Annual Performance Report

Former Frank Wear Cleaners Site

Yakima, Washington

Prepared for

Washington Department of Ecology

April 2, 2015

17800-23/Task 9

HARTCROWSER

Annual Performance Report

Former Frank Wear Cleaners Site

Groundwater Remediation System

Yakima, Washington

Prepared for
Washington Department of Ecology

April 2, 2015
17800-23/Task 9

Prepared by

Hart Crowser, Inc.

Jill Kiernan, PE
Project Manager

Bioremediation Specialists, LLC

Troy Fowler
Biochemist and Chief Technology Officer

8910 SW Gemini Drive
Beaverton, OR 97008-7123
Fax 503.620.6918
Tel 503.620.7284

Contents

TABLES

FIGURES

APPENDIX A

APPENDIX B

Annual Performance Report

Former Frank Wear Cleaners Site

Groundwater Remediation System

Yakima, Washington

1.0 INTRODUCTION

This annual performance report summarizes the startup, operation and maintenance (O&M), and performance of the groundwater remediation system (GRS) at the Former Frank Wear Cleaners Site in Yakima, Washington (Figure 1) for 2014. The GRS is being operated as a component of the groundwater interim action selected for the Site, as described in the Groundwater Remediation System Draft Interim Action Plan (IAP) (Hart Crowser 2013). The IAP seeks to address chlorinated volatile organic compounds (cVOCs), primarily tetrachloroethene (PCE), in soil and groundwater at the Site through *in situ* bioremediation. Installation of Phase 1 of the groundwater recirculation system was completed from September 2013 through November 2013 and is described in the Draft Construction Completion Report, Groundwater Interim Action Phase 1 (Hart Crowser 2014). Startup of the system began on March 19, 2014.

The primary component of the groundwater interim action includes enhanced *in situ* bioremediation using a groundwater recirculation system. Other components of the groundwater interim action, as described in the IAP include natural attenuation, institutional controls, and compliance monitoring. An interim action for soil is concurrently being implemented at the Site; this action includes operation of a soil vapor extraction (SVE) system and is summarized in other reports.

The groundwater recirculation system is designed to continuously extract groundwater from downgradient extraction wells; convey the groundwater to a remediation building where the groundwater is amended with soluble substrate consisting of electron donors and nutrients to promote biological degradation of the contaminants; and inject the amended groundwater back into the subsurface to create a recirculation cell. Two separate recirculation cells will be operated; the first cell, known as Phase 1, will address the source area at the Site with the most heavily impacted soil and groundwater. The second cell, referred to as Phase 2, will shift the treatment focus from the Phase 1 source area toward the south, to treat the more diffuse downgradient portion of the groundwater plume. Operation of the Phase 1 and Phase 2 treatment areas is also intended to accelerate natural attenuation of residual cVOCs plume-wide.

The 2013 construction of the Phase 1 GRS included the installation of 12 injection/extraction wells, installation of the remediation building and associated equipment, and trenching and pipe installation to connect eight of the 12 injection/extraction wells to the remediation building. Construction of the Phase 2 groundwater remediation system is planned for the summer of 2015 and will include trenching and pipe installation to connect the remaining four extraction wells and re-piping at the remediation building to convert four extraction wells to injection wells.

1.1 Purpose

The purpose of this report is to describe and document the Phase 1 groundwater recirculation system startup, O&M, monitoring, and performance in achieving remediation goals. This work was completed to protect human health and the environment in accordance with the provisions of the Washington State Model Toxics Control Act (MTCA) and its implementing regulations of the Washington Administrative Code (WAC) Chapter 173-340, under the direction of the Washington Department of Ecology's (Ecology) Toxics Cleanup Program (TCP). This document was prepared for Ecology under Task 9 of Work Assignment C110144W Amendment 2.

1.2 Scope of Work

From March through December 2014, the following O&M and monitoring activities were performed:

- Began GRS startup March 19, 2014;
- Periodically collected flow totalizer and pressure readings at the remediation building;
- Conducted routine O&M;
- Completed bioremediation amendment additions into the GRS injection wells and slug injections into key monitoring wells;
- Responded to system alarms and non-routine O&M of the system; and
- Collected quarterly groundwater samples from monitoring wells and periodic performance samples from selected extraction wells.

1.3 Report Organization

This annual performance report is organized into the following report sections:

- **Section 2.0 – Site Background**; includes a description of the Site location and description, previous environmental investigations, and a summary of the Site geology and hydrogeology.
- **Section 3.0 – Groundwater Remediation System Description**; describes the system design and components, recirculation system network, and bioremediation technology.
- **Section 4.0 – System Operation and Maintenance**; provides a description of the routine operation and maintenance activities conducted during 2014, bioremediation amendment additions, and non-routine maintenance of the system.
- **Section 5.0 – System Performance Monitoring**; presents a summary of the groundwater recirculation system flow data, groundwater monitoring events, and monitoring program components including groundwater level measurements, field parameters, and chemical analyses.
- **Section 6.0 – Groundwater Monitoring Results and Assessment**; presents the monitoring results and a discussion and assessment of the data with respect to effectiveness and progress of the GRS.
- **Section 7.0 – Conclusions**; provides a summary of the overall progress of the GRS operation in addressing Site subsurface contaminants.

- **Section 8.0 – Recommendations;** presents recommendations for operation of the GRS and performance monitoring.
- **Section 9.0 – References**.

Appendix A contains the Hart Crowser Site visit field logs for GRS operational data, maintenance, and amendment injections. Appendix B contains a quality assurance review of the 2014 groundwater monitoring data and the laboratory analytical reports.

1.4 Limitations

Work performed by Hart Crowser and Bioremediation Specialists for this project and the preparation of this report was conducted in accordance with generally accepted professional practices in the same or similar localities, related to the nature of the work accomplished at the time our services were performed. This report is for specific application to the referenced project and for the exclusive use of Ecology. No other warranty, express or implied, is made.

2.0 SITE BACKGROUND

A brief summary of the Site location, setting, historical Site uses, and previous environmental activities is presented in this section, followed by an overview of the regional and local geology and hydrogeology.

2.1 Site Location and Description

The Site is located at 106 South 3rd Avenue, Yakima, Washington (Figure 1 and 2) and is part of the larger Yakima Railroad Area (YRRA), a study area established by Ecology to investigate area-wide groundwater contamination. The YRRA consists of approximately 6 square miles of numerous contaminated small sites with commingled PCE plumes centered along the BNSF Railroad.

Dry cleaning businesses operated at the Former Frank Wear Site from the early 1940s to 2000. The dry cleaning operations primarily used Stoddard solvent as the dry cleaning fluid, although sometime during the 1970s, the business began using PCE as the dry cleaning solvent. Spills, overflows, and leaks from equipment, and the on-site disposal of sludges from the spent solvent reclamation process have resulted in PCE contamination in soil and groundwater at the Site. Based on these releases, the Site has been identified as one source of cVOCs within the broader YRRA plume.

The Former Frank Wear property is now a vacant gravel lot bounded to the north by a privately-owned asphalt parking lot, an alley and businesses to the west, a children's daycare facility (Buckle My Shoe Early Learning Center) to the south (downgradient), and by South 3rd Avenue to the east. South of the daycare facility is the Central Washington Comprehensive Mental Health facility (CWCMH), which extends south to West Walnut Street. Figure 2 shows the current Site layout and adjacent properties.

2.2 Previous Investigations

Previous environmental investigations and interim cleanup actions have been conducted by various parties, including Ecology, since 1989 and are described in the IAP. Historical groundwater monitoring has shown PCE concentrations up to 43,500 micrograms per liter (µg/L) in monitoring well MW-10 within the footprint of the former dry cleaning building. The most recent investigation was the Data Gap Investigation completed in 2012 to delineate the extent of cVOC contamination in soil and groundwater (Hart Crowser 2012). Results of this investigation show that PCE has migrated into the subsurface soil and groundwater to depths between 40 and 60 feet at, and near, the Former Frank Wear property. The horizontal extent of the PCE contamination in shallow groundwater extends from the Former Frank Wear property to downgradient wells MW-22 and MW-25. Groundwater samples collected from most of the Site's shallow monitoring wells (approximately 35 feet deep or less) exceeded the MTCA Method B Cleanup Level for PCE of 5.0 µg/L. The Data Gap Investigation also showed detections of PCE in the on-property deep well, MW-18 (90 feet deep), suggesting limited vertical migration at depth, but off-site migration in the deeper zone did not appear to be occurring.

The Data Gap Investigation included an assessment of bioremediation data that indicated the subsurface conditions were favorable for an enhanced *in situ* bioremediation groundwater remedy. A bioremediation remedy utilizing a reductive dechlorination process was estimated to be the most effective remedy to reduce PCE concentrations to below the MTCA cleanup levels. The Data Gap Investigation concluded that the proposed groundwater remedy using enhanced *in situ* bioremediation with a recirculation system to deliver amendment as described in the 2007 Feasibility Study (FS) (Hart Crowser 2007) was still appropriate for the Former Frank Wear Site. Based on the Site conditions, the most effective operation of a recirculation system may be during periods of high water during the irrigation season to more effectively target the contaminants that are vertically distributed throughout the soil matrix and shallow aquifer.

2.3 Geology and Hydrogeology

The Site's shallow upper aquifer is unconfined and consists of unconsolidated alluvium, primarily coarse-grained sands, gravels, and cobbles with occasional interbedded lenses of clay and silt; and the Thorp Gravel, primarily highly weathered, poorly cemented, coarse sands and gravels. This alluvium extends from approximately 10 to 80 feet below ground surface (bgs) and is representative of the alluvium that blankets most of the Yakima Valley floor. Below this material is the Upper Ellensburg Formation, which consists of alluvial and volcanic mudslide deposits (lahar) that have been semi-consolidated. The Upper Ellensburg Formation overlies basalt bedrock (Columbia River Basalts) and interbedded Ellensburg Formation, and is present from 50 to 1,600 feet bgs. The upper member of the Upper Ellensburg Formation is the principle water source for the Ahtanum-Moxee Basin.

Groundwater elevations fluctuate seasonally as a result of localized recharge created from irrigation canals. During the winter months (January through March), the shallow groundwater table at the Site is typically present at approximately 20 to 25 feet bgs with the groundwater flow direction toward the south. Irrigation ditches throughout the Yakima area are charged from late March through early October each year, raising the water table to between 12 to 18 feet bgs and changing the flow

direction toward the east-southeast through the autumn months. Groundwater horizontal gradients range from 0.008 feet/foot (winter) to 0.025 feet/foot (through autumn). Vertical gradients calculated from recent data are downward and range from 0.069 to 0.091 foot/foot. Groundwater velocities within the alluvial aquifer are approximately 240 feet per year during the winter.

Two aquifers have been identified at the study Site: a deep drinking water aquifer and a shallow water table aquifer. The interconnection between these aquifers has not been directly investigated. The aquifers are believed to be separated by a sequence of discontinuous, but thick and gradational low permeability layers.

3.0 GROUNDWATER REMEDIATION SYSTEM DESCRIPTION

The interim action utilizes groundwater recirculation to promote *in situ* bioremediation of chlorinated ethene contaminants. Construction of the Phase 1 GRS was completed on November 20, 2013, and the system became operational on March 19, 2014. The GRS is designed to extract groundwater from downgradient extraction wells and convey it to a remediation building (GRS building) where it is periodically amended with various bioremediation substrates, as described below.

3.1 Groundwater Remediation System Components

The GRS includes a pre-fabricated remediation building that houses the programmable logic control (PLC) panel, flow meters, pressure transducers, transfer pump, and other components; a 1,200-gallon polyethylene batch tank with a mixer motor and tank heater; and the impeller-driven electrical pumps installed in the extraction wells. The system is also equipped with an in-line sediment filter and ozone infusion system, neither of which are currently in use. The system is designed to accept water from up to eight extraction points and inject into as many as six points at one time. Currently four extraction and four injection lines are in use for the Phase 1 GRS operation. The polyethylene batch tank installed next to the building receives water from the extraction wells. Extracted water is mixed in the tank and batch-injected into injection wells. Amendments are periodically added directly to the batch tank and mixed (as needed) prior to groundwater re-injection.

3.2 Recirculation Network

The interim action includes two phases of recirculation network operation. Phase 1 is currently in operation and includes four extraction wells (EXT-1 through EXT-4) installed to the south of the daycare facility building, covered parking area, and garage; and four injection wells (INJ-1 through INJ-4) installed in a parking lot immediately north (upgradient) of the Former Frank Wear property (Figure 2). The Phase 1 operation targets the Site's source area soil and shallow groundwater. Groundwater is extracted from the four extraction wells, pumped to the GRS building mixing tank, periodically amended, and injected into the four injection wells. This creates a recirculation cell designed to continuously move amended groundwater through contaminated soil. Phase 1 injection wells were installed approximately 40 feet north of the property boundary to allow amendment to be recirculated more homogenously through the high cVOC concentration source area.

The planned Phase 2 operational stage of the GRS will shift the recirculation cell downgradient of the Phase 1 source area to address the more diffuse downgradient portion of the groundwater plume. Construction and startup of Phase 2 are anticipated for the summer of 2015. The current four extraction wells (EXT-1 through EXT-4) will be converted into injection wells INJ-5 through INJ-8 by removing the pumps and reconfiguring conveyance piping at the GRS. Two new extraction wells (EXT-6 and EXT-7) were installed along West Walnut, and the former monitoring wells MW-3 and MW-4 were converted for groundwater extraction (EXT-5 and EXT-8, respectively)(Figure 2). The Phase 2 GRS will continue operation much in the same way that Phase 1 is currently operating.

3.3 Bioremediation Technology Overview

Bioremediation is a very broad term used to classify numerous degradation processes that can be occurring simultaneously during a given remedy. The introduction of electron donors induces a reduced environment; however, the broader aquifer around the Former Frank Wear Site is moderately oxidizing. The seasonal oxidative influence of the regional irrigation network can further influence degradation mechanisms. This performance review evaluates both reductive and oxidative degradation mechanisms likely to occur at the Former Frank Wear Site, as discussed below.

The primary mechanism being utilized at this Site is reductive dechlorination. As part of this process, PCE is converted to lesser chlorinated compounds including trichloroethene (TCE), *cis*-1,2- and *trans*-1,2-dichloroethene (c-DCE and t-DCE, respectively), vinyl chloride (VC), and non-chlorinated ethene. Further hydrogenation of ethene can occur to convert ethene to ethane in highly reductive environments. This process will also convert other chlorinated compounds, such as trichloroethane (TCA) and chloroform (a by-product of tap water chlorination) to lesser chlorinated forms.

The reductive dechlorination process is stimulated or enhanced by the addition of electron donors, such as bioremediation amendments, into groundwater. Microbes gain energy by placing these electrons enzymatically onto cVOCs (which serve as electron acceptors) to release hydrogen and chloride ions, essentially respiring the cVOC to a lesser chlorinated state. Aquifer geochemistry plays a significant role in the type of microbial processes that occur; these processes can be competitive to reductive dechlorination. Other electron-accepting processes (e.g. ferric iron and sulfate respiration, and methanogenesis) can completely consume available electron donors in groundwater systems. Geochemical conditions indicative of these competing processes are, in order of the strongest to weakest: high concentration of dissolved oxygen (greater than 1 milligram per liter [mg/L]), high nitrate concentration (greater than 1 mg/L), oxidized metals such as manganese and iron, and high sulfate concentration (greater than 20 mg/L).

There are other mechanisms which can simultaneously lead to cVOC destruction and detoxification, including abiotic reactions with mineral complexes, co-metabolism, and aerobic and anaerobic oxidation. In abiotic reactions, mineral complexes such as reduced manganese, ferrous sulfide, or humic acids, can directly donate electrons to cVOCs to induce reductive dechlorination. Co-metabolism is a non-beneficial reaction of TCE, dichloroethenes (DCE), or VC within a non-specific enzyme. Anaerobic and aerobic oxidation is a process where lesser chlorinated compounds (less oxidized) such as DCE and VC are oxidized to compounds such as chloroacetic acid using an electron

acceptor. Aerobic oxidation relies on dissolved oxygen while anaerobic oxidation can use non-oxygen electron acceptors such as nitrate or oxidized manganese. Abiotic reactions typically occur in highly reductive zones that have achieved sulfate-reducing conditions while co-metabolism and oxidation mechanisms typically occur in redox-recovery zones around the periphery of reductive dechlorination treatment areas in generally oxidative aquifers, such as the Former Frank Wear Site.

4.0 SYSTEM OPERATION AND MAINTENANCE

The GRS O&M activities, including the routine and non-routine activities, and amendment injections for 2014 are described in the following sections.

4.1 Routine Operation and Maintenance

The GRS began operation on March 19, 2014. Routine O&M from March through December 2014 was performed, primarily by Hart Crowser, with periodic support by personnel from Ecology's Central Region Office. Routine O&M tasks performed included the following items:

- Recorded groundwater flow totals for individual extraction and injection wells;
- Performed flow adjustments to rebalance injection/extraction rates as needed;
- Collected groundwater elevations in select monitoring wells;
- Collected groundwater samples from extraction wells for analyses for cVOCs and total organic carbon (TOC);
- Installed and maintained pressure transducers with dataloggers in MW-20 and MW-22;
- Installed and maintained pressure transducers with conductivity sensors in MW-10 and SPW-12; and
- Periodically added bioremediation amendments.

Appendix A includes a copy of the O&M logs maintained by Hart Crowser from March to December 2014. Flow totals, flow rates, and substrate additions are shown in Table 2.

Site visits by Hart Crowser were not regularly scheduled throughout the reporting period. Instead they depended on the required amendment addition and non-routine maintenance (described below). The volume, frequency, and type of amendment addition was adjusted depending on groundwater sample results, groundwater elevations, and GRS operational issues.

4.2 Bioremediation Amendment Additions

A variety of substrate amendments were added to the batch tank to enhance the *in situ* bioremediation process through operation of the groundwater recirculation system. A description of each type, volume, and dates of the amendment added during the reporting period is provided below.

4.2.1 Amendment Types and Description

The following types of bioremediation amendments were added to the GRS during 2014:

- **ReducED® AQ** is a highly mobile, proprietary blend of multiple food-grade electron donors and microbial nutrients designed to provide an extended fermentation profile in the subsurface and release electrons or dissolved hydrogen gas into groundwater, creating a reductive environment. Nutrients included in ReducED AQ promote the growth and maintenance of microbes based on what is available in their environment, including enhancing rates of complete reductive dechlorination. ReducED AQ is delivered in powder form, in 50-pound bags, and is readily dissolved into the aqueous form following addition to the batch tank where it is mixed with extracted groundwater.
- **Ethyl Lactate** is a highly mobile co-solvent that slowly hydrolyzes in water to create ethanol and lactic acid electron donors. The co-solvent effect of ethyl lactate (and ethanol) lifts hydrophobic cVOCs such as PCE and TCE from the soil matrix and helps maintain their partitioning off of the soil matrix. Higher concentrations of ethyl lactate (such as those created immediately after addition to the batch tank) help reduce biofouling. Ethyl lactate is delivered as a liquid in 55-gallon drums.
- **ReleaSE-Dx™** is a non-ionic, biodegradable surfactant that promotes both petroleum and chlorinated solvent desorption from the soil matrix. ReleaSE-Dx also reduces the surface water tension, allowing other amendments to more effectively penetrate tighter pore spaces in the soil matrix. ReleaSE-Dx is delivered in liquid form, in 5- or 15-gallon containers.
- **Newman Zone® Nonionic Emulsified Oil** (190-6725) is an electron donor amendment comprised of food-grade soybean oil (46 percent), non-ionic food grade surfactants (less than 10 percent), food grade sodium lactate (four percent), and water. Although initially mobile for up to two weeks, the Newman Zone emulsified oil subsequently adheres to the soil matrix to provide a low-mobility, slow-fermenting source of electron donor to maintain a reductive environment. The Newman Zone product is delivered as a liquid emulsion in 270-gallon totes.

4.2.2 Injection Volumes and Events

Injection volumes and the type of substrate added varied depending on analytical results obtained for sampling of the extraction wells and monitoring wells during O&M visits and quarterly sampling events. The 2014 injection dates, types, volumes and locations are described in Table 1 below.

Table 1 – Amendment Injection Volumes and Events

Date	Amendment Type	Volume	Location
March 19, 2014 (System Startup)	ReducED AQ	1,000 pounds	Batch Tank
March 28, 2014	ReducED AQ	500 pounds	Batch Tank
April 3, 2014	ReducED AQ	500 pounds	Batch Tank
May 15, 2014	Ethyl Lactate	55 gallons	Batch Tank
June 6, 2014	Ethyl Lactate	55 gallons	Batch Tank
July 4, 2014	Ethyl Lactate	10 gallons	Injection Well INJ-3

July 14, 2014	Ethyl Lactate	55 gallons	Batch Tank
July 24, 2014	Ethyl Lactate	10 gallons	Injection Well INJ-3
August 21, 2014	ReducED AQ Ethyl Lactate	500 pounds 55 gallons	Batch Tank
September 5, 2014	ReducED AQ Ethyl Lactate	500 pounds 55 gallons	Batch Tank
September 17, 2014	ReducED AQ Ethyl Lactate	500 pounds 15 gallons	Batch Tank
September 17, 2014	Ethyl Lactate	5 gallons	MW-5
September 17, 2014	Ethyl Lactate	2.5 gallons	MW-6
September 17, 2014	Ethyl Lactate	2.5 gallons	MW-7
September 17, 2014	Ethyl Lactate	10 gallons	SPW-14
September 29, 2014	ReducED AQ ReleaSE-Dx	500 pounds 5 gallons	Batch Tank
October 16, 2014	Newman Zone Emulsified Oil	540 gallons	Batch Tank

In total, 4,000 pounds of ReducED AQ, 330 gallons of ethyl lactate, 540 gallons of Newman Zone Nonionic emulsified oil, and 5 gallons of ReleaSE-Dx were added to the subsurface through the groundwater recirculation system during 2014. The ethyl lactate slug injections into monitoring wells MW-5, MW-6, MW-7, and SPW-14 in September were performed to enhance treatment in specific areas of high cVOC mass. The two ethyl lactate injections directly into injection well INJ-3 during July were performed to address biofouling in the well.

4.3 Non-Routine Maintenance

Non-routine activities performed on the system during 2014 included the following:

- March 28, 2014: Re-routed the injection well piping from the top to the west side of the remediation building to reduce the amount of head. The pipe heat trace and insulation were also re-installed.
- April 3, 2014: Transferred two drums of investigation-derived water from previous groundwater monitoring events into batch tank. Also transferred six drums of condensate from the SVE system activated carbon unit into the batch tank.
- June 6, 2014: Took Injection well INJ-3 off-line due to algae fouling in the well.
- June 12, 2014: Took Injection well INJ-4 off-line due to algae fouling in the well. INJ-3 remained off-line. Siphon breaks were installed on the injection well lines from the batch tank to prevent backflow into the batch tank.
- July 4, 2014: Performed maintenance on injection wells INJ-3 and INJ-4, including water flushing and mechanical scrubbing of the well screens to address the algae fouling issues. In addition, 10 gallons of ethyl lactate were added to INJ-3. Injection well INJ-4 was placed back on-line while INJ-3 remained off-line. Sealed seams in building roof.

