-Dichloroethane	ND		1250	1130		ug/L		90	75 - 120
1,2-Dichloropropane	ND		1250	1190		ug/L		95	76 - 120
1,3,5-Trimethylbenzene	ND		1250	1230		ug/L		98	77 - 121
1,3-Dichlorobenzene	ND		1250	1100		ug/L		88	77 - 120
1,4-Dichlorobenzene	ND		1250	1060		ug/L		85	78 - 124
2-Butanone (MEK)	ND		6250	5500		ug/L		88	57 - 140
2-Hexanone	ND		6250	5880		ug/L		94	65 - 127
4-Isopropyltoluene	ND		1250	1220		ug/L		98	73 - 120
4-Methyl-2-pentanone (MIBK)	ND		6250	6210		ug/L		99	71 - 125
Acetone	ND		6250	4990		ug/L		80	56 - 142
Benzene	ND		1250	1170		ug/L		94	71 - 124
Bromodichloromethane	ND		1250	1250		ug/L		100	80 - 122
Bromoform	ND		1250	1210		ug/L		97	61 - 132
Bromomethane	ND		1250	1060		ug/L		85	55 - 144
Carbon disulfide	ND		1250	1150		ug/L		92	59 - 134
Carbon tetrachloride	ND		1250	1210		ug/L		97	72 - 134
Chlorobenzene	ND		1250	1160		ug/L		93	80 - 120
Chloroethane	ND		1250	1120		ug/L		89	69 - 136
Chloroform	ND		1250	1130		ug/L		90	73 - 127
Chloromethane	ND		1250	950		ug/L		76	68 - 124
cis-1,2-Dichloroethene	ND		1250	1130		ug/L		91	74 - 124
cis-1,3-Dichloropropene	ND		1250	1190		ug/L		95	74 - 124
Cyclohexane	ND		1250	1140		ug/L		91	59 - 135
Dibromochloromethane	ND		1250	1310		ug/L		104	75 - 125
Dichlorodifluoromethane	ND		1250	754		ug/L		60	59 - 135
Ethylbenzene	ND		1250	1190		ug/L		95	77 - 123
Isopropylbenzene	ND		1250	1200		ug/L		96	77 - 122
m,p-Xylene	ND		1250	1260		ug/L		101	76 - 122
Methyl acetate	ND		2500	2390		ug/L		96	74 - 133
Methyl tert-butyl ether	ND		1250	1110		ug/L		89	77 - 120
Methylcyclohexane	ND		1250	1090		ug/L		88	68 - 134
Methylene Chloride	ND		1250	1210		ug/L		97	75 - 124
n-Butylbenzene	ND		1250	1130		ug/L		90	71 - 128
N-Propylbenzene	ND		1250	1140		ug/L		92	75 - 127
o-Xylene	ND		1250	1220		ug/L		97	76 - 122
sec-Butylbenzene	ND		1250	1210		ug/L		97	74 - 127
Styrene	ND		1250	1220		ug/L		98	80 - 120
tert-Butylbenzene	ND		1250	1210		ug/L		97	75 - 123
Tetrachloroethene	90		1250	1420		ug/L		106	74 - 122
Toluene	ND		1250	1160		ug/L		93	80 - 122
trans-1,2-Dichloroethene	ND		1250	1160		ug/L		93	73 - 127
trans-1,3-Dichloropropene	ND		1250	1220		ug/L		98	80 - 120
Trichloroethene	51		1250	1180		ug/L		90	74 - 123
Trichlorofluoromethane	ND		1250	1080		ug/L		86	62 - 150

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

Lab Sample ID: 480-128297-2 MS
Matrix: Water
Analysis Batch: 390875

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		1250	1010		ug/L		81	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-128297-2 MSD
Matrix: Water
Analysis Batch: 390875

Client Sample ID: MW-6
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		1250	1180		ug/L		95	73 - 126	1	15
1,1,2,2-Tetrachloroethane	ND		1250	1180		ug/L		94	76 - 120	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1250	1140		ug/L		91	61 - 148	2	20
1,1,2-Trichloroethane	ND		1250	1140		ug/L		91	76 - 122	1	15
1,1-Dichloroethane	ND		1250	1190		ug/L		95	77 - 120	2	20
1,1-Dichloroethene	ND		1250	1160		ug/L		93	66 - 127	1	16
1,2,4-Trichlorobenzene	ND	F1	1250	959	F1	ug/L		77	79 - 122	5	20
1,2,4-Trimethylbenzene	ND		1250	1150		ug/L		92	76 - 121	2	20
1,2-Dibromo-3-Chloropropane	ND		1250	1210		ug/L		97	56 - 134	6	15
1,2-Dibromoethane	ND		1250	1200		ug/L		96	77 - 120	1	15
1,2-Dichlorobenzene	ND		1250	1160		ug/L		92	80 - 124	0	20
1,2-Dichloroethane	ND		1250	1130		ug/L		91	75 - 120	1	20
1,2-Dichloropropane	ND		1250	1190		ug/L		95	76 - 120	0	20
1,3,5-Trimethylbenzene	ND		1250	1220		ug/L		98	77 - 121	0	20
1,3-Dichlorobenzene	ND		1250	1070		ug/L		86	77 - 120	3	20
1,4-Dichlorobenzene	ND		1250	1030		ug/L		83	78 - 124	3	20
2-Butanone (MEK)	ND		6250	5290		ug/L		85	57 - 140	4	20
2-Hexanone	ND		6250	5870		ug/L		94	65 - 127	0	15
4-Isopropyltoluene	ND		1250	1200		ug/L		96	73 - 120	2	20
4-Methyl-2-pentanone (MIBK)	ND		6250	6240		ug/L		100	71 - 125	0	35
Acetone	ND		6250	4360		ug/L		70	56 - 142	13	15
Benzene	ND		1250	1160		ug/L		93	71 - 124	0	13
Bromodichloromethane	ND		1250	1240		ug/L		99	80 - 122	1	15
Bromoform	ND		1250	1250		ug/L		100	61 - 132	3	15
Bromomethane	ND		1250	1100		ug/L		88	55 - 144	4	15
Carbon disulfide	ND		1250	1140		ug/L		91	59 - 134	1	15
Carbon tetrachloride	ND		1250	1200		ug/L		96	72 - 134	1	15
Chlorobenzene	ND		1250	1160		ug/L		93	80 - 120	1	25
Chloroethane	ND		1250	1110		ug/L		89	69 - 136	1	15
Chloroform	ND		1250	1130		ug/L		91	73 - 127	0	20
Chloromethane	ND		1250	970		ug/L		78	68 - 124	2	15
cis-1,2-Dichloroethene	ND		1250	1100		ug/L		88	74 - 124	3	15
cis-1,3-Dichloropropene	ND		1250	1190		ug/L		96	74 - 124	0	15
Cyclohexane	ND		1250	1100		ug/L		88	59 - 135	4	20
Dibromochloromethane	ND		1250	1290		ug/L		103	75 - 125	1	15

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

Lab Sample ID: 480-128297-2 MSD
Matrix: Water
Analysis Batch: 390875

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND		1250	786		ug/L		63	59 - 135	4	20
Ethylbenzene	ND		1250	1200		ug/L		96	77 - 123	1	15
Isopropylbenzene	ND		1250	1210		ug/L		97	77 - 122	1	20
m,p-Xylene	ND		1250	1230		ug/L		99	76 - 122	2	16
Methyl acetate	ND		2500	2340		ug/L		93	74 - 133	2	20
Methyl tert-butyl ether	ND		1250	1140		ug/L		91	77 - 120	3	37
Methylcyclohexane	ND		1250	1100		ug/L		88	68 - 134	1	20
Methylene Chloride	ND		1250	1170		ug/L		94	75 - 124	3	15
n-Butylbenzene	ND		1250	1110		ug/L		89	71 - 128	2	15
N-Propylbenzene	ND		1250	1140		ug/L		91	75 - 127	0	15
o-Xylene	ND		1250	1220		ug/L		97	76 - 122	0	16
sec-Butylbenzene	ND		1250	1200		ug/L		96	74 - 127	1	15
Styrene	ND		1250	1220		ug/L		98	80 - 120	0	20
tert-Butylbenzene	ND		1250	1170		ug/L		94	75 - 123	3	15
Tetrachloroethene	90		1250	1420		ug/L		106	74 - 122	0	20
Toluene	ND		1250	1150		ug/L		92	80 - 122	0	15
trans-1,2-Dichloroethene	ND		1250	1170		ug/L		94	73 - 127	1	20
trans-1,3-Dichloropropene	ND		1250	1250		ug/L		100	80 - 120	2	15
Trichloroethene	51		1250	1210		ug/L		93	74 - 123	2	16
Trichlorofluoromethane	ND		1250	1060		ug/L		84	62 - 150	2	20
Vinyl chloride	ND		1250	979		ug/L		78	65 - 133	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 480-391272/7
Matrix: Water
Analysis Batch: 391272

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			12/09/17 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/09/17 10:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/09/17 10:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/09/17 10:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/09/17 10:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/09/17 10:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/09/17 10:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/09/17 10:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/09/17 10:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/09/17 10:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/09/17 10:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/09/17 10:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/09/17 10:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/09/17 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/09/17 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/09/17 10:49	1

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

Lab Sample ID: MB 480-391272/7
Matrix: Water
Analysis Batch: 391272

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10	1.3	ug/L			12/09/17 10:49	1
2-Hexanone	ND		5.0	1.2	ug/L			12/09/17 10:49	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/09/17 10:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/09/17 10:49	1
Acetone	ND		10	3.0	ug/L			12/09/17 10:49	1
Benzene	ND		1.0	0.41	ug/L			12/09/17 10:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/09/17 10:49	1
Bromoform	ND		1.0	0.26	ug/L			12/09/17 10:49	1
Bromomethane	ND		1.0	0.69	ug/L			12/09/17 10:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/09/17 10:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/09/17 10:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/09/17 10:49	1
Chloroethane	ND		1.0	0.32	ug/L			12/09/17 10:49	1
Chloroform	ND		1.0	0.34	ug/L			12/09/17 10:49	1
Chloromethane	ND		1.0	0.35	ug/L			12/09/17 10:49	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/09/17 10:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/09/17 10:49	1
Cyclohexane	ND		1.0	0.18	ug/L			12/09/17 10:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/09/17 10:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/09/17 10:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/09/17 10:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/09/17 10:49	1
m,p-Xylene	ND		2.0	0.66	ug/L			12/09/17 10:49	1
Methyl acetate	ND		2.5	1.3	ug/L			12/09/17 10:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/09/17 10:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/09/17 10:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/09/17 10:49	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/09/17 10:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/09/17 10:49	1
o-Xylene	ND		1.0	0.76	ug/L			12/09/17 10:49	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/09/17 10:49	1
Styrene	ND		1.0	0.73	ug/L			12/09/17 10:49	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/09/17 10:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/09/17 10:49	1
Toluene	ND		1.0	0.51	ug/L			12/09/17 10:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/09/17 10:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/09/17 10:49	1
Trichloroethene	ND		1.0	0.46	ug/L			12/09/17 10:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/09/17 10:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/09/17 10:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/09/17 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/09/17 10:49*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/09/17 10:49*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/09/17 10:49*	*1*

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

Lab Sample ID: LCS 480-391272/5
Matrix: Water
Analysis Batch: 391272

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	26.4		ug/L		105	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.4		ug/L		110	61 - 148
1,1,2-Trichloroethane	25.0	27.4		ug/L		109	76 - 122
1,1-Dichloroethane	25.0	26.2		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	20.2		ug/L		81	66 - 127
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	79 - 122
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	18.1		ug/L		72	56 - 134
1,2-Dibromoethane	25.0	27.3		ug/L		109	77 - 120
1,2-Dichlorobenzene	25.0	26.6		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	24.6		ug/L		98	76 - 120
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	80 - 120
2-Butanone (MEK)	125	138		ug/L		110	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127
4-Isopropyltoluene	25.0	25.2		ug/L		101	73 - 120
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		99	71 - 125
Acetone	125	167		ug/L		134	56 - 142
Benzene	25.0	26.7		ug/L		107	71 - 124
Bromodichloromethane	25.0	24.6		ug/L		99	80 - 122
Bromoform	25.0	23.6		ug/L		94	61 - 132
Bromomethane	25.0	28.5		ug/L		114	55 - 144
Carbon disulfide	25.0	22.4		ug/L		90	59 - 134
Carbon tetrachloride	25.0	25.8		ug/L		103	72 - 134
Chlorobenzene	25.0	27.8		ug/L		111	80 - 120
Chloroethane	25.0	27.7		ug/L		111	69 - 136
Chloroform	25.0	27.0		ug/L		108	73 - 127
Chloromethane	25.0	23.9		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	27.1		ug/L		108	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	24.9		ug/L		100	59 - 135
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125
Dichlorodifluoromethane	25.0	25.9		ug/L		103	59 - 135
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
Isopropylbenzene	25.0	24.9		ug/L		100	77 - 122
m,p-Xylene	25.0	26.4		ug/L		106	76 - 122
Methyl acetate	50.0	45.5		ug/L		91	74 - 133
Methyl tert-butyl ether	25.0	25.7		ug/L		103	77 - 120
Methylcyclohexane	25.0	29.1		ug/L		117	68 - 134
Methylene Chloride	25.0	25.4		ug/L		101	75 - 124
n-Butylbenzene	25.0	26.0		ug/L		104	71 - 128
N-Propylbenzene	25.0	25.3		ug/L		101	75 - 127
o-Xylene	25.0	26.8		ug/L		107	76 - 122
sec-Butylbenzene	25.0	25.7		ug/L		103	74 - 127

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

Lab Sample ID: LCS 480-391272/5
Matrix: Water
Analysis Batch: 391272

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	25.0	26.5		ug/L		106	80 - 120
tert-Butylbenzene	25.0	25.4		ug/L		101	75 - 123
Tetrachloroethene	25.0	28.4		ug/L		114	74 - 122
Toluene	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	80 - 120
Trichloroethene	25.0	27.8		ug/L		111	74 - 123
Trichlorofluoromethane	25.0	27.2		ug/L		109	62 - 150
Vinyl chloride	25.0	25.3		ug/L		101	65 - 133