- July 14, 2014: Replaced the flexible couplings in the INJ-3 and INJ-4 injection well vaults with reinforced Fernco fittings to address issues with the disconnection of the couplings during pressure build up in the lines. INJ-3 remained off-line.
- July 24, 2014: Performed maintenance again on injection well INJ-3 including mechanical scrubbing of the well screen and addition of 10 gallons of ethyl lactate to address algae fouling. This well was kept off-line. Covered the batch tank with black visqueen to reduce the amount of sunlight into the tank causing algae growth and subsequent algae fouling of the system.
- July 30, 2014: Cleaned the batch tank by draining tank and physically screening out algae. Injection well INJ-4 was taken off-line, purged with water, and 1 gallon of ethyl lactate added to the well. Injection wells INJ-3 and INJ-4 remained off-line.
- August 15, 2014: System was off-line due to excess algae buildup in the batch tank triggering an alarm condition. The entire system had been off-line for 16 days. Cleaned the batch tank with Drano to raise pH and 1 gallon of concentrated bleach to treat the algae. Wrapped the batch tank with opaque insulating cover to further reduce the sunlight penetration that causes algae fouling and protect the tank from freeze damage during winter. Injection wells INJ-3 and INJ-4 remained off-line.
- August 21, 2014: Replaced the reinforced Fernco fittings in the INJ-3 and INJ-4 well vaults with cam-lock fittings which have a higher pressure rating. Injection wells INJ-3 and INJ-4 remained off-line.
- September 29, 2014: Placed sealant on seams of building roof to address leaking issues.
- October 16, 2014: Repaired the injection well totalizer flow meter that was malfunctioning due to algae fouling. Injection wells INJ-3 and INJ-4 placed back on-line. Replaced existing fittings in the INJ-1 and INJ-2 well vaults with cam-lock fittings which have a higher pressure rating.
- November 16, 2014: Installed additional floating tank heater in batch tank to prevent freezing during winter.

The GRS is equipped with an automated system that calls Hart Crowser and Ecology personnel cell phones whenever a system alarm condition is triggered by the PLC. The following alarm conditions were triggered:

- September 25, 2014: Alarms for the ozone system (not operational) and backflow detection resulted in a system shutdown. Upon inspection of the system by Ecology, there were no apparent issues with the system. The alarms were cleared and the system was re-started the next day.
- December 31, 2014: Alarm condition for a high tank level associated with frozen pipes at the injection well heads. Installed insulation around the pipes on January 8, 2015, to protect them from freezing.

5.0 SYSTEM PERFORMANCE MONITORING

The GRS performance monitoring includes measurements of extraction and injection flow volumes, groundwater levels, field parameters, and the collection of groundwater samples for cVOC and bioremediation parameters. A description of each of the groundwater performance monitoring elements is presented below.

5.1 Groundwater Recirculation Flow Summary

Injection and extraction flow volumes are measured with individual, mechanical impeller-type flow totalizer meters installed on each of the injection and extraction lines entering the building. Flow volumes are also measured with in-line flow sensors installed on the influent line (combined extraction flow) and on the effluent line (combined injection flow) in the remediation building. The flow sensors are connected to electronic transmitters with digital readouts measuring total flow volume and instantaneous flow rates.

From March 19 through December 23, 2014, the injection flow totalizer indicated that approximately 4,400,000 gallons of groundwater had been injected (Table 2). Individual injection well totalizers sum to approximately 4,650,000 gallons. During the same period, the extraction totalizer indicated that approximately 4,980,000 gallons of groundwater were extracted while individual wells sum to approximately 4,730,000 gallons. The discrepancy is assumed to be due to a combination of standard meter error and batch tank biofouling interfering with proper totalizing of the injection flow. As a result, the extraction totalizer is assumed to be more accurate. Total recirculation rates between recording periods ranged between 3.1 gallons per minute (gpm) and 39.4 gpm.

To help counteract the cross-gradient (easterly) flow influence during the summer irrigation system and improve the capture of the extraction wells, injection wells INJ-3 and INJ-4 were taken off-line from July 30 through October 16, 2014. As described in Section 4.3, these wells were previously taken off-line periodically during June and July to address fouling issues.

5.2 Groundwater Monitoring

Bioremediation performance is assessed based on periodic monitoring of groundwater quality from both monitoring wells and extraction wells. This monitoring consists of targeted collection of groundwater elevation, field parameters, and groundwater samples for chemical analyses. Groundwater well sampling locations are presented on Figure 2. Well construction details for the monitoring, extraction, and injection wells are provided in Table 3. Laboratory analytical reports are provided in Appendix B. An evaluation of the data is presented in Section 6.0.

5.2.1 Groundwater Monitoring Events

Pre-GRS startup sampling was completed during January 2014. Post-GRS startup sampling was completed during May, August, and November 2014 from all monitoring and extraction wells. Additional periodic performance sampling at extraction locations was completed during April, July, September, October, and December 2014. Periodic performance groundwater elevations were also

collected during the O&M visits to monitor changes in groundwater elevations due to system operation. Mini Diver pressure transducers with dataloggers were installed in MW-20 and MW-22 in April 2014. Mini Diver pressure transducers with temperature and conductivity dataloggers were also installed in MW-10 and SPW-12 in April 2014.

5.2.2 Groundwater Level Measurements

GRS startup measurements were completed during March and April with approximate monthly measurements completed in wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10, MW-18, MW-20, MW-23, SPW-12, and SPW-15. Manual depth to groundwater measurements were recorded for all groundwater wells on January 27, May 12, August 25, and November 11, 2014, and are provided in Table 4. Pressure transducers recorded groundwater elevation data beginning April 18, 2014, for GRS axis wells MW-10, MW-20, MW-22, and SPW-12. Pressure transducer data is presented on Figure 3 along with manual water level measurements and GRS extraction flow.

5.2.3 Field Parameter Measurements

Groundwater field parameters were collected using low-flow sampling techniques and a flow-through cell. Measured field parameters are provided in Table 5. Groundwater samples were collected when the water quality parameters (i.e., pH, temperature, dissolved oxygen [DO] by optical luminescence, oxidation-reduction potential [ORP], and specific conductance) had stabilized. Purge water was collected in drums and placed into the GRS batch tank for treatment and re-injection. Field parameters were also periodically collected from selected extraction wells using similar techniques except that the field parameters were considered stable at the time of first instrument reading.

5.2.4 Groundwater Sampling and Analysis

Groundwater samples were collected using a low-flow bladder pump and dedicated tubing for all monitoring wells. Samples from the extraction wells were collected from the sampling ports installed on the extraction lines within the well vaults. Samples were collected directly into labeled sample containers with no head space, placed in a cooled ice chest for field storage, and shipped to the laboratory using chain of custody protocols. Samples were analyzed for VOCs by EPA Method 8260B; chloride, nitrate, and sulfate by EPA Method 300.0; ethene, ethane, and methane by Method RSK-175; and TOC by EPA Method 5310C. Groundwater samples were analyzed by TestAmerica Laboratories Inc.

6.0 GROUNDWATER MONITORING RESULTS AND ASSESSMENT

Groundwater field and chemical parameters were monitored to assess the effectiveness of the GRS, groundwater conditions within the treatment area, and the attenuation of bioremediation byproducts. This section provides a discussion and assessment of these groundwater data. Table 3 provides details on the construction of the monitoring, injection, and extraction wells. Manual groundwater elevation measurements are provided in Table 4. Field parameters are provided in Table 5. Table 6 presents the water quality data for the shallow and deep wells including cVOC and bioremediation-related parameter data such as electron donors (TOC); competing electron acceptors (nitrate and sulfate);

reductive dechlorination end products (ethene, ethane, and chloride); and competing microbial process end products (methane).

6.1 Groundwater Elevations

Groundwater elevation contours are presented on Figures 4 through 7. Figure 4 shows groundwater elevations in September 2012, before GRS startup and at end of the irrigation season when groundwater levels are typically higher. Figure 5 represents groundwater elevations in January 2014, also before the GRS startup but after the irrigation season when water levels are lower. Figure 6 shows groundwater elevations in May 2014, after the GRS startup and at the beginning of the irrigation season. Figure 7 shows the groundwater elevations for August 2014, post-GRS startup and near the end of the irrigation season.

As measured in MW-22, outside of the estimated GRS hydraulic influence, groundwater elevations increased 10.55 feet between January 2014 and August 2014, which is attributed to operation of the regional irrigation network (Table 4). By mid-November, groundwater elevations dropped by 4.29 feet in this well compared to the August measurement. This decrease is consistent with termination of irrigation supply in mid-to-late October. In the deep aquifer, similar responses were noted in MW-17, MW-18, and MW-19, with groundwater elevations increasing an average of 10.3 feet from January to August 2014 and decreasing by an average of 2.9 feet between August and November 2014.

Groundwater potentiometric heads between the deep and shallow zones continued to display a downward gradient during 2014, as measured between well pairs MW-16/MW-17, MW-10/MW-18, and MW-20/MW-19. Prior to GRS startup, downward potentiometric heads between these well pairs averaged 8.9 feet during January 2014. Following startup, this downward gradient decreased, ranging between 3.6 feet (MW-20/MW-19, May and November 2014) and 8.0 feet (MW-10/MW-18, September 2014). Monthly measurements between MW-10/MW-18 suggest that downward gradients in the source area may be decreasing as a result of the GRS operation. Since discontinuation of irrigation system operation, the potentiometric head between these two wells has continued to decrease, ranging from 7.0 feet during October 2014 to 3.9 feet during late December 2014. A similar response was observed in the MW-20/MW-19 pair (3.6 feet in November 2014) but not as significant in MW-16/MW-17 pair (6.6 feet). These initial data suggest that the operation of the GRS may be mitigating the downward migration of contaminants, although a full seasonal assessment of groundwater elevation changes will be needed to confirm this conclusion.

Figure 3 presents the GRS operational data coupled with pressure transducer and manual water level measurements along the GRS shallow treatment axis, including the on-site wells SPW-12 and MW-10 that are upgradient of the extraction wells; on-site well MW-20 that is downgradient of the extraction wells; and off-site well MW-22 that is downgradient of the extraction wells. The transducer data show that when the GRS system is operating and groundwater elevations are above approximately 1,037 feet above mean sea level, the system is able to maintain an inward gradient on much of the southern portion of the Site. This is further illustrated by a northerly gradient from MW-22 toward MW-20.

6.2 Groundwater Field Parameters

Field parameters were monitored to evaluate changes in aquifer conditions as a result of the GRS operation and are provided in Table 5. An evaluation and discussion of these results is provided below.

pH. Across the entire Site, groundwater pH values were generally within the range of values considered optimal for reductive bioremediation (6.5 to 8.0 standard units [SU]). In general, the shallow aquifer is about 1.0 SU more acidic than the deeper aquifer. During the three quarters of valid 2014 pH readings, shallow groundwater ranged between 6.3 and 7.6 SU, with an overall average pH of 6.8. These data suggest that upgradient groundwater is slightly basic, averaging 7.4 SU in MW-16 during 2014.

Acidification of groundwater can occur as groundwater enters zones of contamination; this is attributed to the release of hydrogen ions by residual carbon or by the reductive dechlorination of contaminants. During January 2014, groundwater wells within the Phase 1 recirculation zone had a pH that ranged from 6.4 to 7.1 SU, averaging 6.5 SU. This slightly acidic groundwater appears to be in the process of buffering, and by November 2014, the pH of the groundwater in the Phase 1 recirculation zone increased to a range of 6.4 and 7.4 SU, averaging 6.8 SU. This suggests that the correct balance between ethyl lactate's acidulating influence and ReducED AQ's slightly basic (7.5 to 8.0 SU) buffering systems has been maintained, reducing the potential for an acid-mediated metals mobilization.

Dissolved Oxygen. Prior to beginning Phase 1 of GRS operation, the shallow and deep aquifers were both aerobic. Shallow groundwater DO concentrations ranged from 4.5 to 9.8 mg/L during January 2014, with an average of 6.7 mg/L. The deeper aquifer was slightly less aerobic with DO concentrations ranging from 1.7 to 5.0 mg/L during January 2014, with an average of 3.6 mg/L. Predictably, as amendments were added to promote reductive dechlorination, the DO concentrations decreased as reductive conditions began to develop. By November 2014, shallow groundwater DO concentrations across the Site ranged from 0.2 to 8.2 mg/L and averaged only 1.8 mg/L. For the 12 wells within the Phase 1 recirculation area, DO concentrations ranged from 0.4 to 1.2 mg/L in November 2014, with an average of 0.9 mg/L. The highest November 2014 DO values within this group were found in wells MW-5, MW-6, MW-7, and MW-9 with DO ranging between 0.9 and 1.2 mg/L, consistent with their location on the periphery of the recirculation influence in a generally aerobic aquifer.

In the shallow aquifer, MW-21, located approximately 360 feet southeast and downgradient from the nearest Phase 1 extraction well, began displaying an appreciable drop in DO beginning in August 2014. From a historical range of 5.0 to 7.6 mg/L, the DO in MW-21 decreased to 1.9 mg/L in August and further decreased to 1.6 mg/L during the subsequent November 2014 sampling event.

In the deep zone, DO concentrations in MW-18 and MW-19 dropped sharply during November 2014. DO concentrations in these wells ranged between 4.1 and 5.5 mg/L, with an average of 4.8 mg/L, during the first three quarters of 2014. During November 2014, the DO concentration was below 1.0 mg/L in both of these wells. This shift was not noted in upgradient well MW-17. Instead, these observations suggest that amendment addition in the shallow zone, coupled with the downward gradients, have a geochemical influence on the deep aquifer.

Oxidation-Reduction Potential. Prior to the GRS startup, the groundwater across the Site was typically both aerobic and oxidative. Across all the shallow groundwater wells, the ORP had ranged between +170 to +347 millivolts (mV) and averaged +217 mV. The wells within the Phase 1 recirculation area averaged a similar +223 mV. During May 2014, after the GRS startup, the ORP in the Phase 1 area wells had already dropped to an average of +83 mV and went as low as -98 mV (SPW-15), indicating reducing conditions. By November 2014, the ORP values in the Phase 1 area wells had decreased in range between -83 mV to +82 mV with an average of -39 mV.

The ORP in MW-21 experienced a substantial decrease during November 2014. The reading of -112 mV is a substantial decrease from the typical +100 to +200 mV reading historically observed in this well. This parallels with the decrease in the DO concentration (noted beginning August 2014) and the rather abrupt cVOC concentration changes noted in this well (Section 6.3.6). This differs from ORP/cVOC patterns observed in other peripheral wells, including MW-22, MW-23, and MW-24, as discussed in subsequent sections below.

Despite the decreases in DO concentrations in MW-18 and MW-19, the ORP has not appreciably changed in these two wells compared to May 2014 data. More quarterly data will help assess the potential for geochemical impacts in groundwater located under the shallow groundwater recirculation area.

Conductivity. Conductivity is a measure of groundwater's ability to carry an electrical current and is reported in micro-ohms (µMHOs). Greater conductivity suggests a greater concentration of ions and charged molecules in groundwater, including free volatile fatty acids, salts, reduced metals, and chloride. Conductivity can also decrease as groundwater enters sulfate-reducing conditions due to sulfide precipitating metals and other cations out of solution.

Prior to beginning GRS operation, conductivity values stayed within a fairly narrow range in shallow groundwater across the Site. During January 2014, conductivity ranged from 0.20 to 0.34 µMHOs and averaged 0.25 µMHOS, typical for oxidized groundwater. Average conductivity peaked during August 2014 monitoring, averaging 0.39 µMHOs and ranging as high as 0.53 µMHOs (MW-2). Within the Phase 1 treatment area, conductivity values were predictably higher as a result of amendment addition and biological activity. By November 2014, conductivity ranged from 0.23 to 0.60 µMHOs and averaged 0.46 µMHOs. The lowest conductivity was noted in MW-6, which only deviated from historical background conductivities during August 2014. It was during this event that an appreciable slug of cVOCs was mobilized and moved through the MW-6 vicinity. Even the September 17, 2014, slug injection of ethyl lactate directly into MW-6 could not be noted by the conductivity at the time of November 2014 sampling.

Substantial conductivity changes were not observed in MW-21, despite swings in the DO concentration and ORP toward anoxic and reducing conditions. While there was a slight increase of 0.044 µMHOs noted during August 2014 (concurrent with cVOC concentration changes) followed by a 0.083 µMHOs decrease during November 2014 as the ORP entered sulfate-reducing conditions, the readings are not outside of historical ranges. This suggests either that TOC concentrations are low or that very little microbial activity is actually occurring in the MW-21 vicinity.

Continuous conductivity monitoring in SPW-12 and MW-10 has yielded important information about groundwater travel times within the Phase 1 recirculation area. Values were recorded every hour from April 18, 2014, through January 21, 2015, by the pressure transducers and were later downloaded and reviewed. Figures 8 and 9 present conductivity data for SPW-12 and MW-10, respectively, co-plotted with amendment additions through December 31, 2014. The amendment additions are standardized to hydrogen equivalents to reflect reducing power of electron donor mass and type. The conductivity data from SPW-12 indicate a leading edge groundwater travel time of approximately 1.1 days. Similarly, data from MW-10 indicate a leading edge travel time of approximately 6.2 days. Thus the conductivity data suggest that groundwater can make a complete circuit through the treatment zone within 10 to 14 days.

6.3 Groundwater Chemical Analyses

Groundwater samples were collected for laboratory analyses to evaluate the effectiveness of groundwater bioremediation. The data assessment in the following paragraphs describes each key parameter analyzed and how they confirm suitable conditions and activity for reductive dechlorination. Chemical data are presented in Table 6.

6.3.1 Nitrate

Nitrate is the preferred electron acceptor after DO for microorganisms as they gain more energy from these than other electron acceptors such as (in order of most to least energy) manganese, ferric iron, sulfate, and carbon dioxide. The preference for nitrate and DO as electron acceptors can competitively inhibit reductive dechlorination. Conditions conductive to reductive dechlorination contain nitrate levels of less than 1.0 mg/L (nitrate as nitrogen). In contrast, elevated nitrate is conducive to the anaerobic oxidation of DCE and VC. Elevated nitrate was detected throughout the Site prior to GRS startup, with concentrations historically ranging as high as 18 mg/L. During 2014, nitrate concentrations ranged from non-detect (less than 0.90 mg/L, MW-7) to 11 mg/L (MW-23). By November 2014, the Phase 1 area wells essentially met the low nitrate threshold in MW-7, MW-8, MW-9, MW-10, and SPW-12. Outside of the Phase 1 area, elevated nitrate was still observed, including MW-20 and MW-23 with nitrate concentrations of 3.4 and 6.2 mg/L, respectively. In deep well MW-18, located under the former source area, nitrate continued to remain stable at approximately 2.6 mg/L. This contrasts with observations that the DO concentration in MW-18 has dropped to anoxic conditions.

6.3.2 Sulfate

Microbes gain more energy from using sulfate as an electron acceptor than methanogenic processes; this preference results in low sulfate concentrations under strong reducing conditions. Generally, sulfate concentrations of 20 mg/L or less are not considered to be a significant competitor to complete reductive dechlorination. However, as available sulfate is consumed, more electron donor is available to fuel complete dechlorination. Rebounding sulfate concentrations are typically a sign of less-reductive activity as sulfate flux overtakes sulfate reduction. Prior to GRS startup, sulfate concentrations in the Site monitoring well network ranged from approximately 8 mg/L to 16 mg/L.

Significant sulfate reduction was first noted in the Phase 1 treatment area wells MW-8 and MW-9 during August 2014. By this time, sulfate concentrations had reduced to 2.5 mg/L and non-detect (less than 1.2 mg/L), respectively. Sulfate reductions were observed in a greater number of wells and were more significant in the November 2014 monitoring event. During this event, sulfate was not detected in wells MW-8, MW-9, and SPW-12, and significant decreases were noted in MW-7 (4.2 mg/L) and MW-10 (1.5 mg/L). Groundwater extracted at EXT-2 also contained lower concentrations of sulfate for the first time during November 2014, at a concentration of 5.8 mg/L. Wells sampled outside of the Phase 1 treatment area, including shallow wells MW-3, MW-20, and MW-23 and deep aquifer well MW-18, continued to have stable sulfate concentrations consistent with background levels.

6.3.3 Total Organic Carbon

TOC concentrations were monitored across the Site to evaluate dissolved electron donor distribution. Generally, TOC concentrations above 20 mg/L are considered high enough to stimulate complete cVOC dechlorination. Phase 1 area wells MW-8 and SPW-12 were the first locations noted to have crossed this threshold during the August 2014 sampling event, at 33 mg/L and 62 mg/L, respectively. This sampling event was approximately 7 days following a relatively large amendment addition (500 pounds of ReducED AQ and 55 gallons of ethyl lactate). With conductivity data indicating a rather rapid 14 day particle track time through the Phase 1 area, these numbers could be considered biased-high and more reflective of transient conditions.

By November 2014, elevated TOC concentrations were also detected in MW-7 (20 mg/L) and MW-9 (22 mg/L). However, the TOC concentration was noted to drop to 12 mg/L in SPW-12 during November 2014. Because the November 2014 sampling was conducted 35 days following the October Newman Zone emulsified oil addition, these values are considered more reliable for assessing broader aquifer water quality in the treatment area. This amount of time is also considered sufficient for the emulsified oil to adhere to the soil matrix and begin fermenting, but it may not be sufficient for all the lactate present in Newman Zone to be consumed. Thus the 12 mg/L of TOC detected in EXT-3 during November 2014, the highest concentration ever detected at an extraction well, may primarily be related to this recirculating lactate. The subsequent decrease in TOC concentration at the extraction wells in December 2014 may signal that most of the soluble electron donor has been consumed and the primary electron donor left is low-mobility oil. Outside of the Phase 1 treatment area, TOC concentrations remained stable and at low concentrations (less than 2 mg/L) through 2014, including MW-3, MW-20, and MW-23.

MW-18, located under the Phase 1 treatment area, displayed a small TOC concentration increase during November 2014, up to 1.7 mg/L. MW-18 had only had one other positive TOC detection, at 1.0 mg/L during March 2013. The November 2014 detection is consistent with other data indicating that the groundwater at MW-18 has become anoxic and more reductive. Further downward electron donor migration may eventually stimulate denitrification.

6.3.4 Ethene and Ethane

Ethene and ethane are the final degradation products of the reductive dechlorination process (PCE to TCE to c-DCE to VC to ethene/ethane). Ethane is the result of ethene dehydrogenation, which typically occurs only when very little competing electron acceptor (e.g., sulfate or cVOCs) is available.

Ethene and ethane were widely detected in both the shallow and deep zones during June 2012 baseline sampling of new wells. However, subsequent sampling did not duplicate the magnitude of those detections until November 2014. By the November 2014 sampling event, the Phase 1 area wells contained appreciable concentrations of ethene, including MW-7 (13 µg/L), MW-8 (18 µg/L), MW-9 (400 µg/L), MW-10 (28 µg/L), and SPW-12 (17 µg/L). Ethane was also detected in MW-9 at 0.57 µg/L, the only well that had detectable concentrations of ethane during the November 2014 sampling event.

The high concentration of ethene detected in MW-9 in November 2014 is significant. The 400 µg/L of ethene in this well is the equivalent of complete dechlorination of groundwater PCE at a concentration of approximately 2,370 µg/L. With only VC (650 µg/L) remaining detectable in MW-9 during November 2014, these results indicate that there are now more completely dechlorinated ethene molecules than there are chlorinated ethenes.

6.3.5 Methane

The presence of methane can indicate a highly reduced environment containing elevated concentrations of dissolved hydrogen gas. When relying solely on complete reductive dechlorination, a methane concentration of 6,000 µg/L is considered optimal to protect anoxic conditions and to have a sufficient steady-state supply of hydrogen gas (electron donor). Methanogenic bacteria, however, can compete with dechlorinating bacteria for hydrogen as an electron donor and consume organic carbon. Methane can also assist with evaluating movement of groundwater from highly reductive environments to downgradient areas. The presence of both dissolved methane and oxygen can also stimulate the co-metabolic destruction of many cVOCs, except for PCE.

Methanogenesis first became notable at the Site during November 2014. Methane concentrations increased appreciably in MW-7 (1,300 µg/L), MW-8 (2,100 µg/L), MW-9 (1,400 µg/L), MW-20 (1,100 µg/L), and SPW-12 (2,100 µg/L) from previous sampling events. For wells in the Phase 1 treatment area that don't have nitrate present, these methane concentrations confirm that conditions have become favorable for complete reductive dechlorination. If methane persists in these wells at concentrations at less than 6,000 µg/L, there will be an optimal balance of organic carbon. These methanogenic conditions became established after the end of the irrigation season.

The field and bioremediation-related parameter data from MW-20 are consistent with upgradient methanogenesis and subsequent migration (lack of complete hydraulic capture) of methane. TOC concentrations are not detectable and groundwater became anoxic during November 2014. Since nitrate has remained relatively stable (3.4 mg/L) at levels that can inhibit PCE and TCE dechlorination, we can infer that the dissolved oxygen is being used to oxidize methane. Thus, downgradient of the Phase 1 treatment area, conditions are likely stimulating co-metabolic activity that can destroy the lesser-chlorinated PCE daughter products that may also make it past the extraction wells.

6.3.6 Chlorinated Volatile Organic Compounds

Because only three sampling rounds of all the monitoring wells have occurred since the GRS startup, the cVOC data set for evaluating GRS system performance is somewhat limited. Therefore, this cVOC discussion related to GRS system performance will focus on several key wells of interest: the Phase 1 treatment area monitoring wells MW-9 and MW-10; the Phase 1 extraction well EXT-2; and downgradient monitoring wells MW-20 and MW-21. These five wells are representative of the key changes discussed above.

One of the most useful ways for assessing reductive bioremediation performance brought about by substrate addition is by observing changes in the molar concentrations and the molar ratios of parent compounds (PCE) and daughter products (TCE, DCE, VC, ethene, ethane) over time rather than changes in contaminant mass. Molar concentrations count the number of molecules rather than a weight per unit volume, improving the ability to understand treatment progress, mobilization influences, and potential degradation mechanisms. Conversion of conventional concentrations (e.g. µg/L) to molar concentrations (moles per liter) facilitates assessment of the degree to which reductive transformations occur, because 1 mole of PCE yields 1 mole of VC. Decreases in molar concentration of total chlorinated ethenes indicate that chlorinated ethene mass is being lost and that significant transformation of these compounds to non-toxic end products is occurring.

While reductive dechlorination substantially reduces the mass of cVOCs in groundwater due to the loss of chloride ions, the lower mass concentrations in groundwater do not significantly help assess cVOC degradation to ethene or other end products. For example, the reductive dechlorination of a given mass of PCE does not produce the same mass of VC (anaerobic dechlorination of 1,000 µg/L of PCE would produce just 380 µg/L of VC). However, the total molar concentration would remain fixed at 6.0 micromoles per liter.

The molar concentration is calculated from the mass concentration divided by the molecular weight for each constituent. As hydrophobic PCE and TCE is converted to lesser chlorinated compounds including hydrophilic c-DCE, t-DCE, VC, and ethene during reductive dechlorination, the total cVOC molar concentration will initially increase until these lesser chlorinated compounds also get consumed by complete dechlorination or other processes. Because of the naturally low TOC concentrations in the aquifer and because the treatment strategy involves the recirculation of surfactants and co-solvents, we did not include an adjustment to account for very divergent organic carbon partitioning coefficients. Since PCE is very hydrophobic and VC is not, 100 µg/L of PCE in groundwater can constitute significantly more mass than 100 µg/L of VC. Figure 10 presents total cVOC micromolar (µM) concentrations for the five wells of special interest. Individual constituents are plotted on Figure 11 for MW-9, Figure 12 for MW-10, Figure 13 for EXT-2, Figure 14 for MW-20, and Figure 15 for MW-21. These time series plots were done on a molar rather than mass basis so that the effects of sequential degradation processes can be more clearly perceived.

Monitoring Wells MW-9 and MW-10. Within the Phase 1 treatment area, total molar concentrations in MW-9 and MW-10 increased by 342 percent and 535 percent, respectively, within two months of beginning operation (May 2014) (Figure 10). This concentration increase was likely more than just the

result of PCE dechlorinating to more soluble daughter products, as evidenced by the concurrent increase in dissolved PCE molar concentrations (Figures 11 and 12). In MW-9 only 15 percent of the initial increase in the total cVOC molar concentration is attributed to dechlorination daughter products. In MW-10, dechlorination daughter products accounted for only 10 percent of the initial total cVOC molar concentration increase.

Given groundwater transport times and the concentration of PCE being captured and re-injected by the recirculation system, this change in MW-9 and MW-10 total cVOC molar concentration is likely due to both mobilization and redistribution of captured cVOCs. Note that this mobilization occurred without adding surfactant and co-solvents. Instead, it is likely that some combination of microbial activity, fatty acids surfactant effects, and higher groundwater velocities helped mobilize residual PCE from other areas of the plume.

Unlike in MW-10, total cVOC molar concentrations in MW-9 continued to increase appreciably through August 2014. All of this increase is attributed to the formation of DCE. As shown on Figure 11, PCE and TCE concentrations decreased to non-detectable concentrations during August 2014, as nitrate and sulfate decreased to non-detectable concentrations and elevated TOC concentrations (8.9 mg/L) were detected for the first time. By November 2014, all the DCE had been dechlorinated to either VC or ethene/ethane as TOC concentrations increased to above the target concentration (22 mg/L) and moderate levels of methanogenesis began. The November 2014 ethene/ethane molar concentration was greater than the pre-GRS startup molar concentration of PCE.

Similar, although slower, progress has been observed in MW-10 (Figure 12). Because PCE and TCE can dechlorinate fairly rapidly, the accumulation of TCE noted in MW-10 during August 2014 is likely associated with the desorption and dechlorination of an appreciable mass of residual PCE. Between the May and August 2014 sampling events, 120 gallons of ethyl lactate co-solvent had been introduced into the subsurface, which causes the desorption of PCE and TCE from the soil matrix. This may have contributed to the temporary TCE dechlorination stall, as sulfate-reducing conditions (optimal for rapid reductive dechlorination) were not yet established. With additional organic carbon, co-solvent, surfactant, and emulsified oil injected by the November 2014 sampling event, the reducing conditions strengthened further into the sulfate reducing range but not into the methanogenic range. By November 2014, 96 percent of the molar balance was either DCE or VC. As methanogenesis increases, complete dechlorination and reductions in DCE and VC are expected.

Extraction Well EXT-2. Sampling for EXT-2 began in April 2014, after GRS recirculation had been operating for approximately 1 month. The concentration of PCE generally increased fairly steadily through August 2014 (Figure 13). During this time, the well was only capturing a modest concentration of TCE and DCE dechlorination products. From 7 days prior to the August sampling event until 12 days before the September 2014 sampling event, 1,500 pounds of ReducED AQ and 145 gallons of ethyl lactate were injected through INJ-1 and INJ-2 only. As previously discussed, injection wells INJ-3 and INJ-4 were off-line to counteract the cross-gradient flux of the irrigation-influenced groundwater. While total molar concentrations decreased appreciably, it is not likely due to biological processes (Figure 10). Instead, the addition of PCE-mobilizing amendments likely flushed contamination from the well vicinity and helped redistribute the PCE for subsequent dechlorination.

Further PCE mobilization from the EXT-2 well vicinity leading up to the October 2014 sampling is evident based on the rebound of both total molar and PCE concentrations to within 82 percent and 78 percent of August 2014 values, respectively.

More substantial progress in the EXT-2 well vicinity is noted following Newman Zone injection and recirculation, which began immediately after collecting the October 2014 groundwater samples. PCE concentrations decreased from 53,000 µg/L to 15,000 µg/L by the November 2014 sampling event conducted 35 days later, or up to three cycles of groundwater through the treatment zone. A relatively small increase in TCE concentration was noted between the sampling events and VC was detected at an appreciable concentration for the first time (170 µg/L). Concurrently, nitrate dropped to below 1 mg/L and sulfate concentrations decreased to below background levels, indicating that much stronger reducing conditions were present in groundwater when the EXT-2 sample was collected during November 2014. A slight decrease in cVOCs concentrations was noted during December 2014, reflecting a 73 percent drop in total molar concentrations compared to October 2014 samples.

Monitoring Well MW-20. Monitoring well MW-20 is important for evaluating water quality approximately 80 feet downgradient from the Phase 1 extraction wells. Historically, low concentrations of PCE (up to 10 µg/L) were noted in this well without any cVOC daughter products. However, approximately 2 months following GRS startup, an appreciable spike in all cVOC molar concentrations was observed during May 2014. No TOC was detected and nitrate, sulfate, and ORP values remained within historical/background ranges. As shown on Figure 3, transducer data indicated that gradients were still southerly until shortly after May 2014 sampling was conducted. As groundwater elevations increased, capture was achieved and total molar concentrations declined by almost 70 percent by August 2014 (Figure 10). As groundwater elevations decreased, concentrations of PCE and DCE increased with both VC and methane becoming detectable for the first time during November 2014. However, nitrate and sulfate concentrations continued to remain stable with no TOC detections; these conditions indicate the apparent lack of source area capture despite the transducer data suggesting a northerly gradient from MW-22 and MW-20 through November 2014. A similar pattern of cVOC changes is noted in MW-22 as well, suggesting substantial groundwater velocities (greater than 280 feet from EXT-3 to MW-22 in 57 days) are present across the Site even when irrigation is not in operation.

Monitoring Well MW-21. As gradients shifted toward the southeast due to the regional irrigation system operation, an increase in PCE, TCE, and DCE concentrations was noted in MW-21 during late August 2014 (Figures 10 and 15). MW-21 is located approximately 370 feet southeast of EXT-4. While a seasonal increase in PCE concentration was observed in the September 2012 sampling event (likely related to the same gradient change phenomenon), there were no other cVOC detections. The August 2014 event showed elevated concentrations of PCE (75 µg/L), TCE (430 µg/L) and DCE (920 µg/L). The August 2014 results indicated that there is approximately 23 times higher molar concentration flux moving through the MW-21 vicinity compared to September 2012. Without the direct irrigation influence, the November 2014 sampling results showed a sharp reduction in PCE and TCE (to non-detect) and DCE (to 220 µg/L). A small increase in VC was noted as well (10 µg/L),

coupled with further declines in ORP (-112 mV) under micro-aerobic conditions (DO at 1.6 mg/L). Future groundwater monitoring will help to assess this mass flux out of the treatment area during periods of irrigation operation.

7.0 CONCLUSIONS

Initial performance of the GRS recirculation system suggests substantial mass reduction progress has been completed within the Phase 1 treatment area. Appreciable PCE mass has been mobilized from the soil matrix during the process, with PCE concentrations in EXT-2 exceeding any previously noted concentration spike for the Site. Moderate reducing conditions have been generated in and around the Phase 1 treatment area and typical patterns of complete reductive dechlorination are evident.

Groundwater velocities at the Site are very high, with particle tracking times as short as 10 to 14 days between the Phase 1 injection and extraction wells during GRS operation based on transducer data. Water quality data suggests that the GRS has a difficult time maintaining capture of cVOCs within the treatment area, especially during low groundwater elevation periods (i.e., non-irrigation season). This difficulty with capture has resulted in some release of cVOCs to areas outside of the Phase 1 treatment area. However, there is evidence suggesting that other degradation processes are likely occurring across the Site, both within and outside of the Phase 1 treatment area, including anaerobic and aerobic oxidation for DCE and VC, and co-metabolism for TCE, DCE, and VC. Based on achieving sulfate-reducing conditions in some areas, abiotic reactions may also be occurring within the Phase 1 treatment area.

Residual organic carbon from the Newman Zone emulsified oil and other organic carbon additions may provide a sufficient supply of electron donor to address residual cVOC mass within the Phase 1 area. This could allow shifting of the GRS operation to the Phase 2 area beginning in the summer of 2015.

8.0 RECOMMENDATIONS

Based on review of data through December 2014, the following recommendations are made.

- Continue GRS operation in the Phase 1 area through at least May 2015.
- Use additional data to be collected during the planned February and May 2015 quarterly groundwater events to assess cVOC and geochemical conditions across the Site for possible activation of the Phase 2 system operation during summer 2015.
- Perform quarterly bioremediation parameter analysis in wells MW-3, MW-7, MW-8, MW-9, MW-10, MW-18, MW-20, MW-21, MW-22, MW-23, and SPW-12.
- Evaluate the February 2015 quarterly monitoring data for redox recovery and cVOC attenuation to determine if additional amendment additions are needed.
- Conduct monthly water quality sampling of GRS extraction wells, including field parameters, VOCs, nitrate, sulfate, and TOC.
- Continue the continuous datalogger deployment in MW-10, MW-20, MW-22, and SPW-12.

- Due to groundwater velocities and the quality of other data, discontinue chloride analysis as part of the bioremediation parameter analytical suite.

9.0 REFERENCES

Hart Crowser 2007. Feasibility Study Report, Frank Wear, Yakima Washington. July 31, 2007.

Hart Crowser 2012. Data Gap Investigation Report, Frank Wear Site, Yakima, Washington. September 18, 2012.

Hart Crowser 2013. Groundwater Remediation System Draft Interim Action Plan, Former Frank Wear Cleaners Site, Yakima, Washington. March 28, 2013.

Hart Crowser 2014. Draft Construction Completion Report, Groundwater Interim Action Phase 1, Former Frank Wear Dry Cleaner Site, Yakima, Washington. December 10, 2014.

F:\Notebooks\1780023_WA Ecology Frank Wear\Workspace\Performance Report\Final Performance Report\Final Frank Wear Performance Rpt 4-1-15.docx

Table 2 - Recirculation System Operational Summary
Former Frank Wear Cleaners Site
Yakima, Washington

Date/Time	Elapsed Time	Injection Total (Flow 3)	Injection Flowrate	Extraction Total (Flow 1)	Extraction Flowrate	Substrate Added	Substrate Added	Injection Wells												Shallow Extraction Wells											
								INJ-1			INJ-2			INJ-3			INJ-4			EXT-1			EXT-2			EXT-3			EXT-4		
								Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate	Reading	Volume Change	Flow-rate
	(min)	(gal)	(gpm)	(gal)	(gpm)	(pounds)	(gallons)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)	(gal)	(gal)	(gpm)
3/19/14 15:29	0	3,483		4,752		1,000 R	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/20/14 8:20	1,011	9,077	5.53	12,633	7.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/20/14 10:35	135	9,402	2.41	13,055	3.13	--	--	1,884	--	--	2,544	--	--	4,904	--	--	1,377	--	--	1,618	--	--	7,394	--	--	7,204	--	--	1,711	--	--
3/20/14 12:52	137	10,359	6.99	14,122	7.79	--	--	1,918	34	0.25	2,937	393	2.87	5,372	468	3.42	1,509	132	0.96	1,754	136	0.99	7,942	548	4.00	7,488	284	2.07	1,868	157	1.15
3/20/14 14:04	72	10,841	6.69	14,656	7.42	--	--	1,950	32	0.44	3,144	207	2.88	5,495	123	1.71	1,561	52	0.72	1,835	81	1.13	8,325	383	5.32	7,497	9	0.13	1,944	76	1.06
3/28/14 8:05	11,161	75,997	5.84	86,101	6.40	500 R	--	12,587	10,637	0.95	23,216	20,072	1.80	27,388	21,893	1.96	12,525	10,964	0.98	14,705	12,870	1.15	41,188	32,863	2.94	21,982	14,485	1.30	15,628	13,684	1.23
3/28/14 17:41	576	78,084	3.62	87,946	3.20	--	--	12,979	392	0.68	23,930	714	1.24	28,105	717	1.24	12,705	180	0.31	15,097	392	0.68	41,968	780	1.35	22,404	422	0.73	16,008	380	0.66
4/3/14 10:53	8,232	107,940	3.63	129,541	5.05	500 R	--	19,889	6,910	0.84	33,440	9,510	1.16	40,595	12,490	1.52	16,361	3,656	0.44	24,412	9,315	1.13	59,661	17,693	2.15	32,364	9,960	1.21	23,532	7,524	0.91
4/3/14 17:11	378	110,289	6.21	131,279	4.60	--	--	20,480	591	1.56	34,129	689	1.82	41,349	754	1.99	16,770	409	1.08	24,811	399	1.06	60,351	690	1.83	32,785	421	1.11	23,821	289	0.76
4/4/14 7:40	869	112,746	2.83	135,320	4.65	--	--	21,186	706	0.81	35,447	1,318	1.52	42,934	1,585	1.82	17,189	419	0.48	25,800	989	1.14	62,088	1,737	2.00	33,836	1,051	1.21	24,512	691	0.80
4/10/14 16:30	9,170	147,243	3.76	176,785	4.52	--	--	31,344	10,158	1.11	46,280	10,833	1.18	51,093	8,159	0.89	22,799	5,610	0.61	36,080	10,280	1.12	80,114	18,026	1.97	44,661	10,825	1.18	31,850	7,338	0.80
4/11/14 7:15	885	150,762	3.98	181,099	4.87	--	--	32,223	879	0.99	47,375	1,095	1.24	52,138	1,045	1.18	23,535	736	0.83	37,143	1,063	1.20	81,884	1,770	2.00	45,712	1,051	1.19	32,600	750	0.85
5/14/14 10:00	47,685	384,242	4.90	539,783	7.52	--	--	106,653	74,430	1.56	108,092	60,717	1.27	201,965	149,827	3.14	70,703	47,168	0.99	128,264	91,121	1.91	230,131	148,247	3.11	115,275	69,563	1.46	80,073	47,473	1.00
5/15/14 9:47	1,427	396,851	8.84	552,196	8.70	--	55 E	109,432	2,779	1.95	110,561	2,469	1.73	207,548	5,583	3.91	72,442	1,739	1.22	131,600	3,336	2.34	235,899	5,768	4.04	117,447	2,172	1.52	81,553	1,480	1.04
6/6/14 11:50	31,803	794,807	12.51	943,152	12.29	--	55 E	199,668	90,236	2.84	206,850	96,289	3.03	376,349	168,801	5.31	120,549	48,107	1.51	258,265	126,665	3.98	353,535	117,636	3.70	277,847	160,400	5.04	127,603	46,050	1.45
6/6/14 14:10	140	796,373	11.19	944,728	11.26	--	--	200,164	496	3.54	207,533	683	4.88	376,349	0	0.00	120,783	234	1.67	258,802	537	3.84	354,002	467	3.34	278,725	878	6.27	127,859	256	1.83
6/12/14 0:00																															
7/4/14 0:00							10 E																								
7/14/14 18:10	54,960	--		--		--	55 E	494,235	294,071	5.35	518,410	310,877	5.66	496,042	119,693	2.18	363,966	243,183	4.42	521,419	262,617	4.78	499,974	145,972	2.66	513,309	234,584	4.27	286,637	158,778	2.89
7/24/14 10:30	68,900	2,100,911	18.93	2,048,742	16.02	--	10 E	618,053	123,818	1.80	702,797	184,387	2.68	496,042	0	0.00	467,559	103,593	1.50	587,615	66,196	0.96	549,085	49,111	0.71	624,005	110,696	1.61	343,599	56,962	0.83
7/24/14 18:30	480	2,101,374	0.96	2,057,447	18.14	--	--	621,721	3,668	7.64	708,677	5,880	12.25	496,047	5	0.01	471,071	3,512	7.32	589,795	2,180	4.54	550,914	1,829	3.81	625,693	1,688	3.52	345,974	2,375	4.95
7/30/14 16:00	8,490	2,136,666	4.16	2,173,943	13.72	--	--	657,591	35,870	4.22	765,702	57,025	6.72	496,526	479	0.06	525,691	54,620	6.43	613,688	23,893	2.81	570,235	19,321	2.28	657,886	32,193	3.79	373,456	27,482	3.24
8/15/14 10:00	22,680	2,160,037	1.03	137,577		--	--	670,814	13,223	0.58	779,154	13,452	0.59	496,537	11	0.00	525,704	13	0.00	616,601	2,913	0.13	574,799	4,564	0.20	668,487	10,601	0.47	378,919	5,463	0.24
8/15/14 16:00	360	2,163,567	9.81	142,460	13.56	--	--	672,737	1,923	5.34	780,199	1,045	2.90	496,665	128	0.36	525,905	201	0.56	617,371	770	2.14	575,542	743	2.06	670,294	1,807	5.02	379,492	573	1.59
8/21/14 9:50	8,270	2,428,061	31.98	468,242	39.39	500 R	55 E	795,624	122,887	14.86	892,752	112,553	13.61	496,665	0	0.00	525,905	0	0.00	668,204	50,833	6.15	626,756	51,214	6.19	806,005	135,711	16.41	407,119	27,627	3.34
8/21/14 18:40	530	2,440,904	24.23	487,073	35.53	--	--	802,966	7,342	13.85	899,982	7,230	13.64	496,724	59	0.11	525,980	75	0.14	671,392	3,188	6.02	629,647	2,891	5.45	813,767	7,762	14.65	408,715	1,596	3.01
8/26/14 9:30	6,650	2,617,838	26.61	717,216	34.61	--	--	883,730	80,764	12.14	969,790	69,808	10.50	496,724	0	0.00	525,988	8	0.00	701,716	30,324	4.56	665,841	36,194	5.44	912,747	98,980	14.88	428,905	20,190	3.04
8/29/14 8:00	4,230	2,717,631	23.59	828,820	26.38	--	--	923,524	39,794	9.41	1,001,861	32,071	7.58	496,724	0	0.00	525,998	10	0.00	716,535	14,819	3.50	686,425	20,584	4.87	953,095	40,348	9.54	445,754	16,849	3.98
9/5/14 11:00	10,260	2,974,760	25.06	1,118,172	28.20	500 R	55 E	1,022,574	99,050	9.65	1,087,225	85,364	8.32	496,724	0	0.00	525,998	0	0.00	761,790	45,255	4.41	739,403	52,978	5.16	1,037,185	84,090	8.20	477,605	31,851	3.10
9/17/14 15:00	17,520	3,373,735	22.77	1,470,418	20.11	500 R	35 E	1,154,862	132,288	7.55	1,217,742	130,517	7.45	496,724	0	0.00	525,998	0	0.00	822,510	60,720	3.47	816,968	77,565	4.43	1,164,330	127,145	7.26	519,679	42,074	2.40
9/29/14 8:10	16,870	3,506,210	7.85	1,770,002	17.76	500 R	5 D	1,263,721	108,859	6.45	1,323,627	105,885	6.28	496,743	19	0.00	526,013	15	0.00	875,847	53,337	3.16	876,174	59,206	3.51	1,260,033	95,703	5.67	558,355	38,676	2.29
9/29/14 11:00	170	3,506,210	0.00	1,772,148	12.62	--	--	1,264,597	876	5.15	1,324,488	861	5.06	496,743	0	0.00	526,013	0	0.00	876,262	415	2.44	876,497	323	1.90	1,260,693	660	3.88	558,629	274	1.61
10/16/14 9:10	24,370	3,506,327	0.00	2,157,131	15.80	--	540 NZEO	1,398,512	133,915	5.50	1,474,099	149,611	6.14	496,768	25	0.00	526,051	38	0.00	954,763	78,501	3.22	944,197	67,700	2.78	1,390,929	130,236	5.34	606,630	48,001	1.97
10/16/14 15:20	370	3,512,263	16.04	2,161,499	11.81	--	--	1,399,504	992	2.68	1,475,530	1,431	3.87	497,835	1,067	2.88	527,800	1,749	4.73	955,664	901	2.44	945,199	1,002	2.71	1,393,454	2,525	6.82	607,530	900	2.43
11/17/14 9:40	45,740	3,937,838	9.30	2,550,361	8.50	--	--	1,491,684	92,180	2.02	1,582,132	106,602	2.33	555,844	58,009	1.27	641,021	113,221	2.48	1,048,422	92,758	2.03	1,067,540	122,341	2.67	1,508,611	115,157	2.52	664,127	56,597	1.24
12/23/14 10:30	51,890	4,359,949	8.13	2,798,456	4.78	--	--	1,572,719	81,035	1.56	1,689,164	107,032	2.06	647,758	91,915	1.77	738,751	97,730	1.88	1,136,922	88,500	1.71	1,214,438	146,897	2.83	1,591,575	82,963	1.60	712,097	47,970	0.92
12/23/14 14:45	255	4,362,160	8.67	2,799,340	3.47	--	--	1,573,192	473	1.86	1,689,756	593	2.32	648,287	528	2.07	739,250	499	1.96	1,137,365	443	1.74	1,215,134	696	2.73	1,591,849	274	1.08	712,264	167	0.66
Totals	**456,676**	**2,714,148**		**2,998,011**		**4,000**	**330 E**																								

Notes:
Recirculation system startup: March 19, 2014.
Substrate addition began: March 19, 2014.
min = minutes
gal = gallons
gpm = gallons per minute
R = ReducED AQ Added
D = ReleaSE-Dx Added
E = ethyl Lactate Added
NZEO = Newman Zone buffered, non-ionic emulsified soybean oil.
9/17/14 MW Slug EL injections: 5 gal into MW-5, 2.5 gal into MW-6, 2.5 gal into MW-7, 10 gal into SPW-15 followed by chase water from batch tank. 15 gallons EL into batch tank.