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

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-390269/1-A
Matrix: Water
Analysis Batch: 390904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 390269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		12/04/17 10:40	12/06/17 17:14	1

Lab Sample ID: LCS 480-390269/2-A
Matrix: Water
Analysis Batch: 391459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 390269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.91		mg/L		99	80 - 120

Lab Sample ID: LCSD 480-390269/24-A
Matrix: Water
Analysis Batch: 391459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 390269

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	9.67		mg/L		97	80 - 120	NaN	20

Lab Sample ID: MB 480-390343/1-B
Matrix: Water
Analysis Batch: 390900

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 390649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		12/06/17 08:38	12/06/17 19:01	1

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

Lab Sample ID: LCS 480-390343/2-B
Matrix: Water
Analysis Batch: 390900

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 390649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	10.0	9.28		mg/L		93	80 - 120

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-390161/27
Matrix: Water
Analysis Batch: 390161

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			12/01/17 19:27	1

Lab Sample ID: MB 480-390161/3
Matrix: Water
Analysis Batch: 390161

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			12/01/17 19:01	1

Lab Sample ID: LCS 480-390161/28
Matrix: Water
Analysis Batch: 390161

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.52		mg/L		101	90 - 110

Lab Sample ID: LCS 480-390161/4
Matrix: Water
Analysis Batch: 390161

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.52		mg/L		101	90 - 110

Lab Sample ID: MB 480-390166/3
Matrix: Water
Analysis Batch: 390166

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			12/01/17 20:14	1

Lab Sample ID: LCS 480-390166/4
Matrix: Water
Analysis Batch: 390166

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.53		mg/L		102	90 - 110

Method: 353.2 - Nitrogen, Nitrite (Continued)

Lab Sample ID: 480-128297-3 MS
Matrix: Water
Analysis Batch: 390166

Client Sample ID: PW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrite as N	ND		1.00	1.04		mg/L		104	90 - 110		

Lab Sample ID: 480-128297-3 DU
Matrix: Water
Analysis Batch: 390166

Client Sample ID: PW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrite as N	ND		ND		mg/L		NC	20

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-390605/96
Matrix: Water
Analysis Batch: 390605

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			12/05/17 14:33	1

Lab Sample ID: LCS 480-390605/95
Matrix: Water
Analysis Batch: 390605

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.40		mg/L		101	90 - 110

Lab Sample ID: MB 480-390761/33
Matrix: Water
Analysis Batch: 390761

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			12/06/17 10:56	1

Lab Sample ID: LCS 480-390761/32
Matrix: Water
Analysis Batch: 390761

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.21		mg/L		101	90 - 110

GC/MS VOA

Analysis Batch: 390875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-2	MW-6	Total/NA	Water	8260C	
MB 480-390875/7	Method Blank	Total/NA	Water	8260C	
LCS 480-390875/5	Lab Control Sample	Total/NA	Water	8260C	
480-128297-2 MS	MW-6	Total/NA	Water	8260C	
480-128297-2 MSD	MW-6	Total/NA	Water	8260C	

Analysis Batch: 391272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	8260C	
480-128297-3	PW-1R	Total/NA	Water	8260C	
MB 480-391272/7	Method Blank	Total/NA	Water	8260C	
LCS 480-391272/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 390269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	3005A	
480-128297-2	MW-6	Total/NA	Water	3005A	
480-128297-3	PW-1R	Total/NA	Water	3005A	
MB 480-390269/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-390269/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-390269/24-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Filtration Batch: 390343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Dissolved	Water	FILTRATION	
480-128297-2	MW-6	Dissolved	Water	FILTRATION	
480-128297-3	PW-1R	Dissolved	Water	FILTRATION	
MB 480-390343/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-390343/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	

Prep Batch: 390649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Dissolved	Water	3005A	390343
480-128297-2	MW-6	Dissolved	Water	3005A	390343
480-128297-3	PW-1R	Dissolved	Water	3005A	390343
MB 480-390343/1-B	Method Blank	Dissolved	Water	3005A	390343
LCS 480-390343/2-B	Lab Control Sample	Dissolved	Water	3005A	390343

Analysis Batch: 390900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Dissolved	Water	6010C	390649
480-128297-2	MW-6	Dissolved	Water	6010C	390649
480-128297-3	PW-1R	Dissolved	Water	6010C	390649
MB 480-390343/1-B	Method Blank	Dissolved	Water	6010C	390649
LCS 480-390343/2-B	Lab Control Sample	Dissolved	Water	6010C	390649

Metals (Continued)

Analysis Batch: 390904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-390269/1-A	Method Blank	Total/NA	Water	6010C	390269

Analysis Batch: 391459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	6010C	390269
480-128297-2	MW-6	Total/NA	Water	6010C	390269
480-128297-3	PW-1R	Total/NA	Water	6010C	390269
LCS 480-390269/2-A	Lab Control Sample	Total/NA	Water	6010C	390269
LCSD 480-390269/24-A	Lab Control Sample Dup	Total/NA	Water	6010C	390269

General Chemistry

Analysis Batch: 390161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-2	MW-6	Total/NA	Water	353.2	
MB 480-390161/27	Method Blank	Total/NA	Water	353.2	
MB 480-390161/3	Method Blank	Total/NA	Water	353.2	
LCS 480-390161/28	Lab Control Sample	Total/NA	Water	353.2	
LCS 480-390161/4	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 390163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	353.2	

Analysis Batch: 390164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	353.2	

Analysis Batch: 390165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-2	MW-6	Total/NA	Water	353.2	
480-128297-3	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 390166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-3	PW-1R	Total/NA	Water	353.2	
MB 480-390166/3	Method Blank	Total/NA	Water	353.2	
LCS 480-390166/4	Lab Control Sample	Total/NA	Water	353.2	
480-128297-3 MS	PW-1R	Total/NA	Water	353.2	
480-128297-3 DU	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 390605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-1	MW-5	Total/NA	Water	D516-90, 02	
480-128297-3	PW-1R	Total/NA	Water	D516-90, 02	
MB 480-390605/96	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-390605/95	Lab Control Sample	Total/NA	Water	D516-90, 02	

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

TestAmerica Job ID: 480-128297-1

General Chemistry (Continued)

Analysis Batch: 390761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128297-2	MW-6	Total/NA	Water	D516-90, 02	
MB 480-390761/33	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-390761/32	Lab Control Sample	Total/NA	Water	D516-90, 02	

Lab Chronicle

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

TestAmerica Job ID: 480-128297-1

Client Sample ID: MW-5

Lab Sample ID: 480-128297-1

Date Collected: 11/30/17 11:00

Matrix: Water

Date Received: 12/01/17 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	391272	12/09/17 12:58	MXS	TAL BUF
Dissolved	Filtration	FILTRATION			390343	12/04/17 12:26	EMB	TAL BUF
Dissolved	Prep	3005A			390649	12/06/17 08:38	EMB	TAL BUF
Dissolved	Analysis	6010C		1	390900	12/06/17 19:47	AMH	TAL BUF
Total/NA	Prep	3005A			390269	12/04/17 10:40	EMB	TAL BUF
Total/NA	Analysis	6010C		1	391459	12/06/17 01:30	AMH	TAL BUF
Total/NA	Analysis	353.2		1	390163	12/01/17 18:08	LED	TAL BUF
Total/NA	Analysis	353.2		1	390164	12/01/17 18:08	LED	TAL BUF
Total/NA	Analysis	D516-90, 02		1	390605	12/05/17 14:41	ALZ	TAL BUF

Client Sample ID: MW-6

Lab Sample ID: 480-128297-2

Date Collected: 11/30/17 10:00

Matrix: Water

Date Received: 12/01/17 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	390875	12/07/17 13:57	ARS	TAL BUF
Dissolved	Filtration	FILTRATION			390343	12/04/17 12:26	EMB	TAL BUF
Dissolved	Prep	3005A			390649	12/06/17 08:38	EMB	TAL BUF
Dissolved	Analysis	6010C		1	390900	12/06/17 20:05	AMH	TAL BUF
Total/NA	Prep	3005A			390269	12/04/17 10:40	EMB	TAL BUF
Total/NA	Analysis	6010C		1	391459	12/06/17 01:33	AMH	TAL BUF
Total/NA	Analysis	353.2		1	390161	12/01/17 19:20	LED	TAL BUF
Total/NA	Analysis	353.2		1	390165	12/01/17 19:20	LED	TAL BUF
Total/NA	Analysis	D516-90, 02		50	390761	12/06/17 11:08	ALZ	TAL BUF

Client Sample ID: PW-1R

Lab Sample ID: 480-128297-3

Date Collected: 11/30/17 12:00

Matrix: Water

Date Received: 12/01/17 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	391272	12/09/17 13:21	MXS	TAL BUF
Dissolved	Filtration	FILTRATION			390343	12/04/17 12:26	EMB	TAL BUF
Dissolved	Prep	3005A			390649	12/06/17 08:38	EMB	TAL BUF
Dissolved	Analysis	6010C		1	390900	12/06/17 20:09	AMH	TAL BUF
Total/NA	Prep	3005A			390269	12/04/17 10:40	EMB	TAL BUF
Total/NA	Analysis	6010C		1	391459	12/06/17 01:37	AMH	TAL BUF
Total/NA	Analysis	353.2		1	390165	12/01/17 20:17	LED	TAL BUF
Total/NA	Analysis	353.2		1	390166	12/01/17 20:17	LED	TAL BUF
Total/NA	Analysis	D516-90, 02		1	390605	12/05/17 14:41	ALZ	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: 480-128297-1
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	03-31-18

Method Summary

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

TestAmerica Job ID: 480-128297-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 480-128297-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-128297-1	MW-5	Water	11/30/17 11:00	12/01/17 13:45
480-128297-2	MW-6	Water	11/30/17 10:00	12/01/17 13:45
480-128297-3	PW-1R	Water	11/30/17 12:00	12/01/17 13:45

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: RLO	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-105484-23673.1
Client Contact: Ms. Lori Riker	Phone:	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days):			
State, Zip: NY, 14218				
Phone:	PO #: Purchase Order not required			
Email: lriker@benchmarkturnkey.com	WO #:			
Project Name: Benchmark - Despatch site	Project #: 48003736			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M, N, O, P, Q, R, S, T, U, V - 480-128297 COC, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - (MOD) T. Fe	8250C - (MOD) TCL list OLM04.2 + Stars	353.2, 353.2_Nitrite, D516, Nitrate_Calc	6010C - (MOD) D. Fe	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
MW-5	11/30/17	1100	G	Water	N	N	✓	✓	✓	✓		
MW-6	11/30/17	1000	G	Water	N	N	✓	✓	✓	✓		
PW-1R	11/30/17	1200	G	Water	N	N	✓	✓	✓	✓		

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months
Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 12-1-17 1100	Company BM	Received by:		Date/Time: 12/01/17 1220	Company TA	
Relinquished by:	Date/Time: 12/01/17 1345	Company TA	Received by:		Date/Time: 12/1/17 1345	Company L	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		7.0 #1		

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-128297-1

Login Number: 128297

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl 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.	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	BM
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	

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: 480-132013-1
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:
3/8/2018 9:51:20 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

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

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

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

Table of Contents

Definitions/Glossary

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

TestAmerica Job ID: 480-132013-1

Qualifiers

GC/MS VOA

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

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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)

Case Narrative

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

TestAmerica Job ID: 480-132013-1

Job ID: 480-132013-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-132013-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2018 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 8260C: The following sample were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-5 (480-132013-1).
The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-5 (480-132013-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-402351 recovered above the upper control limit for Cyclohexane and Methylcyclohexane. 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-6 (480-132013-2) and PW-1R (480-132013-3).

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-6 (480-132013-2). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Method(s) 353.2: The following samples were received outside of holding time: MW-5 (480-132013-1), MW-6 (480-132013-2) and PW-1R (480-132013-3).

Method(s) Nitrate by calc: The following samples were received outside of holding time: MW-5 (480-132013-1), MW-6 (480-132013-2) and PW-1R (480-132013-3).