Table 3 - Well Construction Data
Former Frank Wear Cleaners Site
Yakima, Washington

Well	Completion Date	Well Tag No.	Location		Location Description	On-Site/ Off-site Well	Well Material	Well Casing ID (inches)	Measured Well Depth (feet)	Screen Length (feet)	Screen Slot Size (inches)	Top of Screen Depth (ft bgs)	Bottom of Screen Depth (ft bgs)	Sump Length (feet)	Top of Sand Pack Depth (ft bgs)	Bottom of Sand Pack Depth (ft bgs)	Comments
			Latitude	Longitude													
Shallow Wells																	
MW-1	Feb 1995	NA	46.598934	120.511962	Frank Wear Property	On-Site	PVC	2	35.0	25	0.01	10.0	35.0	None	7.0	35.0	
MW-2	Feb 1995	NA	46.598912	120.512456	Frank Wear Property	On-Site	PVC	2	35.0	25	0.01	10.0	35.0	None	7.0	35.0	
MW-3	Feb 1995	NA	46.598138	120.512108	Sidewalk - South of CWCMH	Off-Site	PVC	2	35.0	25	0.01	10.0	35.0	None	7.0	35.0	
MW-4	Feb 1995	NA	46.598239	120.511674	Sidewalk - Southeast of CWCMH	Off-Site	PVC	2	35.0	25	0.01	10.0	35.0	None	7.0	35.0	
MW-5	1997	NA	46.598980	120.512588	Alley (North of Site)	Off-Site	PVC	2	35.0	20	0.01	15.0	35.0	None	12.0	35.0	
MW-6	2-May-2005	AKN 055	46.598796	120.512500	Alley (West of Site)	Off-Site	PVC	2	35.0	20	0.02	15.0	35.0	None	13.0	35.0	
MW-7	2-May-2005	AKN 056	46.598903	120.512542	Alley (West of Site)	Off-Site	PVC	2	35.0	20	0.02	15.0	35.0	None	13.0	35.0	
MW-8	3-May-2005	AKN 057	46.598849	120.512308	Frank Wear Property	On-Site	PVC	2	35.0	20	0.02	15.0	35.0	None	13.0	35.0	
MW-9	4-May-2005	AKN 058	46.598803	120.511835	East of Day Care Center	Off-Site	PVC	2	34.5	20	0.02	14.5	34.5	None	12.5	34.5	
MW-10	5-May-2005	AKN 059	46.598930	120.512011	Frank Wear Property	On-Site	PVC	2	35.0	20	0.02	15.0	35.0	None	13.0	35.0	
SPW-12	1997	NA	46.599030	120.512148	Frank Wear Property	On-Site	PVC	4	35.0	10 8	NK NK	9.0 21.0	19.0 29.0	None None	7.0 21.0	19.0 29.0	Constructed as sparge well with 2 screened intervals.
SPW-13	1997	NA	46.599048	120.512072	Frank Wear Property	On-Site	PVC	4	35.0	10 8	NK NK	9.0 21.0	19.0 29.0	None None	7.0 21.0	19.0 29.0	Constructed as sparge well with 2 screened intervals.
SPW-14	1997	NA	46.598945	120.511970	Frank Wear Property	On-Site	PVC	4	35.0	10 8	NK NK	9.0 21.0	19.0 29.0	None None	7.0 21.0	19.0 29.0	Constructed as sparge well with 2 screened intervals.
SPW-15	1997	NA	46.598910	120.512096	Frank Wear Property	On-Site	PVC	4	35.0	10 8	NK NK	9.0 21.0	19.0 29.0	None None	7.0 21.0	19.0 29.0	Constructed as sparge well with 2 screened intervals.
MW-16	29-May-2012	BHH 289	46.599146	120.512846	Eagles Parking Lot	Off-Site	PVC	2	35.00	5	0.01	29.66	34.66	0.34	27.5	35.0	
MW-20	7-Jun-2012	BHH 293	46.598578	120.511961	CWCMH Parking Lot	Off-Site	PVC	4	34.75	5	0.02	29.50	34.50	0.25	27.0	34.75	
MW-21	8-Jun-2012	BHH 294	46.598245	120.510646	Parking Lot - East of Java Hut	Off-Site	PVC	4	35.58	10	0.02	25.33	35.33	0.25	23.0	35.58	
MW-22	11-Jun-2012	BHH 295	46.597996	120.511738	Parking Lot - South of W Walnut & West of S 3rd Ave	Off-Site	PVC	4	35.50	10	0.02	25.17	35.17	0.33	23.0	35.50	
MW-23	12-Jun-2012	BHH 296	46.598335	120.512347	Parking Lot - West of Alley (West of CWCMH)	Off-Site	PVC	4	35.58	10	0.02	25.33	35.33	0.25	23.0	35.58	
MW-24	12-Jun-2012	BHH 297	46.597386	120.510840	East ROW on S 3rd, South of W Walnut	Off-Site	PVC	4	35.83	10	0.02	25.50	35.50	0.33	23.0	35.83	
MW-25	13-Jun-2012	BHA 195	46.598598	120.511419	East ROW on S 3rd, North of W Walnut	Off-Site	PVC	4	34.92	10	0.02	24.58	34.58	0.33	23.0	34.92	
Deep Wells																	
MW-17	31-May-2012	BHH 290	46.599155	120.512816	Eagles Parking Lot	Off-Site	PVC	2	93.50	5	0.01	88.00	93.00	0.50	86.0	93.50	
MW-18	5-Jun-2012	BHH 291	46.598908	120.512083	Frank Wear Property	On-Site	PVC	2	92.00	5	0.01	86.67	91.67	0.33	82.0	92.00	
MW-19	7-Jun-2012	BHH 292	46.598569	120.511805	CWCMH Parking Lot	Off-Site	PVC	2	93.50	5	0.01	88.17	93.17	0.33	85.0	93.50	

Table 3 - Well Construction Data
Former Frank Wear Cleaners Site
Yakima, Washington

Well	Completion Date	Well Tag No.	Location		Location Description	On-Site/ Off-site Well	Well Material	Well Casing ID (inches)	Measured Well Depth (feet)	Screen Length (feet)	Screen Slot Size (inches)	Top of Screen Depth (ft bgs)	Bottom of Screen Depth (ft bgs)	Sump Length (feet)	Top of Sand Pack Depth (ft bgs)	Bottom of Sand Pack Depth (ft bgs)	Comments
			Latitude	Longitude													
Injection/Extraction Wells																	
INJ-1	3-Sep-2013	BHL 276			SW End of Fenced Parking Lot North of Site	Off-Site	PVC	4	40.00	15	0.02	20.00	35.00	5.00	18.00	40.00	8 x 12 sand
INJ-2	4-Sep-2013	BHL 277			SW/Central Fenced Parking Lot North of Site	Off-Site	PVC	4	35.00	20	0.02	15.00	35.00	0.00	13.00	35.00	8 x 12 sand
INJ-3	5-Sep-2013	BHL 278			South-Central Fenced Parking Lot North of Site	Off-Site	PVC	4	35.00	20	0.02	15.00	35.00	0.00	13.00	35.00	8 x 12 sand
INJ-4	5-Sep-2013	BHL 279			SE End of Fenced Parking Lot North of Site	Off-Site	PVC	4	35.00	20	0.02	15.00	35.00	0.00	13.00	35.00	8 x 12 sand
EXT-1	6-Sep-2013	BHL 280			Far West End of Daycare Center Property	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-2	13-Sep-2013	BHL 287			North End of CWCMH Parking Lot/Landscape	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-3	12-Sep-2013	BHL 286			North End of CWCMH Parking Lot/Landscape	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-4	11-Sep-2013	BHL 285			NE End of CWCMH Parking/Sidewalk Area	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-5	6-Sep-2013	BHL 281	46.598138	120.512108	Sidewalk Along N side of W. Walnut - SW of CWCMH Building	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	Formerly MW-3: Well was overdrilled and reinstalled as 4" well.
EXT-6	8-Sep-2013	BHL 283			Sidewalk Along N side of W. Walnut - SE of CWCMH Building	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-7	8-Sep-2013	BHL 284			Sidewalk Along N side of W. Walnut - Entrance to CWCMH Parking Lot	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	8 x 12 sand
EXT-8	8-Sep-2013	BHL 282	46.598239	120.511674	Sidewalk Along N side of W. Walnut - Near Corner with S. 3rd Ave	Off-Site	PVC	4	40.00	20	0.02	20.00	40.00	0.00	18.0	40.00	Formerly MW-4: Well was overdrilled and reinstalled as 4" well.

Notes:
CWCMH = Central Washington Comprehensive Mental Health Facility
ft bgs = feet below ground surface
PVC = polyvinyl Chloride
nK = Not known
NA = not Available
ID = inner diameter
INJ = injection well
EXT = extraction well

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
Shallow Monitoring Wells				
MW-1	9-Apr-12	1,062.90	22.63	1,040.27
	15-Jun-12		20.76	1,042.14
	10-Sep-12		15.14	1,047.76
	11-Dec-12		20.44	1,042.46
	25-Mar-13		22.58	1,040.32
	27-Jan-14		22.44	1,040.46
	19-Mar-14		22.85	1,040.05
	20-Mar-14		22.84	1,040.06
	28-Mar-14		23.22	1,039.68
	3-Apr-14		23.68	1,039.22
	10-Apr-14		23.40	1,039.50
	12-May-14		19.94	1,042.96
	6-Jun-14		18.69	1,044.21
	14-Jul-14		18.02	1,044.88
	25-Aug-14		15.25	1,047.65
	17-Sep-14		15.11	1,047.79
	29-Sep-14		14.94	1,047.96
	16-Oct-14		15.87	1,047.03
	11-Nov-14		17.11	1,045.79
	23-Dec-14		18.80	1,044.10
MW-2	9-Apr-12	1063.59	24.81	1,038.78
	10-Sep-12		14.61	1,048.98
	11-Dec-12		21.36	1,042.23
	25-Mar-13		24.97	1,038.62
	27-Jan-14		23.81	1,039.78
	12-May-14		22.58	1,041.01
	25-Aug-14		13.97	1,049.62
	11-Nov-14		16.98	1,046.61
MW-3	9-Apr-12	1,061.17	24.85	1,036.32
	15-Jun-12		20.32	1,040.85
	10-Sep-12		12.79	1,048.38
	11-Dec-12		20.54	1,040.63
	25-Mar-13		24.76	1,036.41
EXT-5	27-Jan-14	1,061.38	22.21	1,039.17
	19-Mar-14		23.44	1,037.94
	20-Mar-14		23.52	1,037.86
	28-Mar-14		23.72	1,037.66
	3-Apr-14		23.76	1,037.62
	10-Apr-14		23.42	1,037.96
	12-May-14		21.94	1,039.44
	6-Jun-14		20.84	1,040.54
	14-Jul-14		18.03	1,043.35
	25-Aug-14		13.40	1,047.98
	17-Sep-14		13.59	1,047.79
	29-Sep-14		13.50	1,047.88

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-3 (cont.)	16-Oct-14		14.20	1,047.18
	11-Nov-14		18.06	1,043.32
	23-Dec-14		21.34	1,040.04
MW-4	9-Apr-12	1,060.93	25.65	1,035.28
	15-Jun-12		20.61	1,040.32
	10-Sep-12		13.98	1,046.95
	11-Dec-12		20.08	1,040.85
	25-Mar-13		25.60	1,035.33
EXT-8	27-Jan-14	1,061.10	24.78	1,036.32
	19-Mar-14		26.28	1,034.82
	20-Mar-14		26.37	1,034.73
	28-Mar-14		26.58	1,034.52
	3-Apr-14		26.69	1,034.41
	10-Apr-14		26.65	1,034.45
	12-May-14		24.85	1,036.25
	6-Jun-14		22.14	1,038.96
	14-Jul-14		17.93	1,043.17
	25-Aug-14		15.00	1,046.10
	17-Sep-14		14.87	1,046.23
	29-Sep-14		14.72	1,046.38
	16-Oct-14		15.57	1,045.53
	11-Nov-14		18.71	1,042.39
	23-Dec-14		22.20	1,038.90
MW-5	9-Apr-12	1,064.16	24.97	1,039.19
	15-Jun-12		21.59	1,042.57
	10-Sep-12		14.66	1,049.50
	11-Dec-12		21.43	1,042.73
	25-Mar-13		25.21	1,038.95
	27-Jan-14		24.27	1,039.89
	19-Mar-14		25.24	1,038.92
	20-Mar-14		25.57	1,038.59
	28-Mar-14		24.02	1,040.14
	3-Apr-14		22.48	1,041.68
	10-Apr-14		21.58	1,042.58
	12-May-14		17.97	1,046.19
	6-Jun-14		16.55	1,047.61
	14-Jul-14		16.00	1,048.16
	25-Aug-14		13.84	1,050.32
	17-Sep-14		14.10	1,050.06
	29-Sep-14		14.09	1,050.07
	16-Oct-14		14.49	1,049.67
	11-Nov-14		15.83	1,048.33
	23-Dec-14		17.30	1,046.86
MW-6	9-Apr-12	1,063.47	24.45	1,039.02
	15-Jun-12		21.30	1,042.17
	10-Sep-12		15.06	1,048.41
	11-Dec-12		21.31	1,042.16

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-6 (cont.)	25-Mar-13		24.66	1,038.81
	27-Jan-14		23.75	1,039.72
	19-Mar-14		26.17	1,037.30
	20-Mar-14		26.30	1,037.17
	28-Mar-14		26.25	1,037.22
	3-Apr-14		27.06	1,036.41
	10-Apr-14		27.62	1,035.85
	12-May-14		24.75	1,038.72
	6-Jun-14		21.59	1,041.88
	14-Jul-14		17.87	1,045.60
	25-Aug-14		14.50	1,048.97
	17-Sep-14		14.97	1,048.50
	29-Sep-14		14.41	1,049.06
	16-Oct-14		15.56	1,047.91
	11-Nov-14		18.59	1,044.88
	23-Dec-14		21.83	1,041.64
MW-7	9-Apr-12	1,063.85	25.20	1,038.65
	15-Jun-12		21.81	1,042.04
	10-Sep-12		14.80	1,049.05
	11-Dec-12		21.73	1,042.12
	25-Mar-13		25.44	1,038.41
	27-Jan-14		24.35	1,039.50
	12-May-14		25.66	1,038.19
	25-Aug-14		14.24	1,049.61
	11-Nov-14		17.33	1,046.52
MW-8	9-Apr-12	1,063.44	24.84	1,038.60
	15-Jun-12		21.27	1,042.17
	10-Sep-12		15.11	1,048.33
	11-Dec-12		21.26	1,042.18
	25-Mar-13		25.07	1,038.37
	27-Jan-14		23.68	1,039.76
	19-Mar-14		26.30	1,037.14
	20-Mar-14		26.61	1,036.83
	28-Mar-14		26.76	1,036.68
	3-Apr-14		26.77	1,036.67
	10-Apr-14		27.24	1,036.20
	12-May-14		22.69	1,040.75
	6-Jun-14		21.42	1,042.02
	14-Jul-14		17.95	1,045.49
	25-Aug-14		14.87	1,048.57
	17-Sep-14		14.43	1,049.01
	29-Sep-14		14.39	1,049.05
	16-Oct-14		15.11	1,048.33
	11-Nov-14		18.11	1,045.33
	23-Dec-14		21.22	1,042.22
	7-Jan-15		21.66	1,041.78

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-9	9-Apr-12	1,062.65	24.71	1,037.94
	15-Jun-12		20.60	1,042.05
	10-Sep-12		14.84	1,047.81
	11-Dec-12		20.29	1,042.36
	25-Mar-13		24.75	1,037.90
	27-Jan-14		23.90	1,038.75
	19-Mar-14		26.73	1,035.92
	20-Mar-14		27.56	1,035.09
	28-Mar-14		27.25	1,035.40
	3-Apr-14		27.61	1,035.04
	10-Apr-14		27.21	1,035.44
	12-May-14		22.23	1,040.42
	6-Jun-14		21.25	1,041.40
	14-Jul-14		17.72	1,044.93
	25-Aug-14		14.96	1,047.69
	17-Sep-14		14.85	1,047.80
	29-Sep-14		14.65	1,048.00
	16-Oct-14		15.62	1,047.03
	11-Nov-14		17.14	1,045.51
	23-Dec-14		19.72	1,042.93
MW-10	9-Apr-12	1,062.49	23.76	1,038.73
	15-Jun-12		20.34	1,042.15
	10-Sep-12		14.65	1,047.84
	11-Dec-12		20.05	1,042.44
	25-Mar-13		23.75	1,038.74
	27-Jan-14		23.07	1,039.42
	19-Mar-14		25.22	1,037.27
	20-Mar-14		25.44	1,037.05
	28-Mar-14		25.91	1,036.58
	3-Apr-14		25.69	1,036.80
	10-Apr-14		25.58	1,036.91
	12-May-14		23.13	1,039.36
	6-Jun-14		22.09	1,040.40
	14-Jul-14		17.83	1,044.66
	25-Aug-14		14.79	1,047.70
	17-Sep-14		14.68	1,047.81
	29-Sep-14		14.48	1,048.01
	16-Oct-14		15.64	1,046.85
	11-Nov-14		18.88	1,043.61
	23-Dec-14		21.90	1,040.59
MW-16	15-Jun-12	1,065.40	22.18	1,043.22
	10-Sep-12		16.56	1,048.84
	11-Dec-12		22.34	1,043.06
	25-Mar-13		26.33	1,039.07
	27-Jan-14		24.39	1,041.01
	12-May-14		25.13	1,040.27
	27-Aug-14		16.60	1,048.80

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-16 (cont.)	11-Nov-14		20.52	1,044.88
MW-20	15-Jun-12	1,060.45	19.52	1,040.93
	10-Sep-12		13.03	1,047.42
	11-Dec-12		19.23	1,041.22
	25-Mar-13		23.91	1,036.54
	27-Jan-14		23.11	1,037.34
	19-Mar-14		25.60	1,034.85
	20-Mar-14		25.64	1,034.81
	28-Mar-14		25.65	1,034.80
	3-Apr-14		25.92	1,034.53
	10-Apr-14		26.11	1,034.34
	12-May-14		24.35	1,036.10
	6-Jun-14		22.15	1,038.30
	14-Jul-14		17.27	1,043.18
	25-Aug-14		15.79	1,044.66
	17-Sep-14		14.93	1,045.52
	29-Sep-14		14.75	1,045.70
	16-Oct-14		16.05	1,044.40
	11-Nov-14		19.84	1,040.61
	23-Dec-14		22.17	1,038.28
MW-21	15-Jun-12	1,061.80	22.27	1,039.53
	10-Sep-12		15.77	1,046.03
	11-Dec-12		21.26	1,040.54
	25-Mar-13		25.34	1,036.46
	27-Jan-14		24.95	1,036.85
	12-May-14		24.94	1,036.86
	25-Aug-14		16.80	1,045.00
	11-Nov-14		20.01	1,041.79
MW-22	15-Jun-12	1,060.92	20.89	1,040.03
	10-Sep-12		14.31	1,046.61
	11-Dec-12		20.71	1,040.21
	25-Mar-13		26.44	1,034.48
	27-Jan-14		25.37	1,035.55
	12-May-14		24.84	1,036.08
	25-Aug-14		14.82	1,046.10
	11-Nov-14		19.11	1,041.81
MW-23	15-Jun-12	1,062.55	21.53	1,041.02
	10-Sep-12		15.10	1,047.45
	11-Dec-12		22.32	1,040.23
	25-Mar-13		27.42	1,035.13
	27-Jan-14		26.26	1,036.29
	19-Mar-14		27.98	1,034.57
	20-Mar-14		28.10	1,034.45
	28-Mar-14		28.33	1,034.22
	3-Apr-14		28.48	1,034.07
	10-Apr-14		28.18	1,034.37

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-23 (cont.)	12-May-14		25.08	1,037.47
	6-Jun-14		22.21	1,040.34
	14-Jul-14		18.18	1,044.37
	25-Aug-14		15.53	1,047.02
	17-Sep-14		15.90	1,046.65
	29-Sep-14		16.01	1,046.54
	16-Oct-14		16.98	1,045.57
	11-Nov-14		20.75	1,041.80
	23-Dec-14		23.65	1,038.90
MW-24	15-Jun-12	1,058.70	19.95	1,038.75
	10-Sep-12		13.14	1,045.56
	11-Dec-12		19.23	1,039.47
	25-Mar-13		24.27	1,034.43
	27-Jan-14		23.42	1,035.28
	12-May-14		23.19	1,035.51
	25-Aug-14		13.90	1,044.80
	11-Nov-14		18.00	1,040.70
MW-25	15-Jun-12	1,061.86	21.94	1,039.92
	10-Sep-12		15.53	1,046.33
	11-Dec-12		21.15	1,040.71
	25-Mar-13		25.32	1,036.54
	27-Jan-14		24.90	1,036.96
	12-May-14		24.73	1,037.13
	27-Aug-14		18.60	1,043.26
	11-Nov-14		19.54	1,042.32
SPW-12	9-Apr-12	1,063.84	22.85	1,040.99
	15-Jun-12		20.19	1,043.65
	10-Sep-12		14.35	1,049.49
	11-Dec-12		19.50	1,044.34
	25-Mar-13		23.55	1,040.29
	27-Jan-14		23.11	1,040.73
	19-Mar-14		23.74	1,040.10
	20-Mar-14		21.89	1,041.95
	28-Mar-14		18.02	1,045.82
	3-Apr-14		17.93	1,045.91
	10-Apr-14		17.85	1,045.99
	12-May-14		16.16	1,047.68
	6-Jun-14		15.95	1,047.89
	14-Jul-14		15.55	1,048.29
	25-Aug-14		13.60	1,050.24
	17-Sep-14		13.75	1,050.09
	29-Sep-14		13.73	1,050.11
	16-Oct-14		14.14	1,049.70
	11-Nov-14		15.42	1,048.42
	23-Dec-14		16.39	1,047.45
SPW-13	9-Apr-12	1,063.68	23.20	1,040.48
	15-Jun-12		21.42	1,042.26

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
SPW-13 (cont.)	10-Sep-12		15.70	1,047.98
	11-Dec-12		21.01	1,042.67
	25-Mar-13		24.22	1,039.46
	27-Jan-14		23.66	1,040.02
	12-May-14		20.82	1,042.86
	25-Aug-14		14.78	1,048.90
	11-Nov-14		17.53	1,046.15
SPW-14	9-Apr-12	1,063.16	22.78	1,040.38
	15-Jun-12		21.00	1,042.16
	10-Sep-12		15.33	1,047.83
	11-Dec-12		20.70	1,042.46
	25-Mar-13		22.75	1,040.41
	27-Jan-14		22.62	1,040.54
	12-May-14		21.25	1,041.91
	25-Aug-14		15.27	1,047.89
	11-Nov-14		16.75	1,046.41
SPW-15	9-Apr-12	1063.24	24.92	1,038.32
	15-Jun-12		21.08	1,042.16
	10-Sep-12		14.98	1,048.26
	11-Dec-12		21.08	1,042.16
	25-Mar-13		25.10	1,038.14
	27-Jan-14		23.72	1,039.52
	19-Mar-14		25.43	1,037.81
	20-Mar-14		25.53	1,037.71
	28-Mar-14		25.93	1,037.31
	3-Apr-14		25.96	1,037.28
	10-Apr-14		25.82	1,037.42
	12-May-14		22.45	1,040.79
	6-Jun-14		21.24	1,042.00
	14-Jul-14		17.77	1,045.47
	25-Aug-14		14.72	1,048.52
	17-Sep-14		14.37	1,048.87
	29-Sep-14		14.32	1,048.92
	16-Oct-14		15.08	1,048.16
	11-Nov-14		18.21	1,045.03
	23-Dec-14		20.93	1,042.31
Deep Monitoring Wells				
MW-17	15-Jun-12	1,065.58	27.64	1,037.94
	10-Sep-12		26.46	1,039.12
	11-Dec-12		29.60	1,035.98
	25-Mar-13		33.06	1,032.52
	27-Jan-14		34.59	1,030.99
	12-May-14		31.68	1,033.90
	25-Aug-14		24.21	1,041.37
	11-Nov-14		27.32	1,038.26

Please refer to the notes at the end of the table.

Table 4 - Monitoring Well Groundwater Elevations
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Date	Top of Casing Elevation [feet above msl]	Depth to Water [feet btoc]	Groundwater Elevation [feet above msl]
MW-18	15-Jun-12	1,062.55	24.69	1,037.86
	10-Sep-12		25.11	1,037.44
	11-Dec-12		26.96	1,035.59
	25-Mar-13		30.10	1,032.45
	27-Jan-14		32.25	1,030.30
	19-Mar-14		30.71	1,031.84
	20-Mar-14		30.59	1,031.96
	28-Mar-14		30.85	1,031.70
	3-Apr-14		30.93	1,031.62
	10-Apr-14		30.98	1,031.57
	12-May-14		28.89	1,033.66
	6-Jun-14		26.57	1,035.98
	14-Jul-14		24.10	1,038.45
	25-Aug-14		21.86	1,040.69
	17-Sep-14		22.69	1,039.86
	29-Sep-14		21.82	1,040.73
	16-Oct-14		22.73	1,039.82
	11-Nov-14		24.53	1,038.02
	23-Dec-14		25.83	1,036.72
MW-19	15-Jun-12	1,060.55	23.70	1,036.85
	10-Sep-12		23.50	1,037.05
	11-Dec-12		25.55	1,035.00
	25-Mar-13		29.20	1,031.35
	27-Jan-14		30.85	1,029.70
	12-May-14		28.01	1,032.54
	25-Aug-14		20.75	1,039.80
	11-Nov-14		23.54	1,037.01

Notes:
msl = mean sea level.
btoc = below top of casing.
MW-3 and MW-4 were converted into extraction wells EXT-5 and EXT-8, respectively, in September 2013.
Recirculation system started on March 19, 2014.

Table 5 - Groundwater Field Parameters
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Sample Date	Field Parameters				
		Temperature [°C]	pH	Conductivity [mS/cm]	ORP [mV]	DO [mg/L]
Shallow Monitoring Wells						
MW-1	9-Apr-12	15.3	6.9	0.165	139	8.8
	12-Sep-12	15.9	7.1	0.243	130	7.7
	12-Dec-12	14.7	6.6	0.249	88	8.3
	26-Mar-13	15.1	6.5	0.172	144	7.9
	29-Jan-14	15.3	6.4	0.205	193	9.8
	13-May-14	16.7	6.8	0.282	132	3.9
	28-Aug-14	18.9	*8.3*	0.453	*-172*	2.8
	20-Nov-14	16.4	6.7	0.493	-54	0.8
MW-2	10-Apr-12	15.3	6.8	0.227	146	5.7
	11-Sep-12	18.6	7.0	0.283	87	7.8
	12-Dec-12	15.1	6.6	0.243	78	6.9
	26-Mar-13	16.3	6.5	0.263	128	5.5
	28-Jan-14	15.9	6.5	0.232	204	8.5
	13-May-14	16.6	7.0	0.317	123	5.9
	27-Aug-14	19.0	*8.8*	0.531	*-182*	2.6
	19-Nov-14	15.2	6.6	0.425	-27	0.9
MW-3	10-Apr-12	16.3	6.7	0.345	167	5.7
	12-Sep-12	18.2	6.8	0.295	128	7.0
	13-Dec-12	15.1	6.7	0.248	88	6.0
	26-Mar-13	17.1	6.4	0.317	159	5.3
	29-Jan-14	17.3	6.3	0.290	175	5.2
	14-May-14	17.0	6.5	0.253	142	5.5
	28-Aug-14	19.7	*8.8*	0.267	*-113*	9.2
	20-Nov-14	16.1	6.6	0.225	187	0.5
MW-4	10-Apr-12	15.4	6.9	0.524	188	6.9
	11-Sep-12	17.8	7.2	0.327	64	7.8
	12-Dec-12	14.2	7.3	0.351	51	8.5
	26-Mar-13	14.2	6.8	0.286	122	6.1
	30-Jan-14	13.2	6.6	0.285	320	6.2
	14-May-14	17.6	7.0	0.441	137	7.4
	27-Aug-14	17.3	*9.2*	0.362	*-100*	6.0
	20-Nov-14	14.5	6.8	0.250	160	0.5
MW-5	9-Apr-12	16.9	6.8	0.285	161	7.7
	11-Sep-12	18.6	7.3	0.281	58	7.4
	12-Dec-12	16.0	7.1	0.251	64	7.4
	26-Mar-13	15.5	6.6	0.257	129	6.3
	28-Jan-14	15.8	6.4	0.236	199	6.2
	13-May-14	17.1	6.6	0.272	124	2.5
	27-Aug-14	19.2	*9.5*	0.402	*-230*	1.1
	19-Nov-14	15.4	6.9	0.445	-71	0.9
MW-6	9-Apr-12	16.8	6.9	0.226	151	7.4
	11-Sep-12	18.2	7.0	0.268	94	7.5
	12-Dec-12	15.7	6.7	0.237	74	8.0
	26-Mar-13	15.8	6.4	0.244	143	6.4
	28-Jan-14	16.3	6.4	0.225	204	6.3
	13-May-14	17.2	6.5	0.237	160	6.5
	27-Aug-14	18.8	*9.5*	0.422	*-160*	1.0
	19-Nov-14	16.2	6.8	0.227	82	1.0

Please refer to the notes at the end of the table.

Table 5 - Groundwater Field Parameters
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Sample Date	Field Parameters				
		Temperature [°C]	pH	Conductivity [mS/cm]	ORP [mV]	DO [mg/L]
MW-7	9-Apr-12	17.4	6.9	0.258	147	6.9
	11-Sep-12	18.3	7.1	0.268	82	7.2
	12-Dec-12	15.1	6.9	0.217	63	7.2
	26-Mar-13	16.0	6.5	0.270	138	6.5
	28-Jan-14	16.1	6.5	0.270	217	9.1
	13-May-14	17.1	6.9	0.280	152	8.4
	27-Aug-14	19.8	*9.3*	0.432	*-154*	5.2
	19-Nov-14	15.0	7.1	0.580	-61	1.2
MW-8	9-Apr-12	15.9	6.9	0.213	141	7.4
	11-Sep-12	17.5	7.0	0.271	100	7.4
	12-Dec-12	15.4	6.7	0.203	75	7.0
	26-Mar-13	16.0	6.5	0.242	140	6.1
	30-Jan-14	15.9	6.4	0.220	347	7.0
	14-May-14	18.0	6.7	0.238	163	6.7
	28-Aug-14	18.1	*8.0*	0.500	*-130*	1.0
	19-Nov-14	16.2	6.6	0.574	-26	0.5
MW-9	9-Apr-12	16.2	7.5	0.201	120	7.3
	12-Sep-12	16.4	7.0	0.268	129	8.0
	13-Dec-12	13.4	6.7	0.175	92	7.6
	27-Mar-13	13.6	7.3	0.247	117	6.4
	30-Jan-14	11.9	7.1	0.252	243	6.3
	14-May-14	17.5	7.1	0.274	110	6.7
	28-Aug-14	19.2	*9.1*	0.447	*-217*	3.2
	20-Nov-14	16.3	6.9	0.420	-69	1.1
MW-10	9-Apr-12	14.3	7.0	0.159	156	8.4
	12-Sep-12	15.1	7.6	0.232	125	6.9
	13-Dec-12	12.5	6.7	0.246	92	6.9
	27-Mar-13	13.5	6.7	0.197	156	7.4
	30-Jan-14	14.3	6.7	0.226	228	8.9
	14-May-14	18.6	7.0	0.311	56	5.2
	28-Aug-14	18.8	*9.4*	0.417	*-214*	5.4
	19-Nov-14	13.1	7.4	0.537	-24	0.9
MW-16	13-Jun-12	18.9	8.4	0.278	-112	0.7
	11-Sep-12	18.2	8.2	0.244	-224	0.7
	12-Dec-12	15.2	7.5	0.218	-127	1.1
	26-Mar-13	14.9	7.6	0.272	82	5.3
	29-Jan-14	15.6	7.4	0.318	189	4.5
	14-May-14	17.5	7.3	0.291	133	3.6
	27-Aug-14	17.5	*9.3*	0.274	*-155*	4.7
	17-Nov-14	14.7	7.6	0.256	46	6.0
MW-20	15-Jun-12	16.6	7.2	0.246	121	7.6
	11-Sep-12	17.6	7.8	0.273	25	7.2
	12-Dec-12	15.1	7.7	0.215	38	7.2
	26-Mar-13	14.6	6.7	0.247	128	6.1
	29-Jan-14	15.1	6.5	0.230	204	6.9
	14-May-14	16.8	6.7	0.235	148	5.7
	26-Aug-14	17.5	*8.2*	0.221	*26*	6.2
	19-Nov-14	13.8	7.2	0.225	145	0.2

Please refer to the notes at the end of the table.

Table 5 - Groundwater Field Parameters
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Sample Date	Field Parameters				
		Temperature [°C]	pH	Conductivity [mS/cm]	ORP [mV]	DO [mg/L]
MW-21	14-Jun-12	17.1	7.0	0.249	123	7.3
	11-Sep-12	17.2	7.1	0.274	103	7.6
	12-Dec-12	15.1	7.2	0.198	63	7.4
	25-Mar-13	15.7	6.5	0.383	108	5.0
	29-Jan-14	10.8	6.5	0.263	192	6.6
	13-May-14	17.5	6.7	0.282	135	7.2
	26-Aug-14	17.9	*9.1*	0.326	*-27*	1.9
	18-Nov-14	15.4	7.3	0.241	-112	1.6
MW-22	14-Jun-12	17.8	7.3	0.291	13	7.2
	11-Sep-12	17.7	7.0	0.308	90	7.6
	12-Dec-12	14.7	6.8	0.217	71	7.2
	26-Mar-13	15.2	6.9	0.318	117	5.9
	30-Jan-14	16.1	6.7	0.300	231	7.2
	15-May-14	16.3	6.9	0.275	112	3.1
	27-Aug-14	18.0	*8.0*	0.303	*-20*	7.8
	18-Nov-14	16.5	7.1	0.240	170	4.1
MW-23	14-Jun-12	17.9	7.3	0.387	-30	5.1
	12-Sep-12	15.9	7.0	0.277	129	8.2
	13-Dec-12	13.3	6.9	0.231	87	7.2
	27-Mar-13	15.0	6.8	0.393	146	5.1
	29-Jan-14	15.8	6.5	0.336	192	6.0
	14-May-14	16.0	6.7	0.308	144	7.0
	28-Aug-14	17.2	*9.3*	0.293	*-117*	9.7
	18-Nov-14	15.2	6.9	0.246	123	8.2
MW-24	14-Jun-12	18.4	7.1	0.241	57	7.0
	11-Sep-12	17.7	7.2	0.277	90	7.1
	12-Dec-12	15.1	7.1	0.222	63	7.1
	25-Mar-13	16.6	6.2	0.231	113	6.8
	29-Jan-14	15.1	6.5	0.221	187	6.6
	13-May-14	17.5	6.7	0.225	115	1.2
	26-Aug-14	17.4	*8.0*	0.320	*84*	0.8
	17-Nov-14	16.2	7.2	0.248	140	0.8
MW-25	15-Jun-12	15.8	7.5	0.349	-29	6.6
	11-Sep-12	16.5	7.2	0.243	80	7.3
	12-Dec-12	14.4	7.2	0.351	64	7.8
	26-Mar-13	13.7	6.8	0.237	112	4.9
	30-Jan-14	15.0	6.6	0.275	192	4.7
	14-May-14	16.5	7.0	0.171	99	9.5
	27-Aug-14	16.8	*8.5*	0.234	*-42*	4.0
	18-Nov-14	15.7	7.3	0.342	-	5.6
SPW-12	9-Apr-12	16.6	6.8	0.261	153	4.6
	11-Sep-12	18.2	7.0	0.280	104	8.1
	12-Dec-12	16.2	6.8	0.261	78	9.1
	26-Mar-13	15.7	6.4	0.310	144	5.3
	30-Jan-14	15.8	6.5	0.277	240	6.6
	14-May-14	16.6	6.8	0.276	70	2.4
	28-Aug-14	18.7	*8.0*	0.516	*-155*	5.2
	20-Nov-14	14.9	6.9	0.386	-82	1.1

Please refer to the notes at the end of the table.

Table 5 - Groundwater Field Parameters
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Sample Date	Field Parameters				
		Temperature [°C]	pH	Conductivity [mS/cm]	ORP [mV]	DO [mg/L]
SPW-13	9-Apr-12	15.9	6.9	0.172	156	7.7
	11-Sep-12	17.6	6.9	0.274	109	7.0
	12-Dec-12	14.0	6.6	0.228	81	5.1
	26-Mar-13	17.2	6.5	0.216	134	6.2
	30-Jan-14	14.1	6.5	0.227	216	6.1
	14-May-14	18.3	6.7	0.393	-62	2.0
	28-Aug-14	19.7	*8.5*	0.441	*164*	2.4
	20-Nov-14	14.5	6.4	0.372	-34	0.4
SPW-14	9-Apr-12	15.2	7.1	0.143	139	8.8
	12-Sep-12	17.0	7.1	0.284	135	8.4
	12-Dec-12	14.4	6.7	0.181	85	7.4
	26-Mar-13	15.2	6.5	0.172	137	7.9
	29-Jan-14	15.9	6.4	0.200	170	6.8
	13-May-14	16.4	6.9	0.279	68	6.9
	28-Aug-14	18.6	*7.9*	0.460	*-162*	4.6
	20-Nov-14	15.6	6.4	0.595	-83	0.6
SPW-15	9-Apr-12	15.3	7.0	0.163	140	7.9
	11-Sep-12	17.8	7.1	0.287	104	8.3
	12-Dec-12	14.9	6.7	0.205	77	7.1
	26-Mar-13	14.9	6.5	0.219	143	6.2
	30-Jan-14	14.9	6.5	0.227	214	6.0
	14-May-14	17.2	6.8	0.362	-98	0.5
	28-Aug-14	18.2	*8.7*	0.507	*-170*	5.4
	19-Nov-14	15.5	6.4	0.509	-19	1.1
Deep Monitoring Wells						
MW-17	13-Jun-12	18.4	8.1	0.255	-248	0.4
	11-Sep-12	17.9	8.4	0.277	-69	0.7
	12-Dec-12	13.3	7.5	0.208	-47	2.0
	26-Mar-13	15.9	7.6	0.387	151	3.6
	28-Jan-14	13.8	7.6	0.286	141	1.7
	13-May-14	17.5	7.5	0.247	114	2.4
	28-Aug-14	17.9	*9.7*	0.254	*-185*	2.9
	18-Nov-14	14.0	7.7	0.250	23	3.1
MW-18	14-Jun-12	18.4	8.2	0.220	-216	1.5
	12-Sep-12	15.1	7.7	0.203	115	4.0
	13-Dec-12	13.3	7.1	0.195	62	4.4
	27-Mar-13	-	-	-	-	-
	28-Jan-14	13.3	7.7	0.246	171	4.1
	13-May-14	14.8	7.8	0.202	115	4.9
	28-Aug-14	16.9	*9.9*	0.248	*-155*	5.5
	20-Nov-14	13.6	7.8	0.191	90	0.9
MW-19	15-Jun-12	16.5	8.3	0.205	-171	1.3
	11-Sep-12	15.9	8.6	0.194	-157	0.3
	12-Dec-12	14.3	8.3	0.199	-14	3.5
	26-Mar-13	12.2	7.8	0.244	113	4.1
	28-Jan-14	12.5	7.6	0.241	184	5.0
	13-May-14	15.9	7.7	0.203	120	4.8
	26-Aug-14	16.7	*8.8*	0.207	*33*	4.6
	20-Nov-14	14.4	7.9	0.199	73	0.7

Please refer to the notes at the end of the table.

Table 5 - Groundwater Field Parameters
Former Frank Wear Cleaners Site
Yakima, Washington

Well ID	Sample Date	Field Parameters				
		Temperature [°C]	pH	Conductivity [mS/cm]	ORP [mV]	DO [mg/L]
Extraction Wells						
EXT-1	19-Nov-14	15.52	7.5	0.304	32	0.92
	23-Dec-14	16.38	7.3	0.271	190	9.96
EXT-2	4-Apr-14	17.3	7.3	0.272	360	-
	14-May-14	18.6	7.3	0.291	933	10.5
	29-Sep-14	16.9	7.1	0.400	-24	-
	20-Nov-14	16.4	7.4	0.339	-40	0.9
	23-Dec-14	16.9	7.4	0.340	178	9.0
EXT-3	20-Nov-14	16.57	7.2	0.430	-63	0.92
	23-Dec-14	16.34	7.4	0.437	57	3.3
EXT-4	20-Nov-14	15.36	7.3	0.297	-45	0.83
	24-Dec-14	15.95	7.6	0.301	10.3	5.92

Notes:
°C = degrees Celsius.
mS/cm = millisiemens per centimeter.
ORP = oxidation reduction potential.
mV = millivolts.
DO = dissolved oxygen.
mg/L = milligrams per liter.
- = not available.
Values in *italics* are considered inaccurate due to potential sensor failure.
Recirculation system started on March 19, 2014.