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: 480-132013-1

Client Sample ID: MW-5 — Lab Sample ID: 480-132013-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	320		100	13	ug/L	10		8260C	Total/NA
Acetone	200		100	30	ug/L	10		8260C	Total/NA
Iron	89.5		0.050		mg/L	1		6010C	Total/NA
Iron, Dissolved	37.7		0.050		mg/L	1		6010C	Dissolved
Nitrate as N	0.078	H	0.050		mg/L	1		353.2	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-132013-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	3.8	J	4.0	3.0	ug/L	4		8260C	Total/NA
2-Butanone (MEK)	8.7	J	40	5.3	ug/L	4		8260C	Total/NA
Acetone	49		40	12	ug/L	4		8260C	Total/NA
Tetrachloroethene	3.5	J	4.0	1.4	ug/L	4		8260C	Total/NA
Trichloroethene	4.9		4.0	1.8	ug/L	4		8260C	Total/NA
Iron	16.3		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	0.099	H	0.050		mg/L	1		353.2	Total/NA
Sulfate	1070		225		mg/L	45		D516-90, 02	Total/NA

Client Sample ID: PW-1R — Lab Sample ID: 480-132013-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.0	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroform	0.44	J	1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.74	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	4.7		1.0	0.46	ug/L	1		8260C	Total/NA
Iron	3.1		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	1.0	H	0.050		mg/L	1		353.2	Total/NA
Sulfate	76.1		10.0		mg/L	2		D516-90, 02	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: 480-132013-1

Client Sample ID: MW-5
Date Collected: 02/27/18 10:30
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-1
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		10	8.2	ug/L			03/02/18 18:56	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			03/02/18 18:56	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			03/02/18 18:56	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			03/02/18 18:56	10
1,1-Dichloroethane	ND		10	3.8	ug/L			03/02/18 18:56	10
1,1-Dichloroethene	ND		10	2.9	ug/L			03/02/18 18:56	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			03/02/18 18:56	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			03/02/18 18:56	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			03/02/18 18:56	10
1,2-Dibromoethane	ND		10	7.3	ug/L			03/02/18 18:56	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			03/02/18 18:56	10
1,2-Dichloroethane	ND		10	2.1	ug/L			03/02/18 18:56	10
1,2-Dichloropropane	ND		10	7.2	ug/L			03/02/18 18:56	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			03/02/18 18:56	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			03/02/18 18:56	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			03/02/18 18:56	10
2-Butanone (MEK)	**320**		100	13	ug/L			03/02/18 18:56	10
2-Hexanone	ND		50	12	ug/L			03/02/18 18:56	10
4-Isopropyltoluene	ND		10	3.1	ug/L			03/02/18 18:56	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			03/02/18 18:56	10
Acetone	**200**		100	30	ug/L			03/02/18 18:56	10
Benzene	ND		10	4.1	ug/L			03/02/18 18:56	10
Bromodichloromethane	ND		10	3.9	ug/L			03/02/18 18:56	10
Bromoform	ND		10	2.6	ug/L			03/02/18 18:56	10
Bromomethane	ND		10	6.9	ug/L			03/02/18 18:56	10
Carbon disulfide	ND		10	1.9	ug/L			03/02/18 18:56	10
Carbon tetrachloride	ND		10	2.7	ug/L			03/02/18 18:56	10
Chlorobenzene	ND		10	7.5	ug/L			03/02/18 18:56	10
Chloroethane	ND		10	3.2	ug/L			03/02/18 18:56	10
Chloroform	ND		10	3.4	ug/L			03/02/18 18:56	10
Chloromethane	ND		10	3.5	ug/L			03/02/18 18:56	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			03/02/18 18:56	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			03/02/18 18:56	10
Cyclohexane	ND		10	1.8	ug/L			03/02/18 18:56	10
Dibromochloromethane	ND		10	3.2	ug/L			03/02/18 18:56	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			03/02/18 18:56	10
Ethylbenzene	ND		10	7.4	ug/L			03/02/18 18:56	10
Isopropylbenzene	ND		10	7.9	ug/L			03/02/18 18:56	10
m,p-Xylene	ND		20	6.6	ug/L			03/02/18 18:56	10
Methyl acetate	ND		25	13	ug/L			03/02/18 18:56	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			03/02/18 18:56	10
Methylcyclohexane	ND		10	1.6	ug/L			03/02/18 18:56	10
Methylene Chloride	ND		10	4.4	ug/L			03/02/18 18:56	10
n-Butylbenzene	ND		10	6.4	ug/L			03/02/18 18:56	10
N-Propylbenzene	ND		10	6.9	ug/L			03/02/18 18:56	10
o-Xylene	ND		10	7.6	ug/L			03/02/18 18:56	10
sec-Butylbenzene	ND		10	7.5	ug/L			03/02/18 18:56	10
Styrene	ND		10	7.3	ug/L			03/02/18 18:56	10
tert-Butylbenzene	ND		10	8.1	ug/L			03/02/18 18:56	10

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: MW-5
Date Collected: 02/27/18 10:30
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		10	3.6	ug/L			03/02/18 18:56	10
Toluene	ND		10	5.1	ug/L			03/02/18 18:56	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			03/02/18 18:56	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			03/02/18 18:56	10
Trichloroethene	ND		10	4.6	ug/L			03/02/18 18:56	10
Trichlorofluoromethane	ND		10	8.8	ug/L			03/02/18 18:56	10
Vinyl chloride	ND		10	9.0	ug/L			03/02/18 18:56	10
Xylenes, Total	ND		20	6.6	ug/L			03/02/18 18:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/02/18 18:56*	*10*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*03/02/18 18:56*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/02/18 18:56*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**89.5**		0.050		mg/L		03/02/18 09:15	03/02/18 21:05	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**37.7**		0.050		mg/L		03/05/18 09:21	03/05/18 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.078**	**H**	0.050		mg/L			03/02/18 15:43	1
Nitrite as N	ND	H	0.050		mg/L			03/02/18 15:43	1
Sulfate	ND		5.0		mg/L			03/07/18 11:17	1

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: MW-6
Date Collected: 02/27/18 10:00
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-2
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		4.0	3.3	ug/L			03/04/18 12:53	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			03/04/18 12:53	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/04/18 12:53	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/04/18 12:53	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			03/04/18 12:53	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			03/04/18 12:53	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			03/04/18 12:53	4
1,2,4-Trimethylbenzene	**3.8**	**J**	4.0	3.0	ug/L			03/04/18 12:53	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			03/04/18 12:53	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/04/18 12:53	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			03/04/18 12:53	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			03/04/18 12:53	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/04/18 12:53	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			03/04/18 12:53	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			03/04/18 12:53	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			03/04/18 12:53	4
2-Butanone (MEK)	**8.7**	**J**	40	5.3	ug/L			03/04/18 12:53	4
2-Hexanone	ND		20	5.0	ug/L			03/04/18 12:53	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			03/04/18 12:53	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/04/18 12:53	4
Acetone	**49**		40	12	ug/L			03/04/18 12:53	4
Benzene	ND		4.0	1.6	ug/L			03/04/18 12:53	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/04/18 12:53	4
Bromoform	ND		4.0	1.0	ug/L			03/04/18 12:53	4
Bromomethane	ND		4.0	2.8	ug/L			03/04/18 12:53	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/04/18 12:53	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/04/18 12:53	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/04/18 12:53	4
Chloroethane	ND		4.0	1.3	ug/L			03/04/18 12:53	4
Chloroform	ND		4.0	1.4	ug/L			03/04/18 12:53	4
Chloromethane	ND		4.0	1.4	ug/L			03/04/18 12:53	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			03/04/18 12:53	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/04/18 12:53	4
Cyclohexane	ND		4.0	0.72	ug/L			03/04/18 12:53	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/04/18 12:53	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			03/04/18 12:53	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/04/18 12:53	4
Isopropylbenzene	ND		4.0	3.2	ug/L			03/04/18 12:53	4
m,p-Xylene	ND		8.0	2.6	ug/L			03/04/18 12:53	4
Methyl acetate	ND		10	5.2	ug/L			03/04/18 12:53	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/04/18 12:53	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/04/18 12:53	4
Methylene Chloride	ND		4.0	1.8	ug/L			03/04/18 12:53	4
n-Butylbenzene	ND		4.0	2.6	ug/L			03/04/18 12:53	4
N-Propylbenzene	ND		4.0	2.8	ug/L			03/04/18 12:53	4
o-Xylene	ND		4.0	3.0	ug/L			03/04/18 12:53	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			03/04/18 12:53	4
Styrene	ND		4.0	2.9	ug/L			03/04/18 12:53	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			03/04/18 12:53	4

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: MW-6
Date Collected: 02/27/18 10:00
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**3.5**	**J**	4.0	1.4	ug/L			03/04/18 12:53	4
Toluene	ND		4.0	2.0	ug/L			03/04/18 12:53	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/04/18 12:53	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/04/18 12:53	4
Trichloroethene	**4.9**		4.0	1.8	ug/L			03/04/18 12:53	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/04/18 12:53	4
Vinyl chloride	ND		4.0	3.6	ug/L			03/04/18 12:53	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/04/18 12:53	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*03/04/18 12:53*	*4*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*03/04/18 12:53*	*4*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/04/18 12:53*	*4*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**16.3**		0.050		mg/L		03/02/18 09:15	03/02/18 21:13	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		03/05/18 09:21	03/05/18 19:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.099**	**H**	0.050		mg/L			03/02/18 15:44	1
Nitrite as N	ND	H	0.050		mg/L			03/02/18 15:44	1
Sulfate	**1070**		225		mg/L			03/07/18 13:49	45

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: PW-1R
Date Collected: 02/27/18 09:00
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-3
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			03/04/18 13:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/04/18 13:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/04/18 13:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/04/18 13:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/04/18 13:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/04/18 13:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/04/18 13:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/04/18 13:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/04/18 13:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/04/18 13:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/04/18 13:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/04/18 13:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/04/18 13:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/04/18 13:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/04/18 13:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/04/18 13:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/04/18 13:20	1
2-Hexanone	ND		5.0	1.2	ug/L			03/04/18 13:20	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/04/18 13:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/04/18 13:20	1
Acetone	**6.0**	**J**	10	3.0	ug/L			03/04/18 13:20	1
Benzene	ND		1.0	0.41	ug/L			03/04/18 13:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/04/18 13:20	1
Bromoform	ND		1.0	0.26	ug/L			03/04/18 13:20	1
Bromomethane	ND		1.0	0.69	ug/L			03/04/18 13:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/04/18 13:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/04/18 13:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/04/18 13:20	1
Chloroethane	ND		1.0	0.32	ug/L			03/04/18 13:20	1
Chloroform	**0.44**	**J**	1.0	0.34	ug/L			03/04/18 13:20	1
Chloromethane	ND		1.0	0.35	ug/L			03/04/18 13:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/04/18 13:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/04/18 13:20	1
Cyclohexane	ND		1.0	0.18	ug/L			03/04/18 13:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/04/18 13:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/04/18 13:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/04/18 13:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/04/18 13:20	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/04/18 13:20	1
Methyl acetate	ND		2.5	1.3	ug/L			03/04/18 13:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/04/18 13:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/04/18 13:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/04/18 13:20	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/04/18 13:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/04/18 13:20	1
o-Xylene	ND		1.0	0.76	ug/L			03/04/18 13:20	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/04/18 13:20	1
Styrene	ND		1.0	0.73	ug/L			03/04/18 13:20	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/04/18 13:20	1

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: PW-1R
Date Collected: 02/27/18 09:00
Date Received: 03/01/18 15:30

Lab Sample ID: 480-132013-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.74**	**J**	1.0	0.36	ug/L			03/04/18 13:20	1
Toluene	ND		1.0	0.51	ug/L			03/04/18 13:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/04/18 13:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/04/18 13:20	1
Trichloroethene	**4.7**		1.0	0.46	ug/L			03/04/18 13:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/04/18 13:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/04/18 13:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/04/18 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/04/18 13:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/04/18 13:20*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/04/18 13:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.1**		0.050		mg/L		03/02/18 09:15	03/02/18 21:20	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		03/05/18 09:21	03/05/18 19:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.0**	**H**	0.050		mg/L			03/02/18 15:46	1
Nitrite as N	ND	H	0.050		mg/L			03/02/18 15:46	1
Sulfate	**76.1**		10.0		mg/L			03/07/18 11:21	2

Surrogate Summary

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

TestAmerica Job ID: 480-132013-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-132013-1	MW-5	105	96	99
480-132013-2	MW-6	104	102	100
480-132013-3	PW-1R	105	93	101
LCS 480-402183/5	Lab Control Sample	96	103	98
LCS 480-402351/5	Lab Control Sample	103	100	97
MB 480-402183/7	Method Blank	106	102	99
MB 480-402351/7	Method Blank	103	98	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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

TestAmerica Job ID: 480-132013-1

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

Lab Sample ID: MB 480-402183/7
Matrix: Water
Analysis Batch: 402183

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			03/02/18 11:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/02/18 11:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/02/18 11:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/02/18 11:28	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/02/18 11:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/02/18 11:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/02/18 11:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/02/18 11:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/02/18 11:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/02/18 11:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/02/18 11:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/02/18 11:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/02/18 11:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/02/18 11:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/02/18 11:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/02/18 11:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/02/18 11:28	1
2-Hexanone	ND		5.0	1.2	ug/L			03/02/18 11:28	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/02/18 11:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/02/18 11:28	1
Acetone	ND		10	3.0	ug/L			03/02/18 11:28	1
Benzene	ND		1.0	0.41	ug/L			03/02/18 11:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/02/18 11:28	1
Bromoform	ND		1.0	0.26	ug/L			03/02/18 11:28	1
Bromomethane	ND		1.0	0.69	ug/L			03/02/18 11:28	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/02/18 11:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/02/18 11:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/02/18 11:28	1
Chloroethane	ND		1.0	0.32	ug/L			03/02/18 11:28	1
Chloroform	ND		1.0	0.34	ug/L			03/02/18 11:28	1
Chloromethane	ND		1.0	0.35	ug/L			03/02/18 11:28	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/02/18 11:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/02/18 11:28	1
Cyclohexane	ND		1.0	0.18	ug/L			03/02/18 11:28	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/02/18 11:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/02/18 11:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/02/18 11:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/02/18 11:28	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/02/18 11:28	1
Methyl acetate	ND		2.5	1.3	ug/L			03/02/18 11:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/02/18 11:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/02/18 11:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/02/18 11:28	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/02/18 11:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/02/18 11:28	1
o-Xylene	ND		1.0	0.76	ug/L			03/02/18 11:28	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/02/18 11:28	1
Styrene	ND		1.0	0.73	ug/L			03/02/18 11:28	1

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

Lab Sample ID: MB 480-402183/7
Matrix: Water
Analysis Batch: 402183

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/02/18 11:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/02/18 11:28	1
Toluene	ND		1.0	0.51	ug/L			03/02/18 11:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/02/18 11:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/02/18 11:28	1
Trichloroethene	ND		1.0	0.46	ug/L			03/02/18 11:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/02/18 11:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/02/18 11:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/02/18 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*03/02/18 11:28*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*03/02/18 11:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/02/18 11:28*	*1*

Lab Sample ID: LCS 480-402183/5
Matrix: Water
Analysis Batch: 402183

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	24.9		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3		ug/L		105	61 - 148
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	24.8		ug/L		99	77 - 120
1,1-Dichloroethene	25.0	21.4		ug/L		86	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	79 - 122
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	28.9		ug/L		116	56 - 134
1,2-Dibromoethane	25.0	25.3		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	23.1		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		101	76 - 120
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		103	77 - 121
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 120
2-Butanone (MEK)	125	138		ug/L		111	57 - 140
2-Hexanone	125	138		ug/L		110	65 - 127
4-Isopropyltoluene	25.0	26.8		ug/L		107	73 - 120
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	156		ug/L		125	56 - 142
Benzene	25.0	24.3		ug/L		97	71 - 124
Bromodichloromethane	25.0	24.9		ug/L		100	80 - 122
Bromoform	25.0	26.8		ug/L		107	61 - 132
Bromomethane	25.0	21.9		ug/L		87	55 - 144
Carbon disulfide	25.0	25.2		ug/L		101	59 - 134
Carbon tetrachloride	25.0	26.1		ug/L		104	72 - 134