Table 6 - Groundwater Monitoring Analytical Data Summary
Former Frank Wear Cleaners Site
Yakima, Washington

Sample Identification	Sampling Date	Volatile Organic Compounds (VOCs)								Bioremediation-Related Parameters						Other VOC Detections		
		PCE	TCE	1,1-DCE	t-DCE	c-DCE	VC	Ethene	Ethane	Nitrate (as N)	Total Iron	Sulfate	Methane	TOC	Chloride	Chloroform	Methylene Chloride	Chloromethane
		Concentration in Micrograms per Liter (µg/L)								Concentration in Milligrams per Liter (mg/L)						(µg/L)		
Shallow Monitoring Wells																		
MW-1	9-Apr-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**24**	<3.0	<5.0
	12-Sep-12	**8.6**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**6.8**	<3.0	<5.0
	12-Dec-12	**17**	**3.5**	<1.0	<1.0	**12**	<1.0	-	-	-	-	-	-	-	-	**6.2**	<3.0	<5.0
	26-Mar-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**25**	<3.0	<5.0
	29-Jan-14	**1.3**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.3**	<3.0	<5.0
	13-May-14	**14,000**	**370**	**0.35**	**11**	**1,000**	<0.020	-	-	-	-	-	-	-	-	**2.5**	<0.50	<0.10
	28-Aug-14	**0.75**	**32**	**8.7**	**200**	**15,000**	**2.3**	-	-	-	-	-	-	-	-	**0.18**	**0.67**	<0.10
	20-Nov-14	<5.0	<5.0	<5.0	<5.0	**28**	**390**	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
MW-2	10-Apr-12	**16**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	**5.2 H**	<0.040	**11**	-	<1.0	**24**	**4.4**	<3.0	<5.0
	11-Sep-12	**4.5**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.4**	<3.0	<5.0
	12-Dec-12	**7.9**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.7**	<3.0	<5.0
	26-Mar-13	**16**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**4.6**	<3.0	<5.0
	28-Jan-14	**2.5**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**2.2**	<3.0	<5.0
	13-May-14	**7,200**	**1,100**	**1.0**	**19**	**2,000**	**0.12**	-	-	-	-	-	-	-	-	**2.2**	<0.50	<0.10
	27-Aug-14	<10	<10	**10**	**220**	**16,000**	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	19-Nov-14	<5.0	<5.0	<5.0	**16**	**1,500**	**1,900**	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
MW-3	10-Apr-12	**8.0**	**1.5**	<1.0	<1.0	**1.2**	<1.0	-	-	**11 H**	<0.040	**11**	-	<1.0	**48**	**3.6**	<3.0	<5.0
	10-Apr-12	**8.2**	**1.4**	<1.0	<1.0	**1.1**	<1.0	-	-	-	-	-	-	-	-	**3.7**	<3.0	<5.0
	12-Sep-12	**2.6**	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	**8.5 H**	-	**14**	<0.0005	**1.5**	**38**	**2.3**	<3.0	<5.0
	13-Dec-12	**5.2**	**1.2**	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	**5.6 H**	-	**12**	<0.0005	**1.4**	**26**	**2.6**	<3.0	<5.0
	26-Mar-13	**9.7**	**1.3**	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	**6.6**	-	**9.5**	<0.0005	**1.0**	**29**	**3.3**	<3.0	<5.0
	29-Jan-14	**3.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	**6.2**	-	**8.7**	<0.0005	**1.3**	**21**	**2.2**	<3.0	<5.0
	14-May-14	**4.2**	**1.6**	<0.10	<0.10	**1.8**	<0.020	<0.50	<0.50	**5.3**	-	**9.6**	<0.0005	<1.0	**29**	**1.8**	<0.50	<0.10
	28-Aug-14	**1.9**	**0.40**	<0.10	<0.10	**0.61**	<0.020	<0.50	<0.50	**6.5**	-	**13**	<0.0005	**2.1**	**28**	**2.2**	<0.50	<0.10
	20-Nov-14	**12**	**3.8**	<0.10	**0.52**	**79**	**3.2**	<0.50	<0.50	**4.0**	-	**9.5**	<0.0005	**1.0**	**24**	**2.6**	<0.50	<0.10
MW-4/ EXT-8	10-Apr-12	**1,900**	**1.3**	<1.0	<1.0	<1.0	<1.0	-	-	**3.8**	**0.089**	**13**	-	<1.0	**160**	**3.3**	<3.0	<5.0
	11-Sep-12	**6.3**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**2.3**	<3.0	<5.0
	12-Dec-12	**9.1**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**2.0**	<3.0	<5.0
	26-Mar-13	**740**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**4.1**	<3.0	<5.0
	30-Jan-14	**150**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**4.0**	<3.0	<5.0
	14-May-14	**940**	<10	**0.19**	<0.10	<10	<0.020	-	-	-	-	-	-	-	-	**2.4**	<0.50	<0.10
	27-Aug-14	**320**	**150**	**0.16**	**2.4**	**200**	**0.20**	-	-	-	-	-	-	-	-	**2.3**	<0.50	<0.10
	20-Nov-14	**9.4**	**4.7**	<1.0	**2.8**	**300**	**77**	-	-	-	-	-	-	-	-	**2.9**	<5.0	<1.0
MW-5	9-Apr-12	**12**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.9**	<3.0	<5.0
	11-Sep-12	**2.1**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.3**	<3.0	<5.0
	12-Dec-12	**8.8**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**2.8**	<3.0	<5.0
	26-Mar-13	**2.4**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**4.8**	<3.0	<5.0
	28-Jan-14	**1.5**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**1.7**	<3.0	<5.0
	13-May-14	**17,000**	**220**	**0.83**	**5.3**	**520**	**0.052**	-	-	-	-	-	-	-	-	**2.6**	<0.50	<0.10
	27-Aug-14	**76**	**15,000**	<5.0	**110**	**7,700**	<1.0	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
	19-Nov-14	<5.0	<5.0	<5.0	**24**	**3,200**	**620**	-	-	-	-	-	-	-	-	<5.0	<25.0	<5.0
MW-6	9-Apr-12	**4.9**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**6.1**	<3.0	<5.0
	11-Sep-12	**1.7**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.0**	<3.0	<5.0
	12-Dec-12	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**3.4**	<3.0	<5.0
	26-Mar-13	**3.4**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**5.7**	<3.0	<5.0
	28-Jan-14	**1.5**	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	**1.8**	<3.0	<5.0
	13-May-14	**1,700**	**69**	<0.10	**1.3**	**140**	<0.020	-	-	-	-	-	-	-	-	**3.2**	<0.50	<0.10
	27-Aug-14	**570**	**5,000**	**3.0**	**91**	**5,000**	**0.83**	-	-	-	-	-	-	-	-	**2.1**	**0.53**	<0.10
	19-Nov-14	**19**	**8.6**	<5.0	<5.0	**390**	**26**									<5.0	<25.0	<5.0

Please refer to the notes at the end of the table.

Table 6 - Groundwater Monitoring Analytical Data Summary
Former Frank Wear Cleaners Site
Yakima, Washington

Sample Identification	Sampling Date	Volatile Organic Compounds (VOCs)								Bioremediation-Related Parameters						Other VOC Detections		
		PCE	TCE	1,1-DCE	t-DCE	c-DCE	VC	Ethene	Ethane	Nitrate (as N)	Total Iron	Sulfate	Methane	TOC	Chloride	Chloroform	Methylene Chloride	Chloromethane
		Concentration in Micrograms per Liter (µg/L)								Concentration in Milligrams per Liter (mg/L)						(µg/L)		
MW-7	9-Apr-12	27	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.9	<3.0	<5.0
	11-Sep-12	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.8	<3.0	<5.0
	12-Dec-12	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.3	<3.0	<5.0
	26-Mar-13	6.7	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.8	<3.0	<5.0
	28-Jan-14	5.1	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.1	<3.0	<5.0
	13-May-14	590	31	<0.10	0.66	86	<0.020	-	-	-	-	-	-	-	-	1.8	<0.50	<0.10
	27-Aug-14	280	2,200	1.9	32	2,200	0.62	<0.50	<0.50	2.1	-	13	0.0019	2.8	36	2.5	<0.50	<0.10
	19-Nov-14	14	6.3	<5.0	32	3,200	1,600	13	<0.50	1.2	-	4.2	1.3	20	38	<5.0	<25.0	<5.0
MW-8	9-Apr-12	260	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	6.2	<3.0	<5.0
	11-Sep-12	7.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.5	<3.0	<5.0
	12-Dec-12	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.6	<3.0	<5.0
	26-Mar-13	37	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	8.7	<3.0	<5.0
	30-Jan-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.1	<3.0	<5.0
	14-May-14	1,800	64	0.15	1.2	150	<0.020	-	-	-	-	-	-	-	-	3.2	<0.50	<0.10
	28-Aug-14	31	370	<10	180	13,000	<2.0	<0.50	<0.50	<0.90	-	2.5	0.022	33	42	<10	<50	<10
	19-Nov-14	<5.0	<5.0	<5.0	26	2,700	1,300	18	<0.50	<0.90	-	<1.2	2.1	45	35	<5.0	<25.0	<5.0
MW-9	9-Apr-12	2,700	<1.0	<1.0	<1.0	3.2	<1.0	-	-	-	-	-	-	-	-	11	<3.0	<5.0
	12-Sep-12	500 E; 350 H[a]	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.4	<3.0	<5.0
	12-Sep-12	480 E; 320 Ha	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.3	<3.0	<5.0
	13-Dec-12	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	2.9	-	8.3	<0.0005	1.3	19	9.9	<3.0	<5.0
	13-Dec-12	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	9.9	<3.0	<5.0
	27-Mar-13	450 E; 1,300 E[c]	<1.0	<1.0	<1.0	1.7	<1.0	<0.500	<0.500	2.9	-	7.9	<0.0005	<1.0	20	12	<3.0	<5.0
	30-Jan-14	2,000	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	3.1	-	9.1	<0.0005	1.1	19	8.5	<3.0	<5.0
	14-May-14	7,500	220	0.32	4.6	630	0.075	<0.50	<0.50	2.0	-	9.0	0.0010	1.1	28	3.4	<0.50	<0.10
	28-Aug-14	<10	<10	15	210	15,000	<2.0	<0.50	<0.50	<0.90	-	<1.2	0.056	8.9	44	<10	<50	<10
	20-Nov-14	<5.0	<5.0	<5.0	<5.0	<5.0	650	400	0.57	<0.90 H	-	<1.2	1.4 H	22	35	<5.0	<25	<5.0
MW-10	10-Apr-12	1,800	1.0	<1.0	<1.0	14	<1.0	-	-	2.7	<0.040	8.1	-	<1.0	18	20	<3.0	<5.0
	12-Sep-12	2,500 E; 11,000 H[a]	1.8	<1.0	<1.0	1.2	<1.0	<0.500	<0.500	5.2 H	-	14	<0.0005	<1.0	27	5.1	<3.0	<5.0
	13-Dec-12	44,000 B	7.5	<1.0	<1.0	3.0	<1.0	<0.500	<0.500	9.1 H	-	21	<0.0005	1.5	27	4.2	<3.0	<5.0
	27-Mar-13	390; 1,100 E[c]	<1.0	<1.0	<1.0	2.7	<1.0	<0.500	<0.500	2.3	-	6.8	<0.0005	<1.0	16	18	<3.0	<5.0
	30-Jan-14	3,300	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	3.0	-	7.6	<0.0005	<1.0	14	4.0	<3.0	<5.0
	14-May-14	19,000	470	0.97	7.6	900	0.18	<0.50	<0.50	1.3	-	11	0.0021	1.1	23	3.1	<0.50	<0.10
	28-Aug-14	3,000	5,500	<10	83	5,700	<2.0	<0.50	<0.50	<0.90	-	8.2	0.0052	9.5	38	<10	<50	<10
	19-Nov-14	370	190	<5.0	26	3,600	400	28	<0.50	<0.90	-	1.5	0.0980	6.8	37	<5.0	<25	<5.0
MW-16	13-Jun-12	36 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	-	-	-	-	-	-	-	-	4.6	<3.0	<5.0
	11-Sep-12	63	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.4	<3.0	<5.0
	12-Dec-12	110 B	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.1	<3.0	<5.0
	26-Mar-13	93	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.9	<3.0	<5.0
	29-Jan-14	84	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.2	<3.0	<5.0
	14-May-14	73	0.21	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	2.2	<0.50	<0.10
	27-Aug-14	52	0.13	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	2.1	<0.50	<0.10
	18-Nov-14	70	0.15	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	2.1	<0.50	<0.10
MW-20	15-Jun-12	16	<1.0	<1.0	<1.0	<1.0	<1.0	0.026	<0.025	4.9	0.20	11	0.0002	1.0	36	5.4	<3.0	<5.0
	11-Sep-12	9.2	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.6	<3.0	<5.0
	12-Dec-12	7.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.4	<3.0	<5.0
	26-Mar-13	10	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	5.7	<3.0	<5.0
	29-Jan-14	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.7	<3.0	<5.0
	14-May-14	610	49	0.17	0.91	110	<0.020	<0.50	<0.50	4.1	-	8.6	<0.0005	<1.0	24	2.4	<0.50	<0.10
	26-Aug-14	84	35	<0.10	0.78	78	<0.020	<0.50	<0.50	3.4	-	9.9	<0.0005	<1.0	19	3.5	<0.50	<0.10
	19-Nov-14	200	16	<1.0	1.4	170	3.8	<0.50	<0.50	3.4	-	9.4	1.1	<1.0	27	3.4	<5.0	<1.0

Please refer to the notes at the end of the table.

Table 6 - Groundwater Monitoring Analytical Data Summary
Former Frank Wear Cleaners Site
Yakima, Washington

Sample Identification	Sampling Date	Volatile Organic Compounds (VOCs)								Bioremediation-Related Parameters						Other VOC Detections		
		PCE	TCE	1,1-DCE	t-DCE	c-DCE	VC	Ethene	Ethane	Nitrate (as N)	Total Iron	Sulfate	Methane	TOC	Chloride	Chloroform	Methylene Chloride	Chloromethane
		Concentration in Micrograms per Liter (µg/L)								Concentration in Milligrams per Liter (mg/L)						(µg/L)		
MW-21	14-Jun-12	28	<1.0	<1.0	<1.0	<1.0	<1.0	0.038	0.029	3.8	0.077	9.3	0.0018	1.0	42	10	<3.0	<5.0
	11-Sep-12	89	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	6.0	<3.0	<5.0
	12-Dec-12	7.6	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	13	<3.0	<5.0
	26-Mar-13	36	1.1	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	5.5	<3.0	<5.0
	29-Jan-14	5.3	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	5.1	<3.0	<5.0
	13-May-14	7.7	0.53	<0.10	<0.10	0.46	<0.020	-	-	-	-	-	-	-	-	1.7	<0.50	<0.10
	26-Aug-14	75	430	0.57	10	910	0.39	-	-	-	-	-	-	-	-	4.0	<0.50	<0.10
	18-Nov-14	<5.0	<5.0	<5.0	<5.0	220	10	-	-	-	-	-	-	-	-	8.0	<25.0	<5.0
MW-22	14-Jun-12	760 H	<1.0	<1.0	<1.0	<1.0	<1.0	0.27	0.29	4.5 H	0.60	12	0.0046	1.1	47	3.5	<3.0	<5.0
	11-Sep-12	300	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.3	<3.0	<5.0
	12-Dec-12	270 B	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.2	<3.0	<5.0
	12-Dec-12	270 B	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.1	<3.0	<5.0
	25-Mar-13	540 E; 1,700 E[c]	1.6	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	6.5	<3.0	<5.0
	30-Jan-14	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.4	<3.0	<5.0
	15-May-14	1,200	290	0.37	5.9	680	0.044	-	-	-	-	-	-	-	-	2.8	<0.50	<0.10
	27-Aug-14	73	15	<0.10	0.37	32	0.034	-	-	-	-	-	-	-	-	1.9	<0.50	<0.10
	18-Nov-14	17	5.1	<5.0	<5.0	270	37	-	-	-	-	-	-	-	-	<5.0	<25.0	<5.0
MW-23	14-Jun-12	7.4 H	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	1.3	18 H	0.26	15	0.0060	<1.0	32	3.7	<3.0	<5.0
	14-Jun-12	7.2 H	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.5	<3.0	<5.0
	12-Sep-12	7.6; 3.7 H[b]	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	7.2 H	-	16	<0.0005	1.1	37	2.3	<3.0	<5.0
	13-Dec-12	3.8	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	4.6 H	-	12	<0.0005	1.1	26	2.3	<3.0	<5.0
	27-Mar-13	24 J	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	12	-	12	<0.0005	<1.0	33	3.8	<3.0	<5.0
	29-Jan-14	8.9	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	8.3	-	11	<0.0005	<1.0	28	2.9	<3.0	<5.0
	14-May-14	9.8	0.67	<0.10	<0.10	0.36	<0.020	<0.50	<0.50	11 H	-	12	<0.0005	<1.0	29	2.4	<0.50	<0.10
	28-Aug-14	4.6	0.46	<0.10	<0.10	<0.10	<0.020	<0.50	<0.50	7.3	-	13	<0.0005	1.5	27	2.5	<0.50	<0.10
	18-Nov-14	8.0	0.62	<0.10	<0.10	7.2	0.22	<0.50	<0.50	6.2	-	11	<0.50	<1.0	26	2.5	<0.50	<0.10
MW-24	14-Jun-12	130	<1.0	<1.0	<1.0	<1.0	<1.0	0.11	0.11	3.6	0.11	9.3	0.00044	<1.0	36	11	<3.0	<5.0
	11-Sep-12	110	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	5.5	<3.0	<5.0
	12-Dec-12	170	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	7.1	<3.0	<5.0
	25-Mar-13	75	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	14	<3.0	<5.0
	25-Mar-13	68.1	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	13	<3.0	<5.0
	29-Jan-14	34	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.6	<3.0	<5.0
	29-Jan-14	31	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.5	<3.0	<5.0
	13-May-14	1,000	140	0.22	3.7	320	0.021	-	-	-	-	-	-	-	-	5.9	<0.50	<0.10
	13-May-14	1,000	140	0.23	4.5	330	0.024	-	-	-	-	-	-	-	-	6.0	<0.50	<0.10
	26-Aug-14	60	57	0.12	1.8	150	<0.020	-	-	-	-	-	-	-	-	1.9	<0.50	<0.10
	17-Nov-14	27	18	<5.0	<5.0	440	21	-	-	-	-	-	-	-	-	5.3	<25.0	<5.0
MW-25	15-Jun-12	6.5	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.4	<3.0	<5.0
	11-Sep-12	53	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	9.4	<3.0	<5.0
	12-Dec-12	30	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	8.8	<3.0	<5.0
	26-Mar-13	33	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	6.7	<3.0	<5.0
	30-Jan-14	28	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	5.9	<3.0	<5.0
	14-May-14	2.5	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	0.11	<0.50	<0.10
	27-Aug-14	210	80	0.14	1.8	200	0.34	-	-	-	-	-	-	-	-	6.9	<0.50	<0.10
	18-Nov-14	6.4	3.1	<1.0	5.2	800	87	-	-	-	-	-	-	-	-	4.9	<5.0	<1.0
SPW-12	9-Apr-12	2,300	21	<1.0	<1.0	70	<1.0	-	-	-	-	-	-	-	-	3.7	<3.0	<5.0
	11-Sep-12	12	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.3	<3.0	<5.0
	12-Dec-12	190 B	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	1.5	<3.0	<5.0
	26-Mar-13	400 E; 1,200 E[c]	18	<1.0	<1.0	31	<1.0	-	-	-	-	-	-	-	-	9.2	<3.0	<5.0
	30-Jan-14	1,500	1.7	<1.0	<1.0	4.9	<1.0	-	-	-	-	-	-	-	-	2.0	<3.0	<5.0

Please refer to the notes at the end of the table.

Table 6 - Groundwater Monitoring Analytical Data Summary
Former Frank Wear Cleaners Site
Yakima, Washington

Sample Identification	Sampling Date	Volatile Organic Compounds (VOCs)								Bioremediation-Related Parameters						Other VOC Detections		
		PCE	TCE	1,1-DCE	t-DCE	c-DCE	VC	Ethene	Ethane	Nitrate (as N)	Total Iron	Sulfate	Methane	TOC	Chloride	Chloroform	Methylene Chloride	Chloromethane
		Concentration in Micrograms per Liter (µg/L)								Concentration in Milligrams per Liter (mg/L)						(µg/L)		
SPW-12 (cont.)	14-May-14	17,000	370	0.19	5.1	520	0.036	-	-	-	-	-	-	-	-	2.9	<0.50	<0.10
	28-Aug-14	14	18	11	240	16,000	3.3	0.56	<0.50	<0.90	-	1.8	0.015	62	44	<10	<50	<10
	20-Nov-14	7.4	7.2	<5.0	21	3,100	1,400	17	<0.50	<0.90	-	<1.2	2.1 H	12	34	<5.0	<25	<5.0
SPW-13	9-Apr-12	380	3.1	<1.0	<1.0	8.5	<1.0	-	-	-	-	-	-	-	-	17	<3.0	<5.0
	11-Sep-12	320	3.4	<1.0	<1.0	6.4	<1.0	-	-	-	-	-	-	-	-	3.9	<3.0	<5.0
	12-Dec-12	110 B	8.8	<1.0	<1.0	20	<1.0	-	-	-	-	-	-	-	-	2.2	<3.0	<5.0
	26-Mar-13	250 E; 610 J	4.5	<1.0	<1.0	9.6	<1.0	-	-	-	-	-	-	-	-	15	<3.0	<5.0
	26-Mar-13	259 E	4.9	<20	<20	10.9	<20	-	-	-	-	-	-	-	-	15.3	<20	<20
	30-Jan-14	190	3.0	<1.0	<1.0	7.7	<1.0	-	-	-	-	-	-	-	-	3.1	<3.0	<5.0
	30-Jan-14	200	3.1	<1.0	<1.0	8.6	<1.0	-	-	-	-	-	-	-	-	3.4	<3.0	<5.0
	14-May-14	4,000	2,300	<10	36	3,500	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	14-May-14	4,200	2,500	<10	36	3,700	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	28-Aug-14	640	5,600	<10	140	9,900	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	20-Nov-14	<5.0	<5.0	<5.0	21	3,000	270	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
SPW-14	9-Apr-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	25	<3.0	<5.0
	12-Sep-12	16; 4.1 H[b]	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.1	<3.0	<5.0
	12-Dec-12	1.5 H	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	9.4	<3.0	<5.0
	26-Mar-13	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	25	<3.0	<5.0
	29-Jan-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.4	<3.0	<5.0
	13-May-14	11,000	340	0.68	10	1,100	0.044	-	-	-	-	-	-	-	-	2.3	<0.50	<0.10
	28-Aug-14	<10	<10	<10	180	13,000	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	20-Nov-14	<5.0	<5.0	<5.0	18	1,700	830	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
SPW-15	9-Apr-12	670	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	16	<3.0	<5.0
	11-Sep-12	400	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	3.1	<3.0	<5.0
	12-Dec-12	960	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	4.9	<3.0	<5.0
	26-Mar-13	700	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	13	<3.0	<5.0
	30-Jan-14	220	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	2.9	<3.0	<5.0
	14-May-14	6,700	2,900	2.3	40	4,200	0.24	-	-	-	-	-	-	-	-	2.5	<0.50	<0.10
	28-Aug-14	130	730	<10	170	11,000	<2.0	-	-	-	-	-	-	-	-	<10	<50	<10
	19-Nov-14	29	23	<5.0	37	5,100	1,200	-	-	-	-	-	-	-	-	<5.0	<25	<5.0
MW-17	13-Jun-12	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	11-Sep-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	12-Dec-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	26-Mar-13	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	28-Jan-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	13-May-14	0.19	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	0.47	<0.50	<0.10
	28-Aug-14	0.17	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	0.67	<0.50	<0.10
	18-Nov-14	<0.1	<0.10	<0.10	<0.10	0.52	<0.020	-	-	-	-	-	-	-	-	0.21	<0.50	<0.10
MW-18	14-Jun-12	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	4.7	2.2	2.3	12	0.0120	<1.0	7.9	<1.0	<3.0	<5.0
	12-Sep-12	5.7; <1.0 H[b]	<1.0	<1.0	<1.0	<1.0	<1.0	0.694	<0.500	2.4	-	14	0.0006	<1.0	9.1	<1.0	<3.0	<5.0
	13-Dec-12	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	2.6	-	10	<0.0005	<1.0	7.7	<1.0	<3.0	<5.0
	27-Mar-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	2.5	-	11	<0.0005	1.0	9.0	<1.0	<3.0	<5.0
	29-Jan-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.500	<0.500	2.5	-	8.6	<0.0005	<1.0	8.1	<1.0	<3.0	<5.0
	13-May-14	0.56	<0.10	<0.10	<0.10	<0.10	<0.020	<0.50	<0.50	2.5	-	9.0	<0.0005	<1.0	7.9	0.19	<0.50	<0.10
	28-Aug-14	0.34	0.15	<0.10	<0.10	0.11	<0.020	<0.50	<0.50	2.6	-	10	<0.0005	<1.0	8.2	0.21	<0.50	<0.10
	20-Nov-14	0.31	<0.10	<0.10	<0.10	0.44	<0.020	<0.50	<0.50	2.6	-	9.0	<0.0005	1.7	8.3	0.19	<0.50	<0.10
MW-19	15-Jun-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	2.9	1.5	2.9	12	0.0081	<1.0	7.5	<1.0	<3.0	<5.0
	11-Sep-12	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H	-	-	-	-	-	-	-	-	<1.0 H	<3.0 H	<5.0 H
	12-Dec-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	26-Mar-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0
	29-Jan-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	<1.0	<3.0	<5.0