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

Lab Sample ID: LCS 480-402183/5
Matrix: Water
Analysis Batch: 402183

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	24.5		ug/L		98	80 - 120
Chloroethane	25.0	22.4		ug/L		90	69 - 136
Chloroform	25.0	23.5		ug/L		94	73 - 127
Chloromethane	25.0	22.5		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	74 - 124
Cyclohexane	25.0	27.6		ug/L		110	59 - 135
Dibromochloromethane	25.0	25.5		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	23.1		ug/L		92	59 - 135
Ethylbenzene	25.0	25.0		ug/L		100	77 - 123
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
m,p-Xylene	25.0	24.9		ug/L		100	76 - 122
Methyl acetate	50.0	50.3		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		96	77 - 120
Methylcyclohexane	25.0	28.6		ug/L		114	68 - 134
Methylene Chloride	25.0	23.6		ug/L		95	75 - 124
n-Butylbenzene	25.0	26.1		ug/L		105	71 - 128
N-Propylbenzene	25.0	25.8		ug/L		103	75 - 127
o-Xylene	25.0	25.5		ug/L		102	76 - 122
sec-Butylbenzene	25.0	25.9		ug/L		103	74 - 127
Styrene	25.0	25.3		ug/L		101	80 - 120
tert-Butylbenzene	25.0	25.7		ug/L		103	75 - 123
Tetrachloroethene	25.0	24.9		ug/L		100	74 - 122
Toluene	25.0	23.6		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	80 - 120
Trichloroethene	25.0	24.8		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	24.5		ug/L		98	62 - 150
Vinyl chloride	25.0	22.7		ug/L		91	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 480-402351/7
Matrix: Water
Analysis Batch: 402351

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			03/04/18 11:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/04/18 11:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/04/18 11:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/04/18 11:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/04/18 11:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/04/18 11:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/04/18 11:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/04/18 11:25	1

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

Lab Sample ID: MB 480-402351/7
Matrix: Water
Analysis Batch: 402351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/04/18 11:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/04/18 11:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/04/18 11:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/04/18 11:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/04/18 11:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/04/18 11:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/04/18 11:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/04/18 11:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/04/18 11:25	1
2-Hexanone	ND		5.0	1.2	ug/L			03/04/18 11:25	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/04/18 11:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/04/18 11:25	1
Acetone	ND		10	3.0	ug/L			03/04/18 11:25	1
Benzene	ND		1.0	0.41	ug/L			03/04/18 11:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/04/18 11:25	1
Bromoform	ND		1.0	0.26	ug/L			03/04/18 11:25	1
Bromomethane	ND		1.0	0.69	ug/L			03/04/18 11:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/04/18 11:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/04/18 11:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/04/18 11:25	1
Chloroethane	ND		1.0	0.32	ug/L			03/04/18 11:25	1
Chloroform	ND		1.0	0.34	ug/L			03/04/18 11:25	1
Chloromethane	ND		1.0	0.35	ug/L			03/04/18 11:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/04/18 11:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/04/18 11:25	1
Cyclohexane	ND		1.0	0.18	ug/L			03/04/18 11:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/04/18 11:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/04/18 11:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/04/18 11:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/04/18 11:25	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/04/18 11:25	1
Methyl acetate	ND		2.5	1.3	ug/L			03/04/18 11:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/04/18 11:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/04/18 11:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/04/18 11:25	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/04/18 11:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/04/18 11:25	1
o-Xylene	ND		1.0	0.76	ug/L			03/04/18 11:25	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/04/18 11:25	1
Styrene	ND		1.0	0.73	ug/L			03/04/18 11:25	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/04/18 11:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/04/18 11:25	1
Toluene	ND		1.0	0.51	ug/L			03/04/18 11:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/04/18 11:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/04/18 11:25	1
Trichloroethene	ND		1.0	0.46	ug/L			03/04/18 11:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/04/18 11:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/04/18 11:25	1

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

Lab Sample ID: MB 480-402351/7
Matrix: Water
Analysis Batch: 402351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			03/04/18 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/04/18 11:25*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*03/04/18 11:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/04/18 11:25*	*1*

Lab Sample ID: LCS 480-402351/5
Matrix: Water
Analysis Batch: 402351

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	28.2		ug/L		113	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.5		ug/L		110	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.3		ug/L		117	61 - 148
1,1,2-Trichloroethane	25.0	26.6		ug/L		106	76 - 122
1,1-Dichloroethane	25.0	27.5		ug/L		110	77 - 120
1,1-Dichloroethene	25.0	27.8		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2,4-Trimethylbenzene	25.0	26.8		ug/L		107	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	29.7		ug/L		119	56 - 134
1,2-Dibromoethane	25.0	27.3		ug/L		109	77 - 120
1,2-Dichlorobenzene	25.0	26.7		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	25.6		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	27.4		ug/L		110	76 - 120
1,3,5-Trimethylbenzene	25.0	26.5		ug/L		106	77 - 121
1,3-Dichlorobenzene	25.0	26.4		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	80 - 120
2-Butanone (MEK)	125	147		ug/L		117	57 - 140
2-Hexanone	125	143		ug/L		114	65 - 127
4-Isopropyltoluene	25.0	27.7		ug/L		111	73 - 120
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125
Acetone	125	129		ug/L		103	56 - 142
Benzene	25.0	27.6		ug/L		110	71 - 124
Bromodichloromethane	25.0	27.6		ug/L		110	80 - 122
Bromoform	25.0	28.0		ug/L		112	61 - 132
Bromomethane	25.0	24.4		ug/L		98	55 - 144
Carbon disulfide	25.0	28.3		ug/L		113	59 - 134
Carbon tetrachloride	25.0	28.7		ug/L		115	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Chloroethane	25.0	24.7		ug/L		99	69 - 136
Chloroform	25.0	26.6		ug/L		106	73 - 127
Chloromethane	25.0	27.1		ug/L		108	68 - 124
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	74 - 124
cis-1,3-Dichloropropene	25.0	28.1		ug/L		112	74 - 124
Cyclohexane	25.0	31.5		ug/L		126	59 - 135
Dibromochloromethane	25.0	26.6		ug/L		106	75 - 125

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

Lab Sample ID: LCS 480-402351/5
Matrix: Water
Analysis Batch: 402351

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	25.0	30.0		ug/L		120	59 - 135
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Isopropylbenzene	25.0	26.9		ug/L		107	77 - 122
m,p-Xylene	25.0	26.1		ug/L		104	76 - 122
Methyl acetate	50.0	55.3		ug/L		111	74 - 133
Methyl tert-butyl ether	25.0	27.2		ug/L		109	77 - 120
Methylcyclohexane	25.0	32.1		ug/L		128	68 - 134
Methylene Chloride	25.0	26.3		ug/L		105	75 - 124
n-Butylbenzene	25.0	27.3		ug/L		109	71 - 128
N-Propylbenzene	25.0	27.3		ug/L		109	75 - 127
o-Xylene	25.0	26.7		ug/L		107	76 - 122
sec-Butylbenzene	25.0	27.2		ug/L		109	74 - 127
Styrene	25.0	26.5		ug/L		106	80 - 120
tert-Butylbenzene	25.0	26.9		ug/L		108	75 - 123
Tetrachloroethene	25.0	26.7		ug/L		107	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	28.0		ug/L		112	73 - 127
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	80 - 120
Trichloroethene	25.0	27.8		ug/L		111	74 - 123
Trichlorofluoromethane	25.0	27.5		ug/L		110	62 - 150
Vinyl chloride	25.0	25.8		ug/L		103	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-402187/1-A
Matrix: Water
Analysis Batch: 402447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 402187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		03/02/18 09:15	03/02/18 19:10	1

Lab Sample ID: LCS 480-402187/2-A
Matrix: Water
Analysis Batch: 402447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 402187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.37		mg/L		104	80 - 120

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

Lab Sample ID: MB 480-402239/1-C
Matrix: Water
Analysis Batch: 402611

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 402403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		03/05/18 09:21	03/05/18 19:03	1

Lab Sample ID: LCS 480-402239/2-C
Matrix: Water
Analysis Batch: 402611

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 402403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	10.0	9.62		mg/L		96	80 - 120

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-402296/3
Matrix: Water
Analysis Batch: 402296

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			03/02/18 15:27	1

Lab Sample ID: LCS 480-402296/4
Matrix: Water
Analysis Batch: 402296

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.48		mg/L		99	90 - 110

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-402946/12
Matrix: Water
Analysis Batch: 402946

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			03/07/18 11:01	1

Lab Sample ID: MB 480-402946/154
Matrix: Water
Analysis Batch: 402946

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			03/07/18 14:12	1

Lab Sample ID: MB 480-402946/43
Matrix: Water
Analysis Batch: 402946

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			03/07/18 11:15	1

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: MB 480-402946/66
Matrix: Water
Analysis Batch: 402946

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			03/07/18 11:26	1

Lab Sample ID: LCS 480-402946/11
Matrix: Water
Analysis Batch: 402946

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.36		mg/L		101	90 - 110

Lab Sample ID: LCS 480-402946/153
Matrix: Water
Analysis Batch: 402946

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	28.54		mg/L		95	90 - 110

Lab Sample ID: LCS 480-402946/42
Matrix: Water
Analysis Batch: 402946

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.07		mg/L		100	90 - 110

Lab Sample ID: LCS 480-402946/65
Matrix: Water
Analysis Batch: 402946

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.61		mg/L		102	90 - 110

GC/MS VOA

Analysis Batch: 402183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	8260C	
MB 480-402183/7	Method Blank	Total/NA	Water	8260C	
LCS 480-402183/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 402351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-2	MW-6	Total/NA	Water	8260C	
480-132013-3	PW-1R	Total/NA	Water	8260C	
MB 480-402351/7	Method Blank	Total/NA	Water	8260C	
LCS 480-402351/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 402187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	3005A	
480-132013-2	MW-6	Total/NA	Water	3005A	
480-132013-3	PW-1R	Total/NA	Water	3005A	
MB 480-402187/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-402187/2-A	Lab Control Sample	Total/NA	Water	3005A	

Filtration Batch: 402239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Dissolved	Water	FILTRATION	
480-132013-2	MW-6	Dissolved	Water	FILTRATION	
480-132013-3	PW-1R	Dissolved	Water	FILTRATION	
MB 480-402239/1-C	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-402239/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	

Prep Batch: 402403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Dissolved	Water	3005A	402239
480-132013-2	MW-6	Dissolved	Water	3005A	402239
480-132013-3	PW-1R	Dissolved	Water	3005A	402239
MB 480-402239/1-C	Method Blank	Dissolved	Water	3005A	402239
LCS 480-402239/2-C	Lab Control Sample	Dissolved	Water	3005A	402239

Analysis Batch: 402447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	6010C	402187
480-132013-2	MW-6	Total/NA	Water	6010C	402187
480-132013-3	PW-1R	Total/NA	Water	6010C	402187
MB 480-402187/1-A	Method Blank	Total/NA	Water	6010C	402187
LCS 480-402187/2-A	Lab Control Sample	Total/NA	Water	6010C	402187

Analysis Batch: 402611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Dissolved	Water	6010C	402403
480-132013-2	MW-6	Dissolved	Water	6010C	402403
480-132013-3	PW-1R	Dissolved	Water	6010C	402403

Metals (Continued)

Analysis Batch: 402611 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-402239/1-C	Method Blank	Dissolved	Water	6010C	402403
LCS 480-402239/2-C	Lab Control Sample	Dissolved	Water	6010C	402403

General Chemistry

Analysis Batch: 402296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	353.2	
480-132013-2	MW-6	Total/NA	Water	353.2	
480-132013-3	PW-1R	Total/NA	Water	353.2	
MB 480-402296/3	Method Blank	Total/NA	Water	353.2	
LCS 480-402296/4	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 402299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	353.2	
480-132013-2	MW-6	Total/NA	Water	353.2	
480-132013-3	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 402946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-132013-1	MW-5	Total/NA	Water	D516-90, 02	
480-132013-2	MW-6	Total/NA	Water	D516-90, 02	
480-132013-3	PW-1R	Total/NA	Water	D516-90, 02	
MB 480-402946/12	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-402946/154	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-402946/43	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-402946/66	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-402946/11	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-402946/153	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-402946/42	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-402946/65	Lab Control Sample	Total/NA	Water	D516-90, 02	

Lab Chronicle

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

TestAmerica Job ID: 480-132013-1

Client Sample ID: MW-5

Lab Sample ID: 480-132013-1

Date Collected: 02/27/18 10:30

Matrix: Water

Date Received: 03/01/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	402183	03/02/18 18:56	AMM	TAL BUF
Dissolved	Filtration	FILTRATION			402239	03/02/18 11:02	JAK	TAL BUF
Dissolved	Prep	3005A			402403	03/05/18 09:21	EMB	TAL BUF
Dissolved	Analysis	6010C		1	402611	03/05/18 19:33	LMH	TAL BUF
Total/NA	Prep	3005A			402187	03/02/18 09:15	JAK	TAL BUF
Total/NA	Analysis	6010C		1	402447	03/02/18 21:05	LMH	TAL BUF
Total/NA	Analysis	353.2		1	402299	03/02/18 15:43	DCB	TAL BUF
Total/NA	Analysis	353.2		1	402296	03/02/18 15:43	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		1	402946	03/07/18 11:17	ALZ	TAL BUF

Client Sample ID: MW-6

Lab Sample ID: 480-132013-2

Date Collected: 02/27/18 10:00

Matrix: Water

Date Received: 03/01/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	402351	03/04/18 12:53	AMM	TAL BUF
Dissolved	Filtration	FILTRATION			402239	03/02/18 11:02	JAK	TAL BUF
Dissolved	Prep	3005A			402403	03/05/18 09:21	EMB	TAL BUF
Dissolved	Analysis	6010C		1	402611	03/05/18 19:49	LMH	TAL BUF
Total/NA	Prep	3005A			402187	03/02/18 09:15	JAK	TAL BUF
Total/NA	Analysis	6010C		1	402447	03/02/18 21:13	LMH	TAL BUF
Total/NA	Analysis	353.2		1	402299	03/02/18 15:44	DCB	TAL BUF
Total/NA	Analysis	353.2		1	402296	03/02/18 15:44	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		45	402946	03/07/18 13:49	ALZ	TAL BUF

Client Sample ID: PW-1R

Lab Sample ID: 480-132013-3

Date Collected: 02/27/18 09:00

Matrix: Water

Date Received: 03/01/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	402351	03/04/18 13:20	AMM	TAL BUF
Dissolved	Filtration	FILTRATION			402239	03/02/18 11:02	JAK	TAL BUF
Dissolved	Prep	3005A			402403	03/05/18 09:21	EMB	TAL BUF
Dissolved	Analysis	6010C		1	402611	03/05/18 19:53	LMH	TAL BUF
Total/NA	Prep	3005A			402187	03/02/18 09:15	JAK	TAL BUF
Total/NA	Analysis	6010C		1	402447	03/02/18 21:20	LMH	TAL BUF
Total/NA	Analysis	353.2		1	402296	03/02/18 15:46	DCB	TAL BUF
Total/NA	Analysis	353.2		1	402299	03/02/18 15:46	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		2	402946	03/07/18 11:21	ALZ	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: 480-132013-1
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	03-31-18 *

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

Method Summary

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

TestAmerica Job ID: 480-132013-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 480-132013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-132013-1	MW-5	Water	02/27/18 10:30	03/01/18 15:30
480-132013-2	MW-6	Water	02/27/18 10:00	03/01/18 15:30
480-132013-3	PW-1R	Water	02/27/18 09:00	03/01/18 15:30

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL

480-132013 COC

Client Information	Sampler: RLD	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-109513-23673.1
Client Contact: Ms. Lori Riker	Phone:	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:

Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:
City: Lackawanna	TAT Requested (days):
State, Zip: NY, 14218	
Phone:	PO #: Purchase Order not required
Email: lriker@benchmarkturnkey.com	WO #:
Project Name: Benchmark - Despatch site	Project #: 48003736
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - (MOD) T. Fe	353.2, 353.2_Nitrite, D516, Nitrate_Calc	6010C - (MOD) D. Fe	8260C - (MOD) TCL list OLM04.2 + CP-51(Stars)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	A		
MW-5	2/27/18	1030	G	Water			X	X	X	X		
MW-6	2/27/18	1000	G	Water			X	X	X	X		
PW-1R	2/27/18	0900	G	Water			X	X	X	X		

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2-28-18 1000	BM		3/1/18 1500	TAL
2		3/1/18 1530	TAL		3/1/18 1530	TAL
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 2.7°

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-132013-1

Login Number: 132013

List Source: 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	

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: 480-136911-1
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:
6/25/2018 10:52:38 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
Project/Site: Benchmark - Despatch site

TestAmerica Job ID: 480-136911-1

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

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: 480-136911-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-136911-1

Comments
No additional comments.

Receipt
The samples were received on 6/5/2018 3:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, 2-Butanone exceeded control limits in the laboratory control sample (LCS) associated with batch 480-418131. The following samples were affected: MW-6 (480-136911-2) and PW-1R (480-136911-3).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-6 (480-136911-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-5 (480-136911-1). Elevated reporting limits (RLs) are provided.

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

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

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

Detection Summary

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

TestAmerica Job ID: 480-136911-1

Client Sample ID: MW-5 — Lab Sample ID: 480-136911-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	45	J *	100	13	ug/L	10		8260C	Total/NA
Acetone	63	J	100	30	ug/L	10		8260C	Total/NA
Iron	35.3		0.25		mg/L	5		6010C	Total/NA
Iron, Dissolved	9.8		0.050		mg/L	1		6010C	Dissolved
Nitrate as N	0.074		0.050		mg/L	1		353.2	Total/NA
Sulfate	10		5.0		mg/L	1		D516-90, 02	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 480-136911-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	40	12	ug/L	4		8260C	Total/NA
Tetrachloroethene	120		4.0	1.4	ug/L	4		8260C	Total/NA
Trichloroethene	88		4.0	1.8	ug/L	4		8260C	Total/NA
Iron	8.4		0.25		mg/L	5		6010C	Total/NA
Iron, Dissolved	0.91		0.050		mg/L	1		6010C	Dissolved
Sulfate	757		100		mg/L	20		D516-90, 02	Total/NA

Client Sample ID: PW-1R — Lab Sample ID: 480-136911-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.2	J	10	3.0	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.9		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	13		1.0	0.46	ug/L	1		8260C	Total/NA
Iron	14.7		0.050		mg/L	1		6010C	Total/NA
Nitrate as N	4.7		0.050		mg/L	1		353.2	Total/NA
Sulfate	120		25.0		mg/L	5		D516-90, 02	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-5

Date Collected: 06/04/18 10:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-1

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		10	8.2	ug/L			06/06/18 14:00	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			06/06/18 14:00	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			06/06/18 14:00	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			06/06/18 14:00	10
1,1-Dichloroethane	ND		10	3.8	ug/L			06/06/18 14:00	10
1,1-Dichloroethene	ND		10	2.9	ug/L			06/06/18 14:00	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			06/06/18 14:00	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			06/06/18 14:00	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			06/06/18 14:00	10
1,2-Dibromoethane	ND		10	7.3	ug/L			06/06/18 14:00	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			06/06/18 14:00	10
1,2-Dichloroethane	ND		10	2.1	ug/L			06/06/18 14:00	10
1,2-Dichloropropane	ND		10	7.2	ug/L			06/06/18 14:00	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			06/06/18 14:00	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			06/06/18 14:00	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			06/06/18 14:00	10
2-Butanone (MEK)	**45**	**J ***	100	13	ug/L			06/06/18 14:00	10
2-Hexanone	ND		50	12	ug/L			06/06/18 14:00	10
4-Isopropyltoluene	ND		10	3.1	ug/L			06/06/18 14:00	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			06/06/18 14:00	10
Acetone	**63**	**J**	100	30	ug/L			06/06/18 14:00	10
Benzene	ND		10	4.1	ug/L			06/06/18 14:00	10
Bromodichloromethane	ND		10	3.9	ug/L			06/06/18 14:00	10
Bromoform	ND		10	2.6	ug/L			06/06/18 14:00	10
Bromomethane	ND		10	6.9	ug/L			06/06/18 14:00	10
Carbon disulfide	ND		10	1.9	ug/L			06/06/18 14:00	10
Carbon tetrachloride	ND		10	2.7	ug/L			06/06/18 14:00	10
Chlorobenzene	ND		10	7.5	ug/L			06/06/18 14:00	10
Chloroethane	ND		10	3.2	ug/L			06/06/18 14:00	10
Chloroform	ND		10	3.4	ug/L			06/06/18 14:00	10
Chloromethane	ND		10	3.5	ug/L			06/06/18 14:00	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			06/06/18 14:00	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			06/06/18 14:00	10
Cyclohexane	ND		10	1.8	ug/L			06/06/18 14:00	10
Dibromochloromethane	ND		10	3.2	ug/L			06/06/18 14:00	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			06/06/18 14:00	10
Ethylbenzene	ND		10	7.4	ug/L			06/06/18 14:00	10
Isopropylbenzene	ND		10	7.9	ug/L			06/06/18 14:00	10
m,p-Xylene	ND		20	6.6	ug/L			06/06/18 14:00	10
Methyl acetate	ND		25	13	ug/L			06/06/18 14:00	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			06/06/18 14:00	10
Methylcyclohexane	ND		10	1.6	ug/L			06/06/18 14:00	10
Methylene Chloride	ND		10	4.4	ug/L			06/06/18 14:00	10
n-Butylbenzene	ND		10	6.4	ug/L			06/06/18 14:00	10
N-Propylbenzene	ND		10	6.9	ug/L			06/06/18 14:00	10
o-Xylene	ND		10	7.6	ug/L			06/06/18 14:00	10
sec-Butylbenzene	ND		10	7.5	ug/L			06/06/18 14:00	10
Styrene	ND		10	7.3	ug/L			06/06/18 14:00	10
tert-Butylbenzene	ND		10	8.1	ug/L			06/06/18 14:00	10

Client Sample ID: MW-5
Date Collected: 06/04/18 10:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		10	3.6	ug/L			06/06/18 14:00	10
Toluene	ND		10	5.1	ug/L			06/06/18 14:00	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			06/06/18 14:00	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			06/06/18 14:00	10
Trichloroethene	ND		10	4.6	ug/L			06/06/18 14:00	10
Trichlorofluoromethane	ND		10	8.8	ug/L			06/06/18 14:00	10
Vinyl chloride	ND		10	9.0	ug/L			06/06/18 14:00	10
Xylenes, Total	ND		20	6.6	ug/L			06/06/18 14:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*06/06/18 14:00*	*10*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/06/18 14:00*	*10*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/06/18 14:00*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**35.3**		0.25		mg/L		06/08/18 10:15	06/09/18 02:03	5

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**9.8**		0.050		mg/L		06/11/18 11:30	06/12/18 17:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.074**		0.050		mg/L			06/05/18 21:08	1
Nitrite as N	ND		0.050		mg/L			06/05/18 21:08	1
Sulfate	**10**		5.0		mg/L			06/22/18 17:39	1

Client Sample ID: MW-6

Date Collected: 06/04/18 10:30
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-2

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		4.0	3.3	ug/L			06/06/18 14:24	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			06/06/18 14:24	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			06/06/18 14:24	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			06/06/18 14:24	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			06/06/18 14:24	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			06/06/18 14:24	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			06/06/18 14:24	4
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			06/06/18 14:24	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			06/06/18 14:24	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			06/06/18 14:24	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			06/06/18 14:24	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			06/06/18 14:24	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			06/06/18 14:24	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			06/06/18 14:24	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			06/06/18 14:24	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			06/06/18 14:24	4
2-Butanone (MEK)	ND	*	40	5.3	ug/L			06/06/18 14:24	4
2-Hexanone	ND		20	5.0	ug/L			06/06/18 14:24	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			06/06/18 14:24	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			06/06/18 14:24	4
Acetone	**12**	**J**	40	12	ug/L			06/06/18 14:24	4
Benzene	ND		4.0	1.6	ug/L			06/06/18 14:24	4
Bromodichloromethane	ND		4.0	1.6	ug/L			06/06/18 14:24	4
Bromoform	ND		4.0	1.0	ug/L			06/06/18 14:24	4
Bromomethane	ND		4.0	2.8	ug/L			06/06/18 14:24	4
Carbon disulfide	ND		4.0	0.76	ug/L			06/06/18 14:24	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			06/06/18 14:24	4
Chlorobenzene	ND		4.0	3.0	ug/L			06/06/18 14:24	4
Chloroethane	ND		4.0	1.3	ug/L			06/06/18 14:24	4
Chloroform	ND		4.0	1.4	ug/L			06/06/18 14:24	4
Chloromethane	ND		4.0	1.4	ug/L			06/06/18 14:24	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			06/06/18 14:24	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			06/06/18 14:24	4
Cyclohexane	ND		4.0	0.72	ug/L			06/06/18 14:24	4
Dibromochloromethane	ND		4.0	1.3	ug/L			06/06/18 14:24	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			06/06/18 14:24	4
Ethylbenzene	ND		4.0	3.0	ug/L			06/06/18 14:24	4
Isopropylbenzene	ND		4.0	3.2	ug/L			06/06/18 14:24	4
m,p-Xylene	ND		8.0	2.6	ug/L			06/06/18 14:24	4
Methyl acetate	ND		10	5.2	ug/L			06/06/18 14:24	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			06/06/18 14:24	4
Methylcyclohexane	ND		4.0	0.64	ug/L			06/06/18 14:24	4
Methylene Chloride	ND		4.0	1.8	ug/L			06/06/18 14:24	4
n-Butylbenzene	ND		4.0	2.6	ug/L			06/06/18 14:24	4
N-Propylbenzene	ND		4.0	2.8	ug/L			06/06/18 14:24	4
o-Xylene	ND		4.0	3.0	ug/L			06/06/18 14:24	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			06/06/18 14:24	4
Styrene	ND		4.0	2.9	ug/L			06/06/18 14:24	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			06/06/18 14:24	4

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

TestAmerica Job ID: 480-136911-1

Client Sample ID: MW-6
Date Collected: 06/04/18 10:30
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**120**		4.0	1.4	ug/L			06/06/18 14:24	4
Toluene	ND		4.0	2.0	ug/L			06/06/18 14:24	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			06/06/18 14:24	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			06/06/18 14:24	4
Trichloroethene	**88**		4.0	1.8	ug/L			06/06/18 14:24	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			06/06/18 14:24	4
Vinyl chloride	ND		4.0	3.6	ug/L			06/06/18 14:24	4
Xylenes, Total	ND		8.0	2.6	ug/L			06/06/18 14:24	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/06/18 14:24*	*4*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/06/18 14:24*	*4*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/06/18 14:24*	*4*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**8.4**		0.25		mg/L		06/08/18 10:15	06/09/18 02:07	5

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.91**		0.050		mg/L		06/11/18 11:30	06/12/18 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050		mg/L			06/05/18 21:09	1
Nitrite as N	ND		0.050		mg/L			06/05/18 21:09	1
Sulfate	**757**		100		mg/L			06/23/18 11:33	20