Table 6 - Groundwater Monitoring Analytical Data Summary
Former Frank Wear Cleaners Site
Yakima, Washington

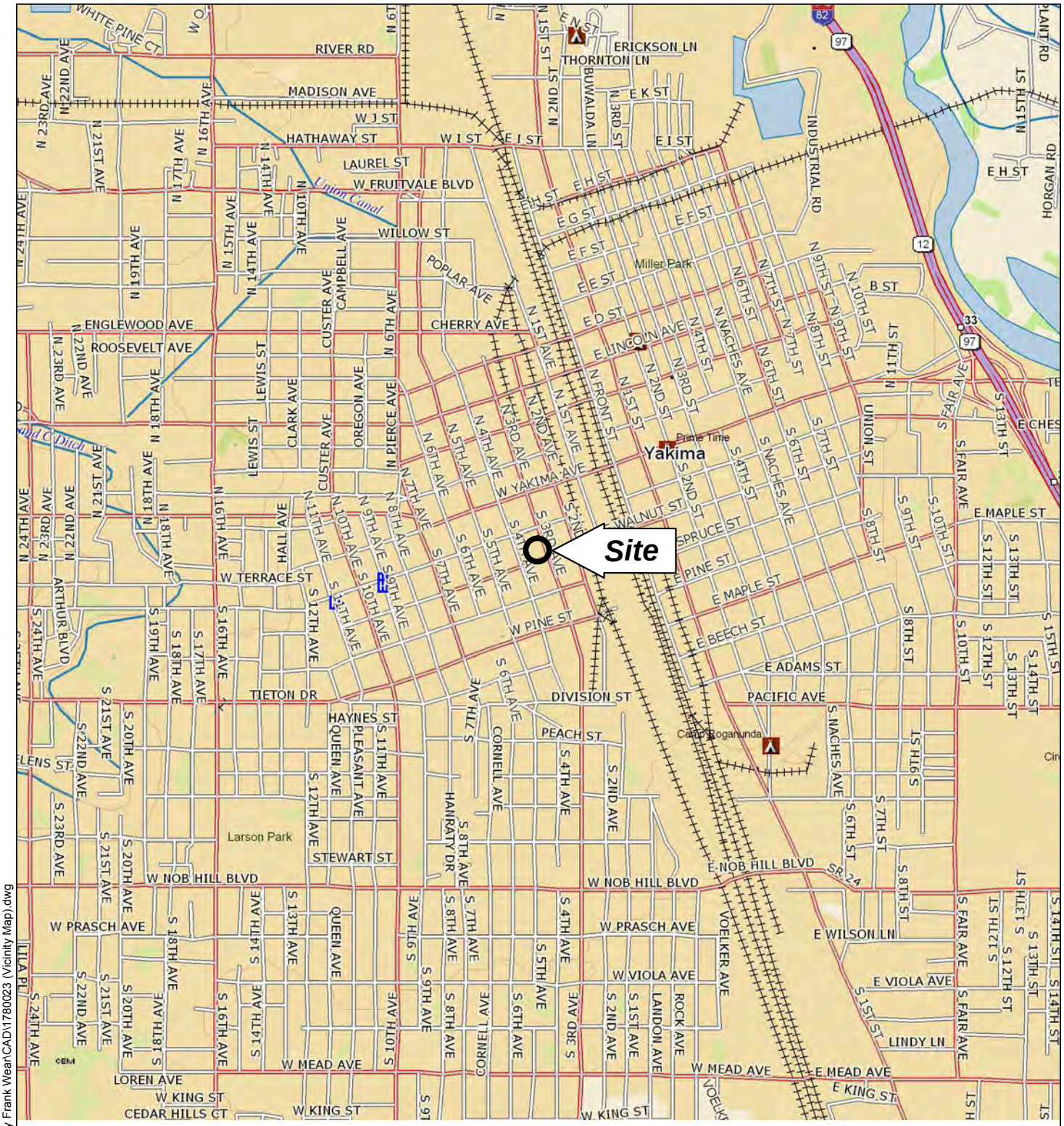
Sample Identification	Sampling Date	Volatile Organic Compounds (VOCs)								Bioremediation-Related Parameters						Other VOC Detections		
		PCE	TCE	1,1-DCE	t-DCE	c-DCE	VC	Ethene	Ethane	Nitrate (as N)	Total Iron	Sulfate	Methane	TOC	Chloride	Chloroform	Methylene Chloride	Chloromethane
		Concentration in Micrograms per Liter (µg/L)								Concentration in Milligrams per Liter (mg/L)						(µg/L)		
Please refer to the notes at the end of the table.																		
MW-19 (cont.)	13-May-14	**0.12**	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	**0.14**	<0.50	<0.10
	26-Aug-14	<0.10	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	**0.13**	<0.50	<0.10
	18-Nov-14	**0.11**	<0.10	<0.10	<0.10	<0.10	<0.020	-	-	-	-	-	-	-	-	**0.13**	<0.50	<0.10
Extraction Wells																		
EXT-1	24-Jul-14	**880**	**270**	<25	<25	**550**	<25	-	-	-	-	-	-	**1.1**	-	<25	<250	<25
	29-Aug-14	**570**	**610**	**0.44**	**7.5**	**580**	**1.4**	-	-	-	-	-	-	-	-	**4.0**	<0.50	<0.10
	19-Nov-14	**81**	**35**	<5.0	**7.1**	**790**	**67**	-	-	-	-	-	-	<1.0	-	<5.0	<25	<5.0
	23-Dec-14	**61**	**22**	0.55	**3.6**	**590**	**72**	-	-	-	-	-	-	<1.0	-	**4.6**	<0.5	<0.1
EXT-2	10-Apr-14	**36,000 B**	**33.0**	**2.0**	**0.13**	**5.2**	<0.020	-	-	-	-	-	-	**1.1**	-	**3.0**	<0.50	<0.10
	14-May-14	**48,000**	**130**	**2.1**	**3.8**	**290**	<0.020	-	-	**3.2**	-	**12**	-	**2.2**	**36**	**3.0**	<0.50	<0.10
	14-Jul-14	**62,000**	**130**	**2.3**	**13**	**710**	**0.24**	-	-	-	-	-	-	**1.6**	-	**3.2**	<0.50	<0.10
	24-Jul-14	**48,000**	**190**	<100	<100	**560**	<100	-	-	-	-	-	-	**1.1**	-	<100	<1,000	<1,000
	28-Aug-14	**68,000**	**350**	<100	<100	**430**	<100	-	-	**3.2**	-	**12**	-	**2.2**	**36**	<100	<300	<500
	29-Sep-14	**14,000**	**130**	<50	<50	**1,300**	<50	-	-	-	-	-	-	**1.6**	-	<50	<500	<500
	16-Oct-14	**53,000**	**500**	<250	<250	**1,800**	<250	-	-	-	-	-	-	**2.8**	-	<250	<2,500	<2,500
	20-Nov-14	**15,000**	**760**	<10	**14**	**1,800**	**170**	-	-	**0.93 H**	-	**5.8**	-	**2.2**	**30**	<10	<30	<50
	23-Dec-14	**13,000 H**	**350**	**2.7**	**11**	**900**	**140**	-	-	-	-	-	-	**1.1**	-	**2.8**	<3.0	<5.0
EXT-3	24-Jul-14	**1,200**	**1,200**	<25	**33**	**3,400**	<25	-	-	-	-	-	-	**4.4**	-	<25	<250	<250
	28-Aug-14	**340**	**380**	**4.0**	**93**	**7,400**	**2.9**	-	-	-	-	-	-	-	-	**1.3**	**0.60**	<0.10
	20-Nov-14	**63**	**95**	<5.0	**16**	**1,800**	**900**	-	-	-	-	-	-	**12**	-	<5.0	<25	<5.0
	23-Dec-14	**370**	**500**	**9.4**	**20**	**2,000**	**940**	-	-	-	-	-	-	**2.8**	-	**4.8**	<0.50	<0.10
EXT-4	24-Jul-14	**73**	**71**	<25	**29**	**3,200**	<25	-	-	-	-	-	-	**10**	-	<25	<250	<250
	28-Aug-14	**140**	**170**	**2.8**	**58**	**4,700**	**1.2**	-	-	-	-	-	-	-	-	**4.0**	<0.50	<0.10
	20-Nov-14	**140**	**36**	<5.0	<5.0	**500**	**290**	-	-	-	-	-	-	**5.8**	-	<5.0	<25	<5.0
	23-Dec-14	**64**	**39**	**0.73**	**2.2**	**220**	**94**	-	-	-	-	-	-	**2.0**	-	**5.4**	<0.50	<0.10
MTCA Method B Groundwater Cleanup Levels																		
		5.0	3.98	-	-	80.0	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

VOCs by EPA Method 8260B; chloride, sulfate, and nitrate by Method 300.0; iron by Method 6010B;
Total Organic Carbon (TOC) by Method 415.1/5310C.
Methane, Ethane, and Ethene by Method AM20GAX.
µg/L = micrograms per liter; ppb = parts per billion.
mg/L = milligrams per liter; ppm = parts per million.
Bold denotes a detected concentration.
Shading indicate the detected analyte exceeded an applicable MTCA Method B cleanup level.
< = not detected above the indicated laboratory method reporting limit.
- = not analyzed for or not available.
H = sample was prepped or analyzed beyond the specified holding time.
E = result exceeded calibration range.
B = compound was found in the blank and sample.
J = reported values estimated.
a = sample required dilution which was performed outside of the analytical holding time. The original (E) flagged result is reported as the primary result and the out of hold time dilution (H) is reported as the secondary result.
b = samples were reanalyzed due to likelihood of carryover from a previously analyzed heavily contaminated sample. The reanalysis confirmed carryover for PCE, however the analysis took place outside the holding time (H). The original in hold analysis is reported as the primary result and the reanalysis for target compound PCE is reported as a secondary result.
c = samples were reanalyzed due to laboratory control samples being out of acceptability criteria for PCE. Due to apparent matrix variability, the reanalysis under a valid LCS was out of calibration range. No more samples were available for reanalysis. As all other quality control parameters (including surrogates) were within range during the first run, the first reported PCE concentration is considered more accurate of the sample matrix.
Recirculation system started on March 19, 2014.

Acronyms:

PCE = tetrachloroethene
TCE = trichloroethene
1,1-DCE = 1,1-dichloroethene
c-DCE = *cis*-1,2-dichloroethene
t-DCE = *trans*-1,2-dichloroethene
VC = vinyl chloride
TOC = total organic carbon



N

0 2,000 4,000

Scale in Feet

Source: DeLorme Topo USA®.

Former Frank Wear Site
Yakima, Washington

Vicinity Map

17800-23

4/15

HARTCROWSER

Figure

1

MAS 02/24/15 \\Pdxsrv\data\Notebooks\17800023_WA Ecology Frank Wear\CAD\17800023 (Vicinity Map).dwg

N

0 80 160

Scale in Feet

APPROXIMATE WELL LOCATION AND NUMBER:

MW-5 MONITORING WELL - PRE-2012

MW-16 SHALLOW MONITORING WELL (35 FT.) - 2012

MW-17 DEEP MONITORING WELL (90 FT.) - 2012

REMEDIATION WELL LOCATION AND NUMBER:

INJ-4 INJECTION WELL WITH VAULT INSTALLED

EXT-2 EXTRACTION WELL WITH VAULT INSTALLED

EXT-5 EXTRACTION WELL WITH VAULT TO BE INSTALLED

Source: Aerial photograph from ArcGIS Online, 2015.

Former Frank Wear Site
Yakima, Washington

Site Plan

17800-23 4/15

HARTCROWSER

Figure
2

File: F:\Notebooks\1780023_WA Ecology Frank Wear\CAD\1780023 (ExplorationPlan).dwg Layout:SitePlan Date: 04-02-2015 Author: melissaschweitzer

APPROXIMATE WELL LOCATION AND NUMBER:

MW-5 1049.50 — MONITORING WELL - PRE-2012 / GROUNDWATER ELEVATION IN FEET

MW-16 1048.84 — SHALLOW MONITORING WELL (35 FT.) - 2012 / GROUNDWATER ELEVATION IN FEET

MW-17 — DEEP MONITORING WELL (90 FT.) - 2012

1040 — GROUNDWATER ELEVATION CONTOUR GENERATED BY SURFER

* GROUNDWATER ELEVATION FROM THIS WELL NOT USED TO CREATE THE CONTOUR

REMEDIATION WELL LOCATION AND NUMBER:

INJ-4 — INJECTION WELL WITH VAULT INSTALLED

EXT-2 — EXTRACTION WELL WITH VAULT INSTALLED

EXT-5 — EXTRACTION WELL WITH VAULT TO BE INSTALLED

GRS — GROUNDWATER REMEDIATION SYSTEM

NOTE: See Site Plan, Figure 2, for identification of site features.

Source: Aerial photograph from ArcGIS Online, 2015.

Former Frank Wear Site
Yakima, Washington

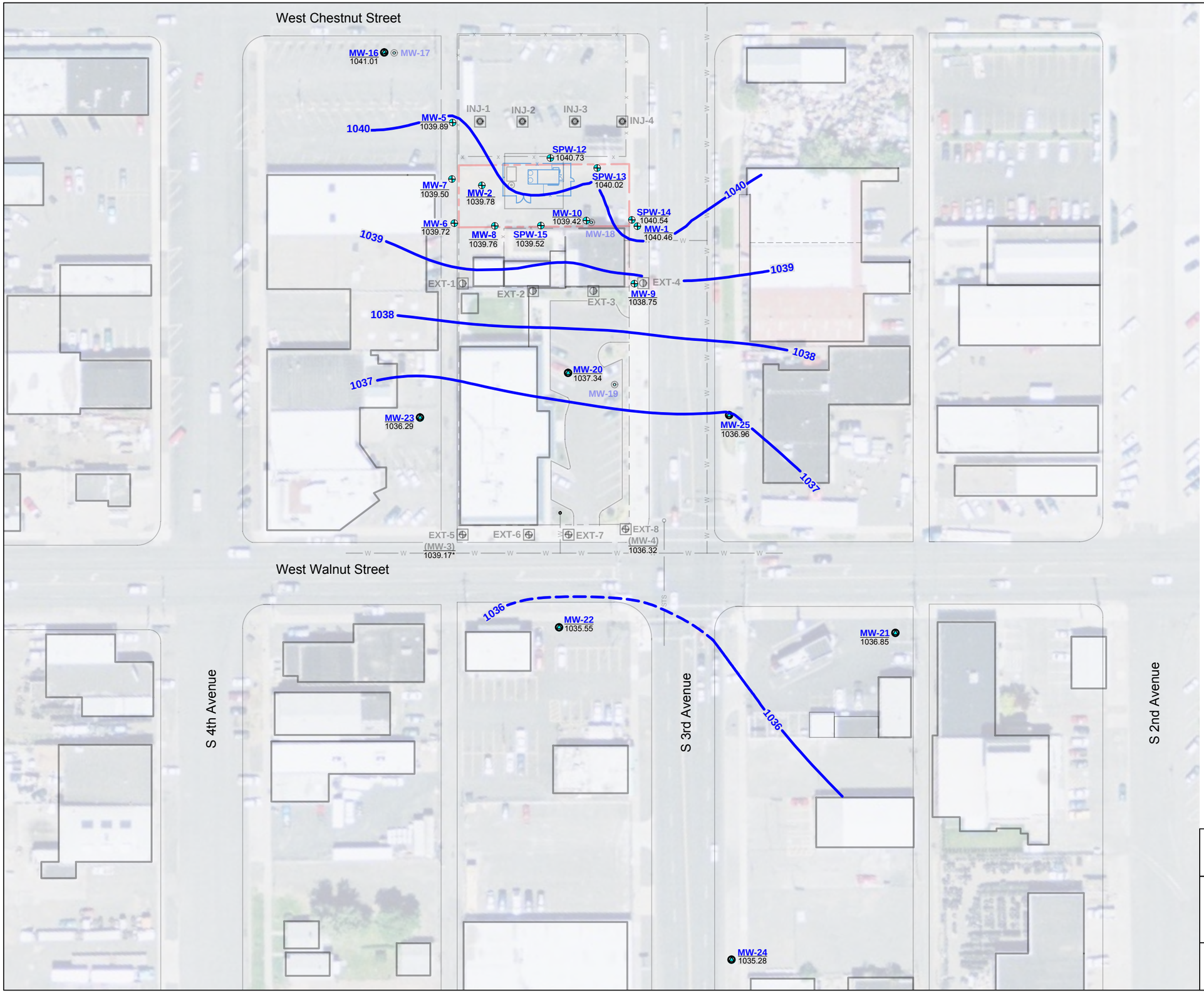
Shallow Groundwater Elevation Contour Map - September 2012 Pre-GRS Startup

17800-23 4/15

HARTCROWSER

Figure **4**

File: F:\Notebooks\1780023_WA Ecology Frank Wear\CAD\1780023 (ExplorationPlan).dwg Layout:GWEL_09-12 Date: 04-02-2015 Author: melissaschweitzer



0 80 160

Scale in Feet

APPROXIMATE WELL LOCATION AND NUMBER:

MW-5 1039.89 — MONITORING WELL - PRE-2012 / GROUNDWATER ELEVATION IN FEET

MW-16 1041.01 — SHALLOW MONITORING WELL (35 FT.) - 2012 / GROUNDWATER ELEVATION IN FEET

MW-17 — DEEP MONITORING WELL (90 FT.) - 2012

1040 — GROUNDWATER ELEVATION CONTOUR GENERATED BY SURFER

1036 — GROUNDWATER ELEVATION CONTOUR GENERATED BASED ON SITE KNOWLEDGE AND FIELD CONDITIONS

* GROUNDWATER ELEVATION FROM THIS WELL NOT USED TO CREATE THE CONTOUR

REMEDIATION WELL LOCATION AND NUMBER:

INJ-4 — INJECTION WELL WITH VAULT INSTALLED

EXT-2 — EXTRACTION WELL WITH VAULT INSTALLED

EXT-5 — EXTRACTION WELL WITH VAULT TO BE INSTALLED

GRS — GROUNDWATER REMEDIATION SYSTEM

NOTE: See Site Plan, Figure 2, for identification of site features.

Source: Aerial photograph from ArcGIS Online, 2015.

Former Frank Wear Site
Yakima, Washington

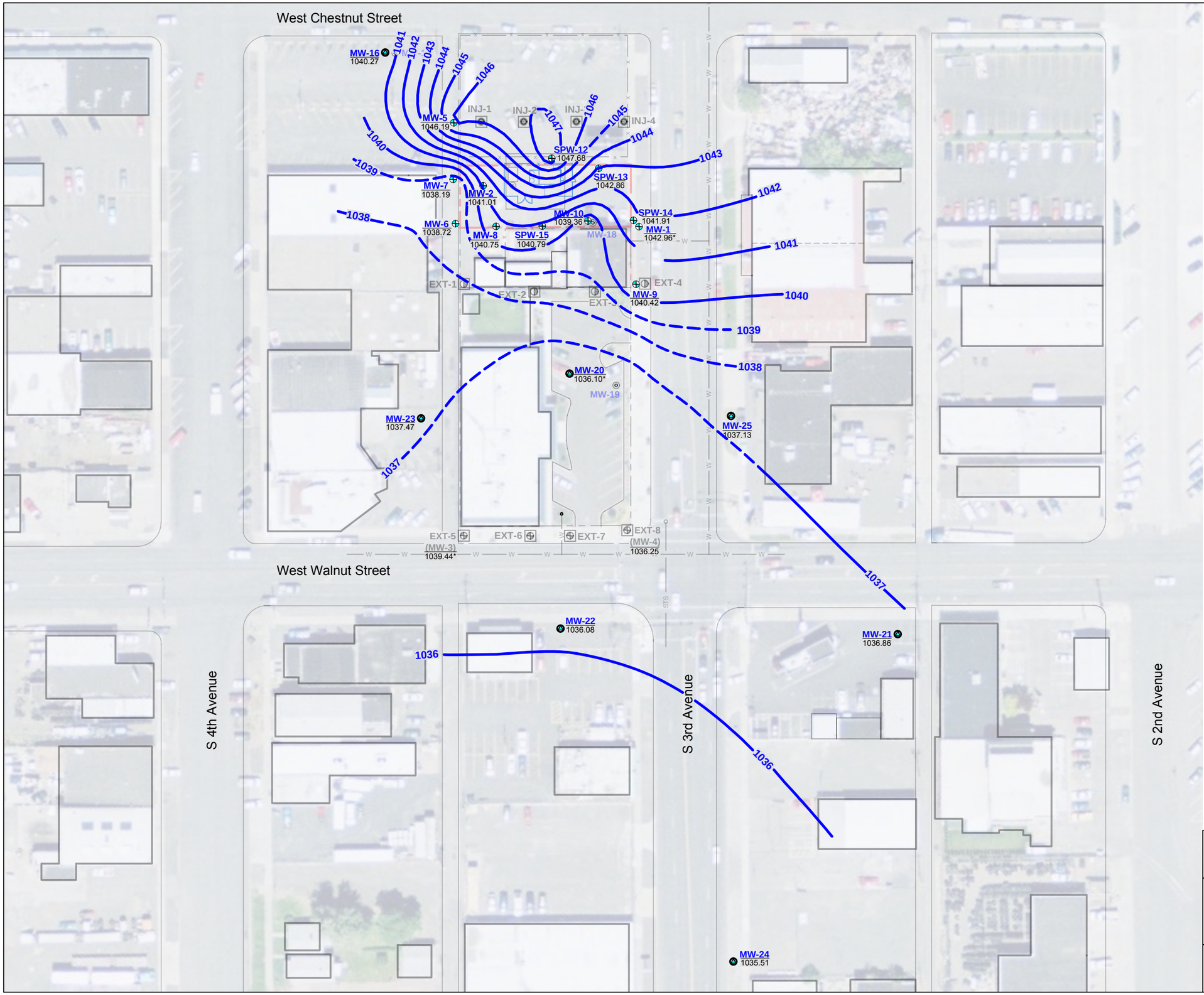
Shallow Groundwater Elevation Contour Map - January 2014 Pre-GRS Startup

17800-23 4/15

HARTCROWSER

Figure **5**

File: F:\Notebooks\1780023_WA Ecology Frank Wear\CAD\1780023 (ExplorationPlan).dwg Layout:GWEL_01-14 Date: 04-02-2015 Author: melissaschweitzer



APPROXIMATE WELL LOCATION AND NUMBER:

MW-5 1046.19 — MONITORING WELL - PRE-2012 / GROUNDWATER ELEVATION IN FEET

MW-16 1040.27 — SHALLOW MONITORING WELL (35 FT.) - 2012 / GROUNDWATER ELEVATION IN FEET

MW-17 — DEEP MONITORING WELL (90 FT.) - 2012

1040 — GROUNDWATER ELEVATION CONTOUR GENERATED BY SURFER

1038 — GROUNDWATER ELEVATION CONTOUR GENERATED BASED ON SITE KNOWLEDGE AND FIELD CONDITIONS

* GROUNDWATER ELEVATION FROM THIS WELL NOT USED TO CREATE THE CONTOUR

REMEDIATION WELL LOCATION AND NUMBER:

INJ-4 — INJECTION WELL WITH VAULT INSTALLED

EXT-2 — EXTRACTION WELL WITH VAULT INSTALLED

EXT-5 — EXTRACTION WELL WITH VAULT TO BE INSTALLED

GRS — GROUNDWATER REMEDIATION SYSTEM

NOTE: See Site Plan, Figure 2, for identification of site features.