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

TestAmerica Job ID: 480-136911-1

Client Sample ID: PW-1R
Date Collected: 06/04/18 11:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-3
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			06/06/18 14:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/06/18 14:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/06/18 14:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/06/18 14:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/06/18 14:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/06/18 14:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/06/18 14:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			06/06/18 14:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/06/18 14:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/06/18 14:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/06/18 14:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/06/18 14:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/06/18 14:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			06/06/18 14:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/06/18 14:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/06/18 14:47	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			06/06/18 14:47	1
2-Hexanone	ND		5.0	1.2	ug/L			06/06/18 14:47	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			06/06/18 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/06/18 14:47	1
Acetone	**8.2**	**J**	10	3.0	ug/L			06/06/18 14:47	1
Benzene	ND		1.0	0.41	ug/L			06/06/18 14:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/06/18 14:47	1
Bromoform	ND		1.0	0.26	ug/L			06/06/18 14:47	1
Bromomethane	ND		1.0	0.69	ug/L			06/06/18 14:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/06/18 14:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/06/18 14:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/06/18 14:47	1
Chloroethane	ND		1.0	0.32	ug/L			06/06/18 14:47	1
Chloroform	ND		1.0	0.34	ug/L			06/06/18 14:47	1
Chloromethane	ND		1.0	0.35	ug/L			06/06/18 14:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/06/18 14:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/06/18 14:47	1
Cyclohexane	ND		1.0	0.18	ug/L			06/06/18 14:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/06/18 14:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/06/18 14:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/06/18 14:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/06/18 14:47	1
m,p-Xylene	ND		2.0	0.66	ug/L			06/06/18 14:47	1
Methyl acetate	ND		2.5	1.3	ug/L			06/06/18 14:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/06/18 14:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/06/18 14:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/06/18 14:47	1
n-Butylbenzene	ND		1.0	0.64	ug/L			06/06/18 14:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			06/06/18 14:47	1
o-Xylene	ND		1.0	0.76	ug/L			06/06/18 14:47	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			06/06/18 14:47	1
Styrene	ND		1.0	0.73	ug/L			06/06/18 14:47	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			06/06/18 14:47	1

Client Sample ID: PW-1R

Date Collected: 06/04/18 11:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**2.9**		1.0	0.36	ug/L			06/06/18 14:47	1
Toluene	ND		1.0	0.51	ug/L			06/06/18 14:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/06/18 14:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/06/18 14:47	1
Trichloroethene	**13**		1.0	0.46	ug/L			06/06/18 14:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/06/18 14:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/06/18 14:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/06/18 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/06/18 14:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/06/18 14:47*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/06/18 14:47*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**14.7**		0.050		mg/L		06/08/18 10:15	06/09/18 02:11	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		06/11/18 11:30	06/12/18 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**4.7**		0.050		mg/L			06/05/18 21:10	1
Nitrite as N	ND	F1	0.050		mg/L			06/05/18 21:10	1
Sulfate	**120**		25.0		mg/L			06/23/18 11:21	5

Surrogate Summary

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

TestAmerica Job ID: 480-136911-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-136911-1	MW-5	98	100	93
480-136911-2	MW-6	103	95	92
480-136911-3	PW-1R	105	96	90
LCS 480-418131/5	Lab Control Sample	103	100	93
MB 480-418131/7	Method Blank	99	95	90

Surrogate Legend

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

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

Lab Sample ID: MB 480-418131/7
Matrix: Water
Analysis Batch: 418131

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/06/18 11:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/06/18 11:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/06/18 11:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/06/18 11:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/06/18 11:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/06/18 11:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/06/18 11:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			06/06/18 11:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/06/18 11:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/06/18 11:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/06/18 11:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/06/18 11:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/06/18 11:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			06/06/18 11:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/06/18 11:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/06/18 11:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/06/18 11:06	1
2-Hexanone	ND		5.0	1.2	ug/L			06/06/18 11:06	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			06/06/18 11:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/06/18 11:06	1
Acetone	ND		10	3.0	ug/L			06/06/18 11:06	1
Benzene	ND		1.0	0.41	ug/L			06/06/18 11:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/06/18 11:06	1
Bromoform	ND		1.0	0.26	ug/L			06/06/18 11:06	1
Bromomethane	ND		1.0	0.69	ug/L			06/06/18 11:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/06/18 11:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/06/18 11:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/06/18 11:06	1
Chloroethane	ND		1.0	0.32	ug/L			06/06/18 11:06	1
Chloroform	ND		1.0	0.34	ug/L			06/06/18 11:06	1
Chloromethane	ND		1.0	0.35	ug/L			06/06/18 11:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/06/18 11:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/06/18 11:06	1
Cyclohexane	ND		1.0	0.18	ug/L			06/06/18 11:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/06/18 11:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/06/18 11:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/06/18 11:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/06/18 11:06	1
m,p-Xylene	ND		2.0	0.66	ug/L			06/06/18 11:06	1
Methyl acetate	ND		2.5	1.3	ug/L			06/06/18 11:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/06/18 11:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/06/18 11:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/06/18 11:06	1
n-Butylbenzene	ND		1.0	0.64	ug/L			06/06/18 11:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			06/06/18 11:06	1
o-Xylene	ND		1.0	0.76	ug/L			06/06/18 11:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			06/06/18 11:06	1
Styrene	ND		1.0	0.73	ug/L			06/06/18 11:06	1

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

Lab Sample ID: MB 480-418131/7
Matrix: Water
Analysis Batch: 418131

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			06/06/18 11:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/06/18 11:06	1
Toluene	ND		1.0	0.51	ug/L			06/06/18 11:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/06/18 11:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/06/18 11:06	1
Trichloroethene	ND		1.0	0.46	ug/L			06/06/18 11:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/06/18 11:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/06/18 11:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/06/18 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*06/06/18 11:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/06/18 11:06*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/06/18 11:06*	*1*

Lab Sample ID: LCS 480-418131/5
Matrix: Water
Analysis Batch: 418131

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	26.3		ug/L		105	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.8		ug/L		107	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.7		ug/L		111	61 - 148
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	26.0		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	24.2		ug/L		97	66 - 127
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		106	79 - 122
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	30.3		ug/L		121	56 - 134
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		97	76 - 120
1,3,5-Trimethylbenzene	25.0	26.6		ug/L		106	77 - 121
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 120
2-Butanone (MEK)	125	253	*	ug/L		202	57 - 140
2-Hexanone	125	130		ug/L		104	65 - 127
4-Isopropyltoluene	25.0	26.5		ug/L		106	73 - 120
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		107	71 - 125
Acetone	125	139		ug/L		111	56 - 142
Benzene	25.0	24.6		ug/L		99	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		106	80 - 122
Bromoform	25.0	28.6		ug/L		114	61 - 132
Bromomethane	25.0	25.3		ug/L		101	55 - 144
Carbon disulfide	25.0	24.6		ug/L		98	59 - 134
Carbon tetrachloride	25.0	27.4		ug/L		110	72 - 134

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

Lab Sample ID: LCS 480-418131/5
Matrix: Water
Analysis Batch: 418131

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	25.4		ug/L		102	80 - 120
Chloroethane	25.0	26.2		ug/L		105	69 - 136
Chloroform	25.0	25.5		ug/L		102	73 - 127
Chloromethane	25.0	24.1		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	74 - 124
Cyclohexane	25.0	26.0		ug/L		104	59 - 135
Dibromochloromethane	25.0	27.6		ug/L		110	75 - 125
Dichlorodifluoromethane	25.0	25.6		ug/L		102	59 - 135
Ethylbenzene	25.0	24.9		ug/L		99	77 - 123
Isopropylbenzene	25.0	26.2		ug/L		105	77 - 122
m,p-Xylene	25.0	26.0		ug/L		104	76 - 122
Methyl acetate	50.0	53.3		ug/L		107	74 - 133
Methyl tert-butyl ether	25.0	24.9		ug/L		100	77 - 120
Methylcyclohexane	25.0	26.9		ug/L		108	68 - 134
Methylene Chloride	25.0	24.0		ug/L		96	75 - 124
n-Butylbenzene	25.0	26.6		ug/L		106	71 - 128
N-Propylbenzene	25.0	26.1		ug/L		104	75 - 127
o-Xylene	25.0	25.3		ug/L		101	76 - 122
sec-Butylbenzene	25.0	26.8		ug/L		107	74 - 127
Styrene	25.0	25.2		ug/L		101	80 - 120
tert-Butylbenzene	25.0	27.5		ug/L		110	75 - 123
Tetrachloroethene	25.0	27.6		ug/L		110	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	24.6		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	26.5		ug/L		106	80 - 120
Trichloroethene	25.0	27.2		ug/L		109	74 - 123
Trichlorofluoromethane	25.0	27.6		ug/L		111	62 - 150
Vinyl chloride	25.0	26.8		ug/L		107	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-418585/1-A
Matrix: Water
Analysis Batch: 418891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 418585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		06/08/18 10:15	06/09/18 00:00	1

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

Lab Sample ID: LCS 480-418585/2-A
Matrix: Water
Analysis Batch: 418891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 418585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.96		mg/L		100	80 - 120

Lab Sample ID: MB 480-418661/1-B
Matrix: Water
Analysis Batch: 419252

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 418873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.050		mg/L		06/11/18 11:30	06/12/18 17:38	1

Lab Sample ID: LCS 480-418661/2-B
Matrix: Water
Analysis Batch: 419252

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 418873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	10.0	10.43		mg/L		104	80 - 120

Lab Sample ID: 480-136911-3 MS
Matrix: Water
Analysis Batch: 419252

Client Sample ID: PW-1R
Prep Type: Dissolved
Prep Batch: 418873

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	ND		10.0	10.13		mg/L		101	75 - 125

Lab Sample ID: 480-136911-3 MSD
Matrix: Water
Analysis Batch: 419252

Client Sample ID: PW-1R
Prep Type: Dissolved
Prep Batch: 418873

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron, Dissolved	ND		10.0	10.28		mg/L		103	75 - 125	1	20

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-418078/27
Matrix: Water
Analysis Batch: 418078

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			06/05/18 20:54	1

Lab Sample ID: MB 480-418078/3
Matrix: Water
Analysis Batch: 418078

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050		mg/L			06/05/18 20:27	1

Method: 353.2 - Nitrogen, Nitrite (Continued)

Lab Sample ID: LCS 480-418078/28
Matrix: Water
Analysis Batch: 418078

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.59		mg/L		106	90 - 110

Lab Sample ID: LCS 480-418078/4
Matrix: Water
Analysis Batch: 418078

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.58		mg/L		105	90 - 110

Lab Sample ID: 480-136911-3 MS
Matrix: Water
Analysis Batch: 418078

Client Sample ID: PW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	ND	F1	1.00	1.21	F1	mg/L		121	90 - 110

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-421202/150
Matrix: Water
Analysis Batch: 421202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/22/18 15:18	1

Lab Sample ID: MB 480-421202/180
Matrix: Water
Analysis Batch: 421202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/22/18 17:39	1

Lab Sample ID: LCS 480-421202/149
Matrix: Water
Analysis Batch: 421202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	28.10		mg/L		94	90 - 110

Lab Sample ID: LCS 480-421202/179
Matrix: Water
Analysis Batch: 421202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	27.28		mg/L		91	90 - 110

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: MB 480-421246/12
Matrix: Water
Analysis Batch: 421246

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/23/18 11:13	1

Lab Sample ID: MB 480-421246/43
Matrix: Water
Analysis Batch: 421246

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			06/23/18 11:27	1

Lab Sample ID: LCS 480-421246/11
Matrix: Water
Analysis Batch: 421246

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	29.19		mg/L		97	90 - 110

Lab Sample ID: LCS 480-421246/42
Matrix: Water
Analysis Batch: 421246

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	28.94		mg/L		96	90 - 110

QC Association Summary

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

TestAmerica Job ID: 480-136911-1

GC/MS VOA

Analysis Batch: 418131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	8260C	
480-136911-2	MW-6	Total/NA	Water	8260C	
480-136911-3	PW-1R	Total/NA	Water	8260C	
MB 480-418131/7	Method Blank	Total/NA	Water	8260C	
LCS 480-418131/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 418585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	3005A	
480-136911-2	MW-6	Total/NA	Water	3005A	
480-136911-3	PW-1R	Total/NA	Water	3005A	
MB 480-418585/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-418585/2-A	Lab Control Sample	Total/NA	Water	3005A	

Filtration Batch: 418661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Dissolved	Water	FILTRATION	
480-136911-2	MW-6	Dissolved	Water	FILTRATION	
480-136911-3	PW-1R	Dissolved	Water	FILTRATION	
MB 480-418661/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-418661/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
480-136911-3 MS	PW-1R	Dissolved	Water	FILTRATION	
480-136911-3 MSD	PW-1R	Dissolved	Water	FILTRATION	

Prep Batch: 418873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Dissolved	Water	3005A	418661
480-136911-2	MW-6	Dissolved	Water	3005A	418661
480-136911-3	PW-1R	Dissolved	Water	3005A	418661
MB 480-418661/1-B	Method Blank	Dissolved	Water	3005A	418661
LCS 480-418661/2-B	Lab Control Sample	Dissolved	Water	3005A	418661
480-136911-3 MS	PW-1R	Dissolved	Water	3005A	418661
480-136911-3 MSD	PW-1R	Dissolved	Water	3005A	418661

Analysis Batch: 418891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	6010C	418585
480-136911-2	MW-6	Total/NA	Water	6010C	418585
480-136911-3	PW-1R	Total/NA	Water	6010C	418585
MB 480-418585/1-A	Method Blank	Total/NA	Water	6010C	418585
LCS 480-418585/2-A	Lab Control Sample	Total/NA	Water	6010C	418585

Analysis Batch: 419252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Dissolved	Water	6010C	418873
480-136911-2	MW-6	Dissolved	Water	6010C	418873
480-136911-3	PW-1R	Dissolved	Water	6010C	418873
MB 480-418661/1-B	Method Blank	Dissolved	Water	6010C	418873

Metals (Continued)

Analysis Batch: 419252 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-418661/2-B	Lab Control Sample	Dissolved	Water	6010C	418873
480-136911-3 MS	PW-1R	Dissolved	Water	6010C	418873
480-136911-3 MSD	PW-1R	Dissolved	Water	6010C	418873

General Chemistry

Analysis Batch: 418078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	353.2	
480-136911-2	MW-6	Total/NA	Water	353.2	
480-136911-3	PW-1R	Total/NA	Water	353.2	
MB 480-418078/27	Method Blank	Total/NA	Water	353.2	
MB 480-418078/3	Method Blank	Total/NA	Water	353.2	
LCS 480-418078/28	Lab Control Sample	Total/NA	Water	353.2	
LCS 480-418078/4	Lab Control Sample	Total/NA	Water	353.2	
480-136911-3 MS	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 418087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	353.2	
480-136911-2	MW-6	Total/NA	Water	353.2	
480-136911-3	PW-1R	Total/NA	Water	353.2	

Analysis Batch: 421202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-1	MW-5	Total/NA	Water	D516-90, 02	
MB 480-421202/150	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-421202/180	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-421202/149	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-421202/179	Lab Control Sample	Total/NA	Water	D516-90, 02	

Analysis Batch: 421246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-136911-2	MW-6	Total/NA	Water	D516-90, 02	
480-136911-3	PW-1R	Total/NA	Water	D516-90, 02	
MB 480-421246/12	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-421246/43	Method Blank	Total/NA	Water	D516-90, 02	
LCS 480-421246/11	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-421246/42	Lab Control Sample	Total/NA	Water	D516-90, 02	

Lab Chronicle

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

TestAmerica Job ID: 480-136911-1

Client Sample ID: MW-5

Date Collected: 06/04/18 10:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	418131	06/06/18 14:00	AEM	TAL BUF
Dissolved	Filtration	FILTRATION			418661	06/08/18 11:06	KMP	TAL BUF
Dissolved	Prep	3005A			418873	06/11/18 11:30	KMP	TAL BUF
Dissolved	Analysis	6010C		1	419252	06/12/18 17:46	AMH	TAL BUF
Total/NA	Prep	3005A			418585	06/08/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		5	418891	06/09/18 02:03	LMH	TAL BUF
Total/NA	Analysis	353.2		1	418087	06/05/18 21:08	DCB	TAL BUF
Total/NA	Analysis	353.2		1	418078	06/05/18 21:08	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		1	421202	06/22/18 17:39	AED	TAL BUF

Client Sample ID: MW-6

Date Collected: 06/04/18 10:30
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	418131	06/06/18 14:24	AEM	TAL BUF
Dissolved	Filtration	FILTRATION			418661	06/08/18 11:06	KMP	TAL BUF
Dissolved	Prep	3005A			418873	06/11/18 11:30	KMP	TAL BUF
Dissolved	Analysis	6010C		1	419252	06/12/18 17:50	AMH	TAL BUF
Total/NA	Prep	3005A			418585	06/08/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		5	418891	06/09/18 02:07	LMH	TAL BUF
Total/NA	Analysis	353.2		1	418087	06/05/18 21:09	DCB	TAL BUF
Total/NA	Analysis	353.2		1	418078	06/05/18 21:09	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		20	421246	06/23/18 11:33	MRF	TAL BUF

Client Sample ID: PW-1R

Date Collected: 06/04/18 11:00
Date Received: 06/05/18 15:15

Lab Sample ID: 480-136911-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	418131	06/06/18 14:47	AEM	TAL BUF
Dissolved	Filtration	FILTRATION			418661	06/08/18 11:06	KMP	TAL BUF
Dissolved	Prep	3005A			418873	06/11/18 11:30	KMP	TAL BUF
Dissolved	Analysis	6010C		1	419252	06/12/18 17:54	AMH	TAL BUF
Total/NA	Prep	3005A			418585	06/08/18 10:15	KMP	TAL BUF
Total/NA	Analysis	6010C		1	418891	06/09/18 02:11	LMH	TAL BUF
Total/NA	Analysis	353.2		1	418087	06/05/18 21:10	DCB	TAL BUF
Total/NA	Analysis	353.2		1	418078	06/05/18 21:10	DCB	TAL BUF
Total/NA	Analysis	D516-90, 02		5	421246	06/23/18 11:21	MRF	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: 480-136911-1
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	03-31-18 *

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

Method Summary

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

TestAmerica Job ID: 480-136911-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
353.2	Nitrate	EPA	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
FILTRATION	Sample Filtration	None	TAL BUF

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
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: 480-136911-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-136911-1	MW-5	Water	06/04/18 10:00	06/05/18 15:15
480-136911-2	MW-6	Water	06/04/18 10:30	06/05/18 15:15
480-136911-3	PW-1R	Water	06/04/18 11:00	06/05/18 15:15

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRO

480-136911 COC

Client Information	Sampler: RLD	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-113881-23673.1
Client Contact: Ms. Lori Riker	Phone:	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:

Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:
City: Lackawanna	TAT Requested (days):
State, Zip: NY, 14218	
Phone:	PO #: Purchase Order not required
Email: lriker@benchmarkturnkey.com	WO #:
Project Name: Benchmark - Despatch site	Project #: 48003736
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - (MOD) T. Fe	353.2, 353.2_Nitrite, D516, Nitrate_Calc	6010C - (MOD) D. Fe	8260C - (MOD) TCL list OLM04.2 + CP-51(Stars)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	A		
MW-5	6/4/18	1000	G	Water	N		X	X	X	X		
MW-6		1030	G	Water	N		X	X	X	X		
PW-1R		1100	G	Water	N		X	X	X	X		

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/5/18 0730	RM/TK		6/5/18 1618	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/5/18 1615	TAL		6/5/18 1515	FAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		3.0 #1

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-136911-1

Login Number: 136911

List Source: 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	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	

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: 480-140244-1
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:
8/15/2018 11:12:04 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

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.

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
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)

Case Narrative

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

TestAmerica Job ID: 480-140244-1

Job ID: 480-140244-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-140244-1

Comments
No additional comments.

Receipt
The sample was received on 8/10/2018 3:35 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-6 (480-140244-1). Elevated reporting limits (RLs) are provided.

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

Detection Summary

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

TestAmerica Job ID: 480-140244-1

Client Sample ID: MW-6

Lab Sample ID: 480-140244-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.8	J	4.0	1.8	ug/L	4		8260C	Total/NA
Tetrachloroethene	290		4.0	1.4	ug/L	4		8260C	Total/NA
Trichloroethene	130		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: 480-140244-1

Client Sample ID: MW-6
Date Collected: 08/08/18 14:00
Date Received: 08/10/18 15:35

Lab Sample ID: 480-140244-1
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			08/14/18 15:51	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			08/14/18 15:51	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			08/14/18 15:51	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			08/14/18 15:51	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			08/14/18 15:51	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			08/14/18 15:51	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			08/14/18 15:51	4
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			08/14/18 15:51	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			08/14/18 15:51	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			08/14/18 15:51	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			08/14/18 15:51	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			08/14/18 15:51	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			08/14/18 15:51	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			08/14/18 15:51	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			08/14/18 15:51	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			08/14/18 15:51	4
2-Butanone (MEK)	ND		40	5.3	ug/L			08/14/18 15:51	4
2-Hexanone	ND		20	5.0	ug/L			08/14/18 15:51	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			08/14/18 15:51	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			08/14/18 15:51	4
Acetone	ND		40	12	ug/L			08/14/18 15:51	4
Benzene	ND		4.0	1.6	ug/L			08/14/18 15:51	4
Bromodichloromethane	ND		4.0	1.6	ug/L			08/14/18 15:51	4
Bromoform	ND		4.0	1.0	ug/L			08/14/18 15:51	4
Bromomethane	ND		4.0	2.8	ug/L			08/14/18 15:51	4
Carbon disulfide	ND		4.0	0.76	ug/L			08/14/18 15:51	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			08/14/18 15:51	4
Chlorobenzene	ND		4.0	3.0	ug/L			08/14/18 15:51	4
Chloroethane	ND		4.0	1.3	ug/L			08/14/18 15:51	4
Chloroform	ND		4.0	1.4	ug/L			08/14/18 15:51	4
Chloromethane	ND		4.0	1.4	ug/L			08/14/18 15:51	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			08/14/18 15:51	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			08/14/18 15:51	4
Cyclohexane	ND		4.0	0.72	ug/L			08/14/18 15:51	4
Dibromochloromethane	ND		4.0	1.3	ug/L			08/14/18 15:51	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			08/14/18 15:51	4
Ethylbenzene	ND		4.0	3.0	ug/L			08/14/18 15:51	4
Isopropylbenzene	ND		4.0	3.2	ug/L			08/14/18 15:51	4
m,p-Xylene	ND		8.0	2.6	ug/L			08/14/18 15:51	4
Methyl acetate	ND		10	5.2	ug/L			08/14/18 15:51	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			08/14/18 15:51	4
Methylcyclohexane	ND		4.0	0.64	ug/L			08/14/18 15:51	4
Methylene Chloride	**3.8**	**J**	4.0	1.8	ug/L			08/14/18 15:51	4
n-Butylbenzene	ND		4.0	2.6	ug/L			08/14/18 15:51	4
N-Propylbenzene	ND		4.0	2.8	ug/L			08/14/18 15:51	4
o-Xylene	ND		4.0	3.0	ug/L			08/14/18 15:51	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			08/14/18 15:51	4
Styrene	ND		4.0	2.9	ug/L			08/14/18 15:51	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			08/14/18 15:51	4

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

TestAmerica Job ID: 480-140244-1

Client Sample ID: MW-6
Date Collected: 08/08/18 14:00
Date Received: 08/10/18 15:35

Lab Sample ID: 480-140244-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**290**		4.0	1.4	ug/L			08/14/18 15:51	4
Toluene	ND		4.0	2.0	ug/L			08/14/18 15:51	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			08/14/18 15:51	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			08/14/18 15:51	4
Trichloroethene	**130**		4.0	1.8	ug/L			08/14/18 15:51	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			08/14/18 15:51	4
Vinyl chloride	ND		4.0	3.6	ug/L			08/14/18 15:51	4
Xylenes, Total	ND		8.0	2.6	ug/L			08/14/18 15:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*08/14/18 15:51*	*4*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*08/14/18 15:51*	*4*
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/14/18 15:51*	*4*

Surrogate Summary

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

TestAmerica Job ID: 480-140244-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-140244-1	MW-6	111	97	102
LCS 480-429438/5	Lab Control Sample	111	107	108
MB 480-429438/8	Method Blank	114	103	108

Surrogate Legend

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

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

Lab Sample ID: MB 480-429438/8
Matrix: Water
Analysis Batch: 429438

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			08/14/18 11:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/14/18 11:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/14/18 11:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/14/18 11:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/14/18 11:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/14/18 11:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/14/18 11:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			08/14/18 11:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/14/18 11:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/14/18 11:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/14/18 11:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/14/18 11:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/14/18 11:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			08/14/18 11:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/14/18 11:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/14/18 11:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/14/18 11:05	1
2-Hexanone	ND		5.0	1.2	ug/L			08/14/18 11:05	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			08/14/18 11:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/14/18 11:05	1
Acetone	ND		10	3.0	ug/L			08/14/18 11:05	1
Benzene	ND		1.0	0.41	ug/L			08/14/18 11:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/14/18 11:05	1
Bromoform	ND		1.0	0.26	ug/L			08/14/18 11:05	1
Bromomethane	ND		1.0	0.69	ug/L			08/14/18 11:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/14/18 11:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/14/18 11:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/14/18 11:05	1
Chloroethane	ND		1.0	0.32	ug/L			08/14/18 11:05	1
Chloroform	ND		1.0	0.34	ug/L			08/14/18 11:05	1
Chloromethane	ND		1.0	0.35	ug/L			08/14/18 11:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/14/18 11:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/14/18 11:05	1
Cyclohexane	ND		1.0	0.18	ug/L			08/14/18 11:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/14/18 11:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/14/18 11:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/14/18 11:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/14/18 11:05	1
m,p-Xylene	ND		2.0	0.66	ug/L			08/14/18 11:05	1
Methyl acetate	ND		2.5	1.3	ug/L			08/14/18 11:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/14/18 11:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/14/18 11:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/14/18 11:05	1
n-Butylbenzene	ND		1.0	0.64	ug/L			08/14/18 11:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/14/18 11:05	1
o-Xylene	ND		1.0	0.76	ug/L			08/14/18 11:05	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			08/14/18 11:05	1
Styrene	ND		1.0	0.73	ug/L			08/14/18 11:05	1

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

Lab Sample ID: MB 480-429438/8
Matrix: Water
Analysis Batch: 429438

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			08/14/18 11:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/14/18 11:05	1
Toluene	ND		1.0	0.51	ug/L			08/14/18 11:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/14/18 11:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/14/18 11:05	1
Trichloroethene	ND		1.0	0.46	ug/L			08/14/18 11:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/14/18 11:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/14/18 11:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/14/18 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*77 - 120*		*08/14/18 11:05*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*08/14/18 11:05*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*08/14/18 11:05*	*1*

Lab Sample ID: LCS 480-429438/5
Matrix: Water
Analysis Batch: 429438

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	28.7		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.5		ug/L		118	61 - 148
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	76 - 122
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	27.1		ug/L		108	66 - 127
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	79 - 122
1,2,4-Trimethylbenzene	25.0	27.5		ug/L		110	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	56 - 134
1,2-Dibromoethane	25.0	25.5		ug/L		102	77 - 120
1,2-Dichlorobenzene	25.0	26.2		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	25.1		ug/L		101	76 - 120
1,3,5-Trimethylbenzene	25.0	27.3		ug/L		109	77 - 121
1,3-Dichlorobenzene	25.0	26.2		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	26.1		ug/L		104	80 - 120
2-Butanone (MEK)	125	137		ug/L		110	57 - 140
2-Hexanone	125	133		ug/L		106	65 - 127
4-Isopropyltoluene	25.0	27.7		ug/L		111	73 - 120
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	71 - 125
Acetone	125	147		ug/L		117	56 - 142
Benzene	25.0	25.4		ug/L		102	71 - 124
Bromodichloromethane	25.0	27.1		ug/L		109	80 - 122
Bromoform	25.0	27.5		ug/L		110	61 - 132
Bromomethane	25.0	23.2		ug/L		93	55 - 144
Carbon disulfide	25.0	28.4		ug/L		114	59 - 134
Carbon tetrachloride	25.0	28.8		ug/L		115	72 - 134

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

TestAmerica Job ID: 480-140244-1

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

Lab Sample ID: LCS 480-429438/5
Matrix: Water
Analysis Batch: 429438

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	25.4		ug/L		101	80 - 120
Chloroethane	25.0	21.2		ug/L		85	69 - 136
Chloroform	25.0	25.0		ug/L		100	73 - 127
Chloromethane	25.0	24.2		ug/L		97	68 - 124
cis-1,2-Dichloroethene	25.0	25.1		ug/L		101	74 - 124
cis-1,3-Dichloropropene	25.0	28.1		ug/L		112	74 - 124
Cyclohexane	25.0	25.5		ug/L		102	59 - 135
Dibromochloromethane	25.0	28.2		ug/L		113	75 - 125
Dichlorodifluoromethane	25.0	29.5		ug/L		118	59 - 135
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
Isopropylbenzene	25.0	27.4		ug/L		110	77 - 122
m,p-Xylene	25.0	27.1		ug/L		108	76 - 122
Methyl acetate	50.0	50.3		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	26.4		ug/L		105	77 - 120
Methylcyclohexane	25.0	27.6		ug/L		111	68 - 134
Methylene Chloride	25.0	23.1		ug/L		93	75 - 124
n-Butylbenzene	25.0	25.6		ug/L		102	71 - 128
N-Propylbenzene	25.0	27.4		ug/L		110	75 - 127
o-Xylene	25.0	26.4		ug/L		106	76 - 122
sec-Butylbenzene	25.0	26.4		ug/L		105	74 - 127
Styrene	25.0	26.8		ug/L		107	80 - 120
tert-Butylbenzene	25.0	27.8		ug/L		111	75 - 123
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	73 - 127
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	80 - 120
Trichloroethene	25.0	27.0		ug/L		108	74 - 123
Trichlorofluoromethane	25.0	25.5		ug/L		102	62 - 150
Vinyl chloride	25.0	24.3		ug/L		97	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

QC Association Summary

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

TestAmerica Job ID: 480-140244-1

GC/MS VOA

Analysis Batch: 429438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-140244-1	MW-6	Total/NA	Water	8260C	
MB 480-429438/8	Method Blank	Total/NA	Water	8260C	
LCS 480-429438/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-140244-1

Client Sample ID: MW-6
Date Collected: 08/08/18 14:00
Date Received: 08/10/18 15:35

Lab Sample ID: 480-140244-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	429438	08/14/18 15:51	RLB	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: 480-140244-1
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

Method Summary

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

TestAmerica Job ID: 480-140244-1

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: 480-140244-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-140244-1	MW-6	Water	08/08/18 14:00	08/10/18 15:35

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

Chain of Custody Record

288880

TestAmerica
THE LEADER IN E
TestAmerica

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

Client Contact	Project Manager: Lori Riker	Site Contact: Mike Surri	Date: 8/8/18	COC No: 1 of 1 480-140244 CO
Company Name: Benchmark Env. Eng.	Tel/Fax: 716-565-0635	Lab Contact: Brian Fischer	Carrier:	Sampler:
Address: 2558 Hamburg Tpke Ste 300	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Buffalo, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: 716-713-3437	TAT if different from Below standard			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: Destech Site	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# B0040-002-400	☐ 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	8/8/18	14.00	G	W	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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.0 Corr'd: _____ | Therm ID No.: #1

Relinquished by:	Company: Benchmark	Date/Time: 8/9/18 12.00	Received by:	Company: TAL	Date/Time: 8.10.18 1300
Relinquished by:	Company: TAL	Date/Time: 8.10.18 1535	Received by:	Company: TAB	Date/Time: 8/10/18 1535
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

8/15/2018

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-140244-1

Login Number: 140244

List Source: 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	benchmark
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	

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: 480-144589-1
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:
11/5/2018 4:24:15 PM

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

Table of Contents

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: 480-144589-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-144589-1

Comments
No additional comments.

Receipt
The sample was received on 11/2/2018 4:10 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-443478 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane & Cyclohexane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-6 (480-144589-1).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-6 (480-144589-1). Elevated reporting limits (RLs) are provided.

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

Detection Summary

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

TestAmerica Job ID: 480-144589-1

Client Sample ID: MW-6

Lab Sample ID: 480-144589-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	170		4.0	1.4	ug/L	4		8260C	Total/NA
Trichloroethene	140		4.0	1.8	ug/L	4		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-6

Date Collected: 10/29/18 14:00
Date Received: 11/02/18 16:10

Lab Sample ID: 480-144589-1

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			11/04/18 05:16	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			11/04/18 05:16	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			11/04/18 05:16	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			11/04/18 05:16	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			11/04/18 05:16	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			11/04/18 05:16	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			11/04/18 05:16	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			11/04/18 05:16	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			11/04/18 05:16	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			11/04/18 05:16	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			11/04/18 05:16	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			11/04/18 05:16	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			11/04/18 05:16	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			11/04/18 05:16	4
2-Butanone (MEK)	ND		40	5.3	ug/L			11/04/18 05:16	4
2-Hexanone	ND		20	5.0	ug/L			11/04/18 05:16	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			11/04/18 05:16	4
Acetone	ND		40	12	ug/L			11/04/18 05:16	4
Benzene	ND		4.0	1.6	ug/L			11/04/18 05:16	4
Bromodichloromethane	ND		4.0	1.6	ug/L			11/04/18 05:16	4
Bromoform	ND		4.0	1.0	ug/L			11/04/18 05:16	4
Bromomethane	ND		4.0	2.8	ug/L			11/04/18 05:16	4
Carbon disulfide	ND		4.0	0.76	ug/L			11/04/18 05:16	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/04/18 05:16	4
Chlorobenzene	ND		4.0	3.0	ug/L			11/04/18 05:16	4
Chloroethane	ND		4.0	1.3	ug/L			11/04/18 05:16	4
Chloroform	ND		4.0	1.4	ug/L			11/04/18 05:16	4
Chloromethane	ND		4.0	1.4	ug/L			11/04/18 05:16	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			11/04/18 05:16	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			11/04/18 05:16	4
Cyclohexane	ND		4.0	0.72	ug/L			11/04/18 05:16	4
Dibromochloromethane	ND		4.0	1.3	ug/L			11/04/18 05:16	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			11/04/18 05:16	4
Ethylbenzene	ND		4.0	3.0	ug/L			11/04/18 05:16	4
Isopropylbenzene	ND		4.0	3.2	ug/L			11/04/18 05:16	4
m,p-Xylene	ND		8.0	2.6	ug/L			11/04/18 05:16	4
Methyl acetate	ND		10	5.2	ug/L			11/04/18 05:16	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			11/04/18 05:16	4
Methylcyclohexane	ND		4.0	0.64	ug/L			11/04/18 05:16	4
Methylene Chloride	ND		4.0	1.8	ug/L			11/04/18 05:16	4
o-Xylene	ND		4.0	3.0	ug/L			11/04/18 05:16	4
Styrene	ND		4.0	2.9	ug/L			11/04/18 05:16	4
Tetrachloroethene	**170**		4.0	1.4	ug/L			11/04/18 05:16	4
Toluene	ND		4.0	2.0	ug/L			11/04/18 05:16	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			11/04/18 05:16	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			11/04/18 05:16	4
Trichloroethene	**140**		4.0	1.8	ug/L			11/04/18 05:16	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			11/04/18 05:16	4
Vinyl chloride	ND		4.0	3.6	ug/L			11/04/18 05:16	4

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

TestAmerica Job ID: 480-144589-1

Client Sample ID: MW-6
Date Collected: 10/29/18 14:00
Date Received: 11/02/18 16:10

Lab Sample ID: 480-144589-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		8.0	2.6	ug/L			11/04/18 05:16	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/04/18 05:16*	*4*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*11/04/18 05:16*	*4*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/04/18 05:16*	*4*

Surrogate Summary

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

TestAmerica Job ID: 480-144589-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-144589-1	MW-6	107	97	97
LCS 480-443478/5	Lab Control Sample	104	100	98
MB 480-443478/7	Method Blank	104	97	98

Surrogate Legend

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

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

Lab Sample ID: MB 480-443478/7
Matrix: Water
Analysis Batch: 443478

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			11/04/18 00:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/18 00:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/18 00:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/18 00:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/18 00:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/18 00:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/18 00:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/18 00:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/18 00:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/18 00:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/18 00:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/18 00:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/18 00:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/18 00:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/18 00:29	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/18 00:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/18 00:29	1
Acetone	ND		10	3.0	ug/L			11/04/18 00:29	1
Benzene	ND		1.0	0.41	ug/L			11/04/18 00:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/18 00:29	1
Bromoform	ND		1.0	0.26	ug/L			11/04/18 00:29	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/18 00:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/18 00:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/18 00:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/18 00:29	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/18 00:29	1
Chloroform	ND		1.0	0.34	ug/L			11/04/18 00:29	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/18 00:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/18 00:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/18 00:29	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/18 00:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/18 00:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/18 00:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/18 00:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/18 00:29	1
m,p-Xylene	ND		2.0	0.66	ug/L			11/04/18 00:29	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/18 00:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/18 00:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/18 00:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/18 00:29	1
o-Xylene	ND		1.0	0.76	ug/L			11/04/18 00:29	1
Styrene	ND		1.0	0.73	ug/L			11/04/18 00:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/18 00:29	1
Toluene	ND		1.0	0.51	ug/L			11/04/18 00:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/18 00:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/18 00:29	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/18 00:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/18 00:29	1

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

Lab Sample ID: MB 480-443478/7
Matrix: Water
Analysis Batch: 443478

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/18 00:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/18 00:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*11/04/18 00:29*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*11/04/18 00:29*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/04/18 00:29*	*1*

Lab Sample ID: LCS 480-443478/5
Matrix: Water
Analysis Batch: 443478

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	22.2		ug/L		89	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.0		ug/L		100	61 - 148
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	76 - 122
1,1-Dichloroethane	25.0	28.1		ug/L		113	77 - 120
1,1-Dichloroethene	25.0	27.5		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	79 - 122
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.2		ug/L		85	56 - 134
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	28.1		ug/L		113	76 - 120
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	77 - 121
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 120
2-Butanone (MEK)	125	143		ug/L		114	57 - 140
2-Hexanone	125	133		ug/L		106	65 - 127
4-Isopropyltoluene	25.0	26.0		ug/L		104	73 - 120
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	122		ug/L		97	56 - 142
Benzene	25.0	28.1		ug/L		113	71 - 124
Bromodichloromethane	25.0	25.5		ug/L		102	80 - 122
Bromoform	25.0	23.2		ug/L		93	61 - 132
Bromomethane	25.0	22.8		ug/L		91	55 - 144
Carbon disulfide	25.0	28.5		ug/L		114	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	24.4		ug/L		98	80 - 120
Chloroethane	25.0	26.9		ug/L		108	69 - 136
Chloroform	25.0	25.1		ug/L		100	73 - 127
Chloromethane	25.0	22.6		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	74 - 124
Cyclohexane	25.0	32.8		ug/L		131	59 - 135

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

Lab Sample ID: LCS 480-443478/5
Matrix: Water
Analysis Batch: 443478

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	25.0	22.9		ug/L		92	75 - 125
Dichlorodifluoromethane	25.0	23.1		ug/L		92	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
m,p-Xylene	25.0	25.2		ug/L		101	76 - 122
Methyl acetate	50.0	54.6		ug/L		109	74 - 133
Methyl tert-butyl ether	25.0	25.8		ug/L		103	77 - 120
Methylcyclohexane	25.0	29.7		ug/L		119	68 - 134
Methylene Chloride	25.0	24.0		ug/L		96	75 - 124
n-Butylbenzene	25.0	24.3		ug/L		97	71 - 128
N-Propylbenzene	25.0	25.1		ug/L		100	75 - 127
o-Xylene	25.0	24.9		ug/L		99	76 - 122
sec-Butylbenzene	25.0	25.9		ug/L		104	74 - 127
Styrene	25.0	26.5		ug/L		106	80 - 120
tert-Butylbenzene	25.0	25.0		ug/L		100	75 - 123
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	27.5		ug/L		110	73 - 127
trans-1,3-Dichloropropene	25.0	24.9		ug/L		100	80 - 120
Trichloroethene	25.0	26.8		ug/L		107	74 - 123
Trichlorofluoromethane	25.0	23.4		ug/L		93	62 - 150
Vinyl chloride	25.0	22.0		ug/L		88	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

QC Association Summary

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

TestAmerica Job ID: 480-144589-1

GC/MS VOA

Analysis Batch: 443478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144589-1	MW-6	Total/NA	Water	8260C	
MB 480-443478/7	Method Blank	Total/NA	Water	8260C	
LCS 480-443478/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-144589-1

Client Sample ID: MW-6
Date Collected: 10/29/18 14:00
Date Received: 11/02/18 16:10

Lab Sample ID: 480-144589-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	443478	11/04/18 05:16	OMI	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: 480-144589-1
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

Method Summary

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

TestAmerica Job ID: 480-144589-1

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: 480-144589-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144589-1	MW-6	Water	10/29/18 14:00	11/02/18 16:10

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 293306

TestAmerica
THE LEADE... TESTING
TestAm..., Inc.
(0713)

480-144589 COC

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

Client Contact	Project Manager: Lori Rader	Site Contact: Mike Sivak	Date: 10-31-18	COC No: 1 of 1
Company Name: Benchmark env. engineering	Tel/Fax: 716-365 0635	Lab Contact: Brian Fischer	Carrier:	Sampler:
Address: 2558 hamburg Turnpike Suite 300	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Buffalo, NY, 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: 716-713-3437	TAT if different from Below			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: DESPatch	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO # B0040-002-400	☐ 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	10/31/18	14:00	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:

#1 3.3

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	10/31/18 1224	Rebecca Terry	TAL	11/1/18 1230
Rebecca Terry	TAL	11/1/18 1600	C Wallace	TAB	11/1/18 1640
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

11/5/2018

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-144589-1

Login Number: 144589
List Number: 1
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

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