Source: Aerial photograph from ArcGIS Online, 2015.

Former Frank Wear Site
Yakima, Washington

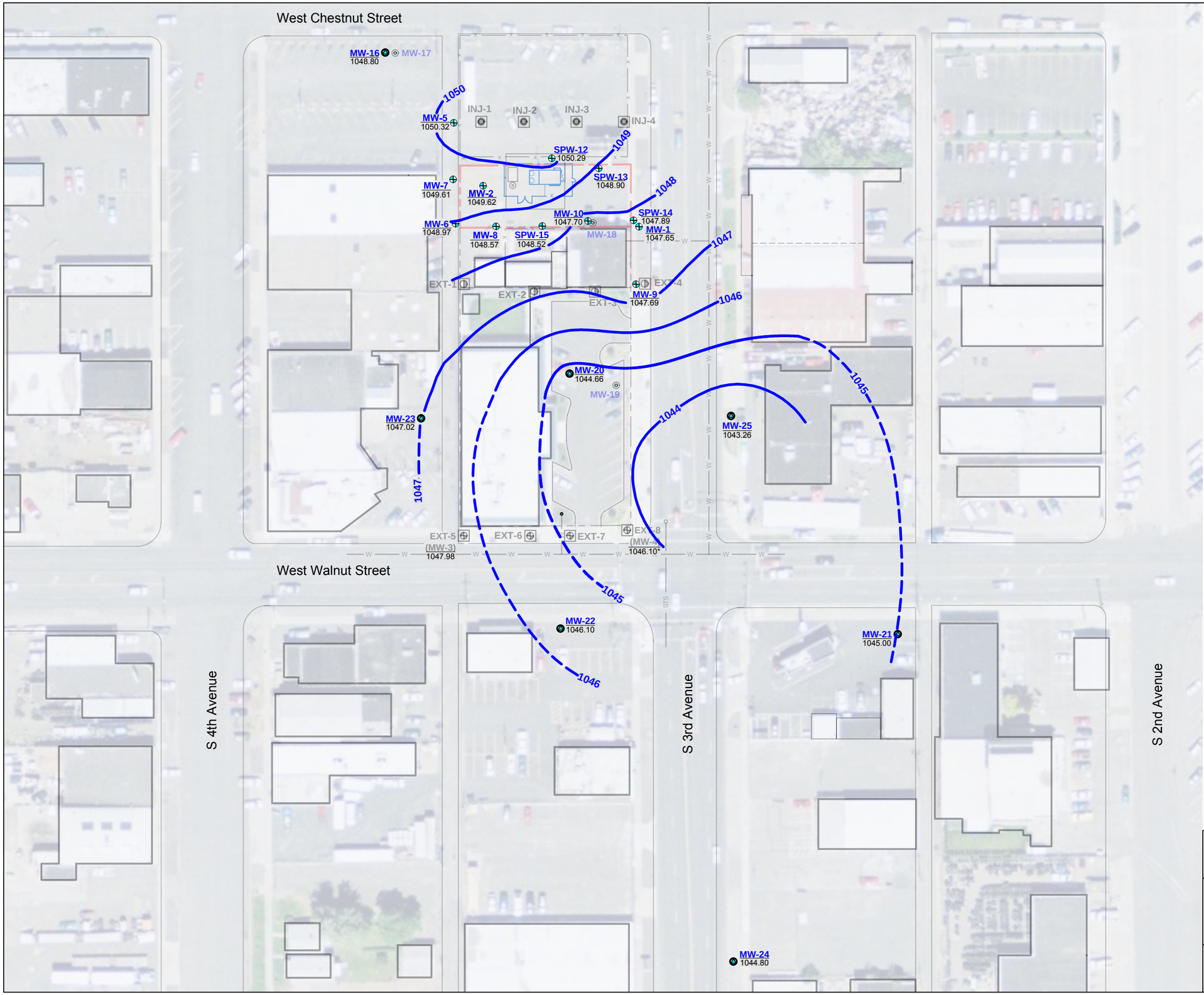
Shallow Groundwater Elevation Contour Map - May 2014 Post-GRS Startup

17800-23 4/15

HARTCROWSER

Figure 6

File: F:\Notebooks\17800023_WA Ecology Frank Wear\CAD\17800023 (ExplorationPlan).dwg Layout:GWEL_05-14 Date: 04-02-2015 Author: melissaschweitzer



APPROXIMATE WELL LOCATION AND NUMBER:

MW-5 1050.32 — MONITORING WELL - PRE-2012; GROUNDWATER ELEVATION IN FEET

MW-16 1048.80 — SHALLOW MONITORING WELL (35 FT.) - 2012; GROUNDWATER ELEVATION IN FEET

MW-17 — DEEP MONITORING WELL (90 FT.) - 2012

1040 — GROUNDWATER ELEVATION CONTOUR GENERATED BY SURFER

1046 — GROUNDWATER ELEVATION CONTOUR GENERATED BASED ON SITE KNOWLEDGE AND FIELD CONDITIONS

* GROUNDWATER ELEVATION FROM THIS WELL NOT USED TO CREATE THE CONTOUR

REMEDIATION WELL LOCATION AND NUMBER:

INJ-4 — INJECTION WELL WITH VAULT INSTALLED

EXT-2 — EXTRACTION WELL WITH VAULT INSTALLED

EXT-5 — EXTRACTION WELL WITH VAULT TO BE INSTALLED

GRS — GROUNDWATER REMEDIATION SYSTEM

NOTE: See Site Plan, Figure 2, for identification of site features.

Source: Aerial photograph from ArcGIS Online, 2015.

Former Frank Wear Site
Yakima, Washington

Shallow Groundwater Elevation Contour Map - August 2014 Post-GRS Startup

17800-23 4/15

HARTCROWSER

Figure **7**

File: F:\Notebooks\1780023_WA Ecology Frank Wear\CAD\1780023 (ExplorationPlan).dwg Layout:GWEL_08-14 Date: 04-02-2015 Author: melissaschweitzer

Groundwater Elevations Along GRS Center Line

F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

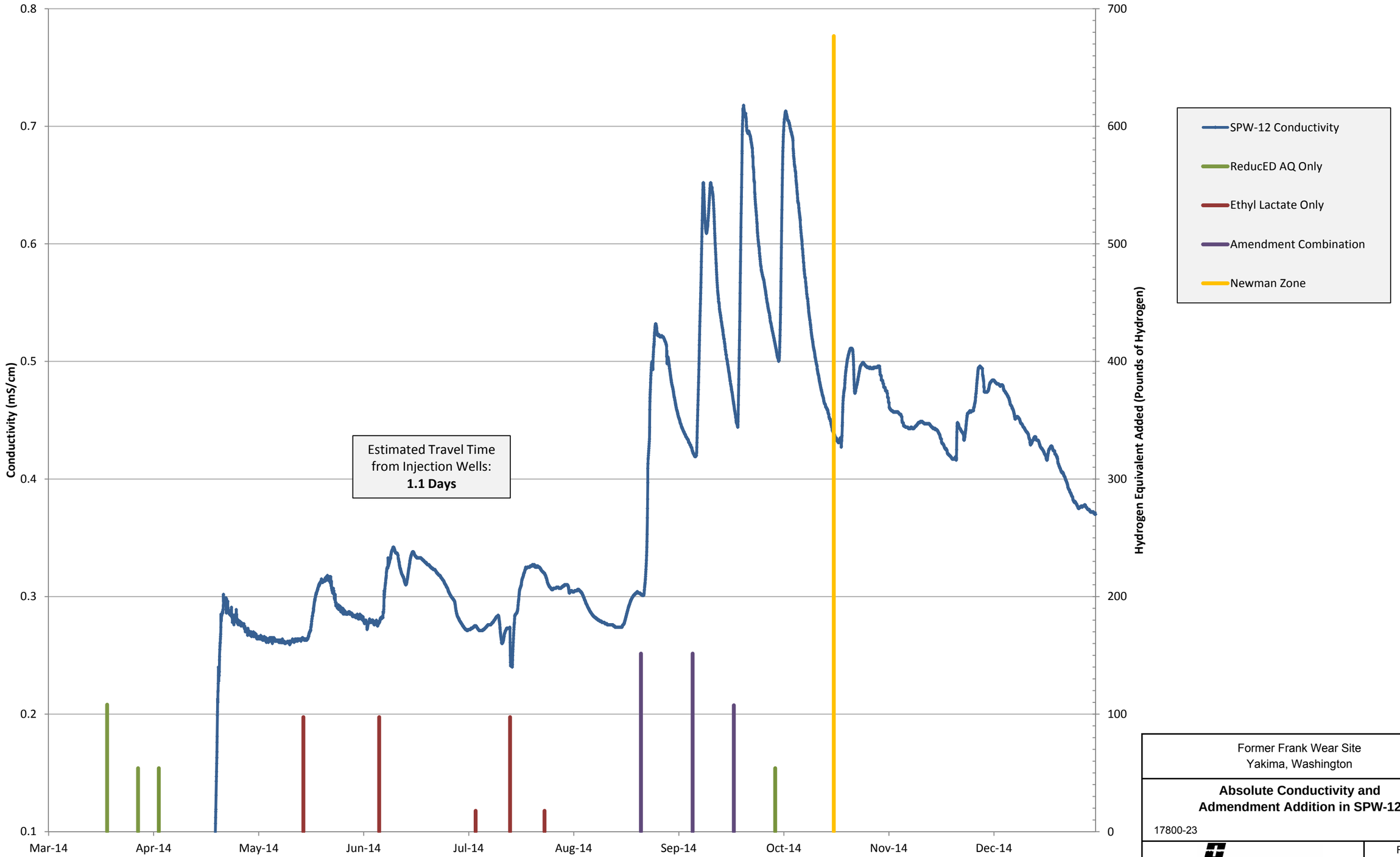
Groundwater Elevations Along GRS Center Line

17800-23 4/15

HARTCROWSER

Figure 3

Absolute Conductivity and Amendment Addition in SPW-12



F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

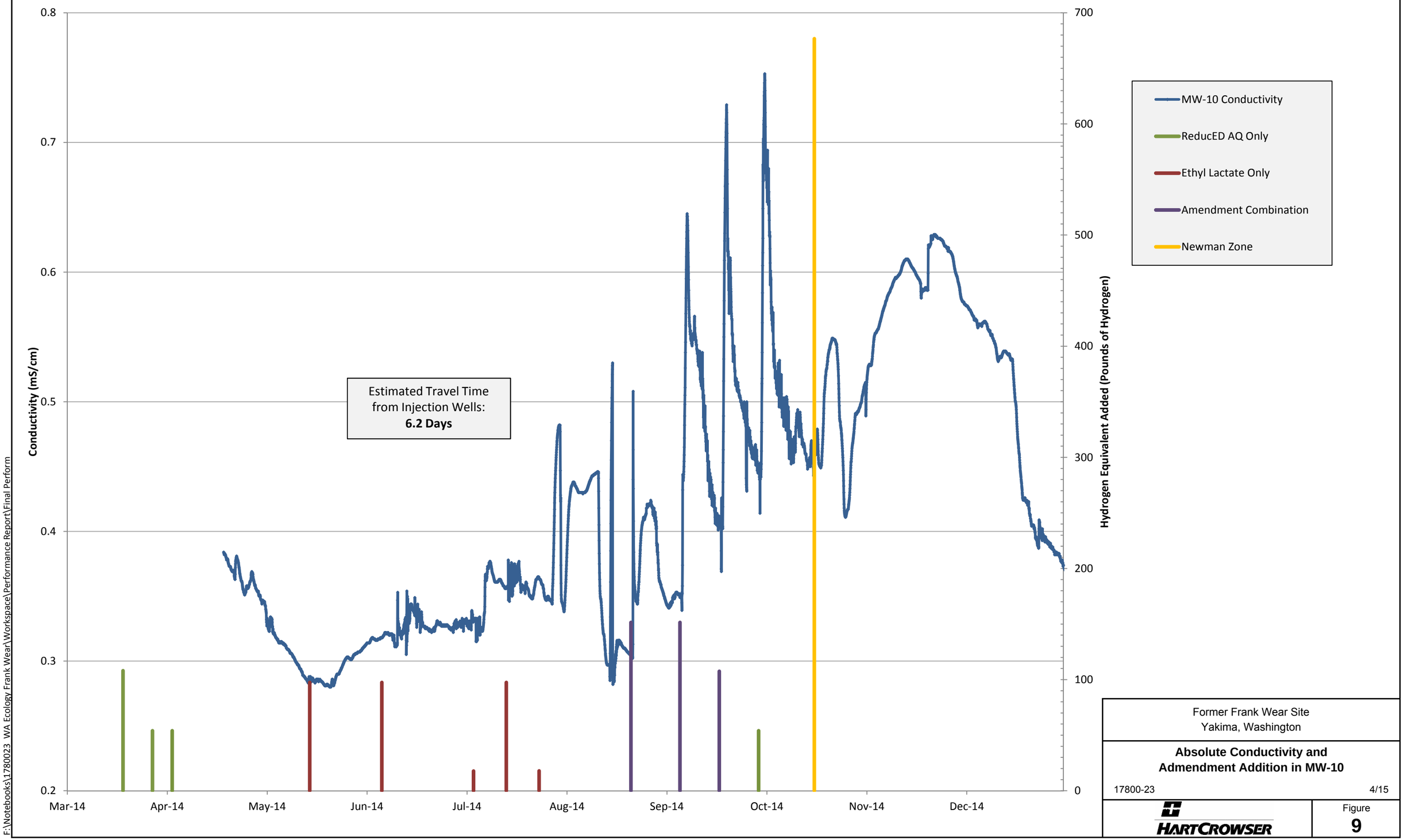
Absolute Conductivity and Admendment Addition in SPW-12

17800-23 4/15

HARTCROWSER

Figure **8**

Absolute Conductivity and Amendment Addition in MW-10



F:\Notebooks\17800023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

Absolute Conductivity and Admendment Addition in MW-10

17800-23 4/15

HARTCROWSER

Figure **9**

Total Micromolar Concentration Profile for Key Wells

GRS System Startup
March 19, 2014

Micromolar Concentration

1,000.0
100.0
10.0
1.0
0.1
0.0

Hydrogen Equivalent Added (Pounds of Hydrogen)

800
700
600
500
400
300
200
100
0

Apr-12 Jul-12 Sep-12 Dec-12 Apr-13 Jul-13 Sep-13 Dec-13 Apr-14 Jul-14 Oct-14

MW-9
MW-10
EXT-2
MW-20
MW-21
ReducED AQ Only
Ethyl Lactate Only
Amendment Combination
Newman Zone

F:\Notebooks\17800023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

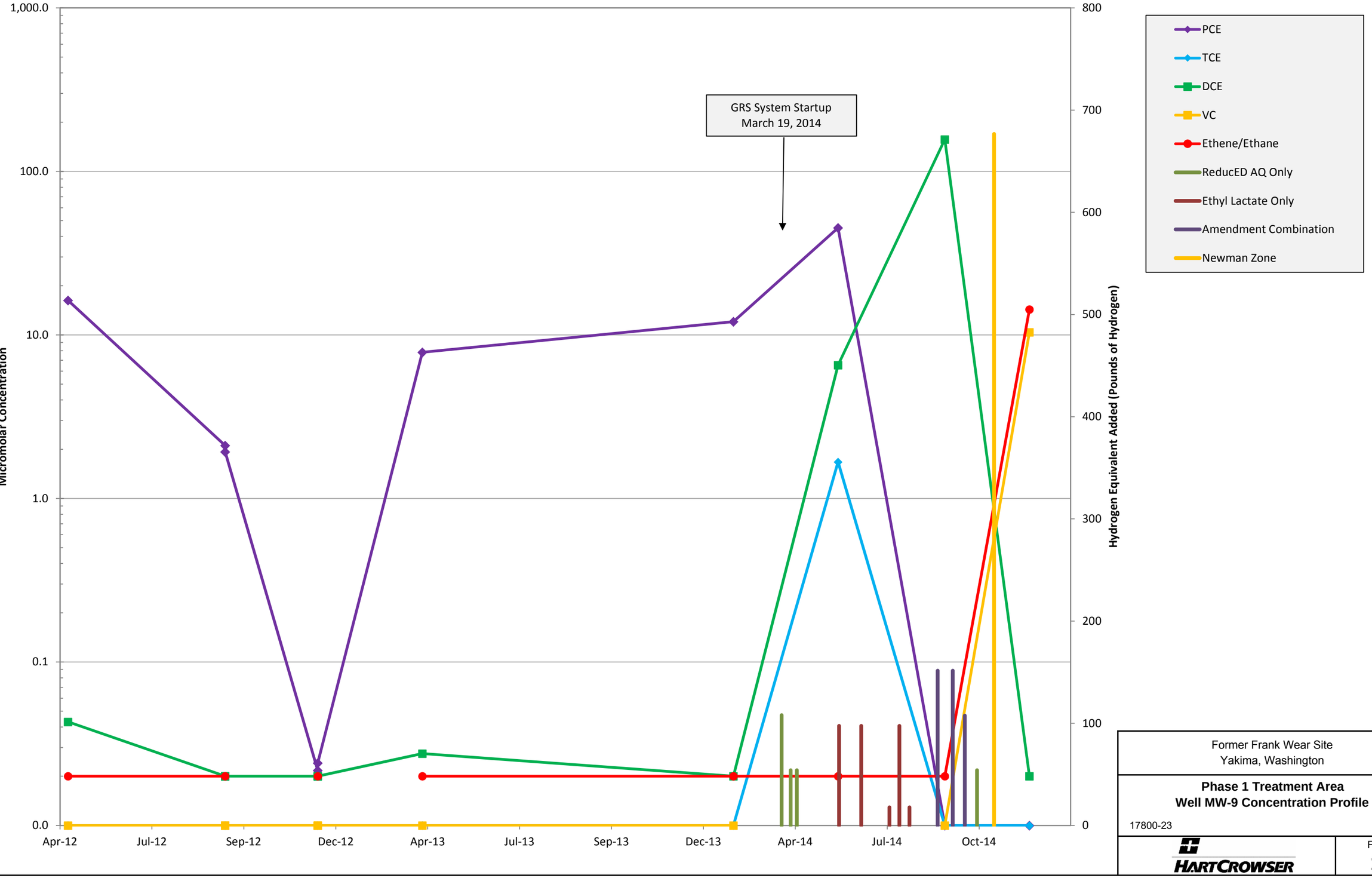
Total Micromolar Concentration Profile for Key Wells

17800-23 4/15

HARTCROWSER

Figure
10

Phase 1 Treatment Area Well MW-9 Concentration Profile



Former Frank Wear Site
Yakima, Washington

Phase 1 Treatment Area
Well MW-9 Concentration Profile

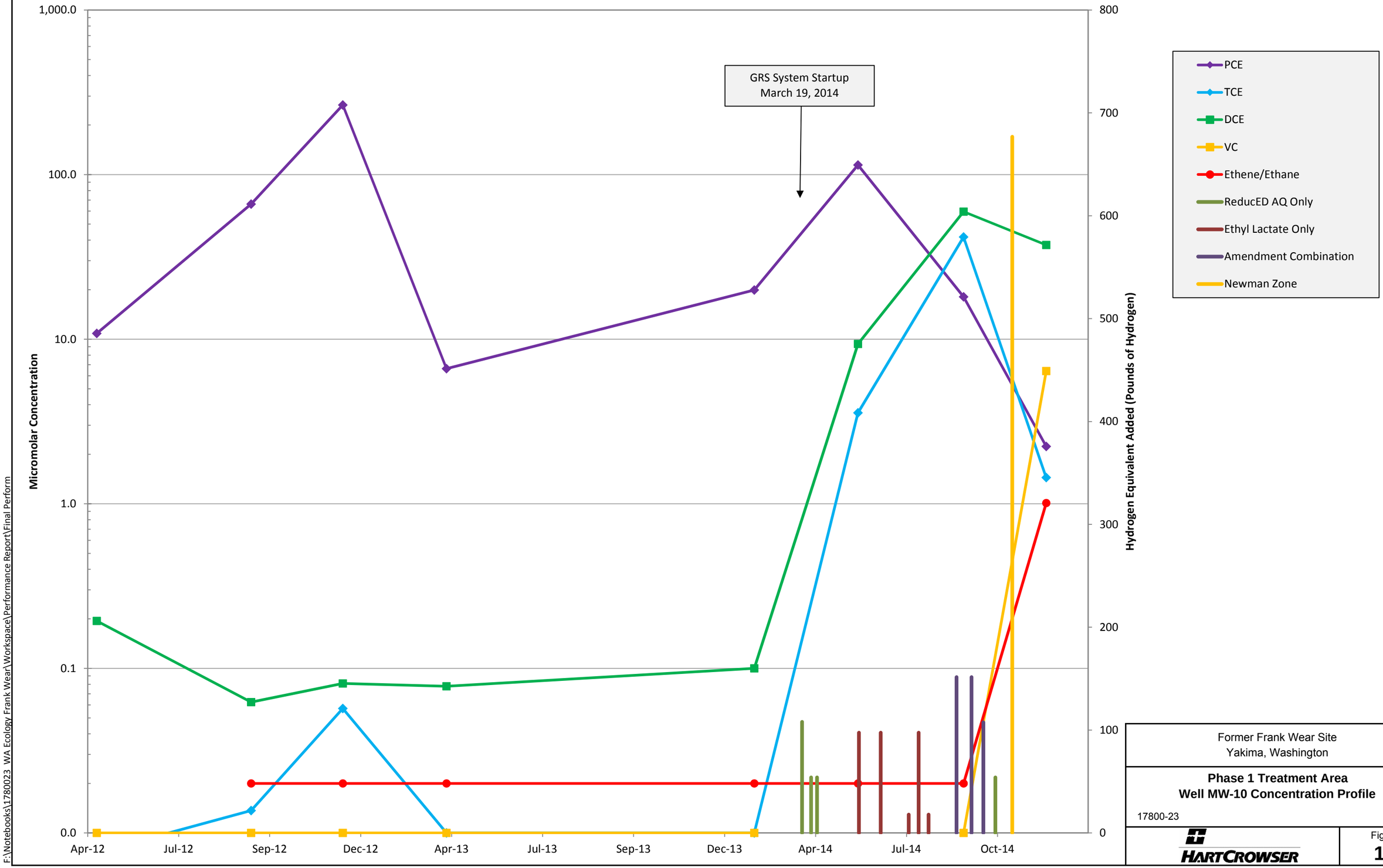
17800-23 4/15

HARTCROWSER

Figure
11

F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Phase 1 Treatment Area Well MW-10 Concentration Profile



F:\Notebooks\17800023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

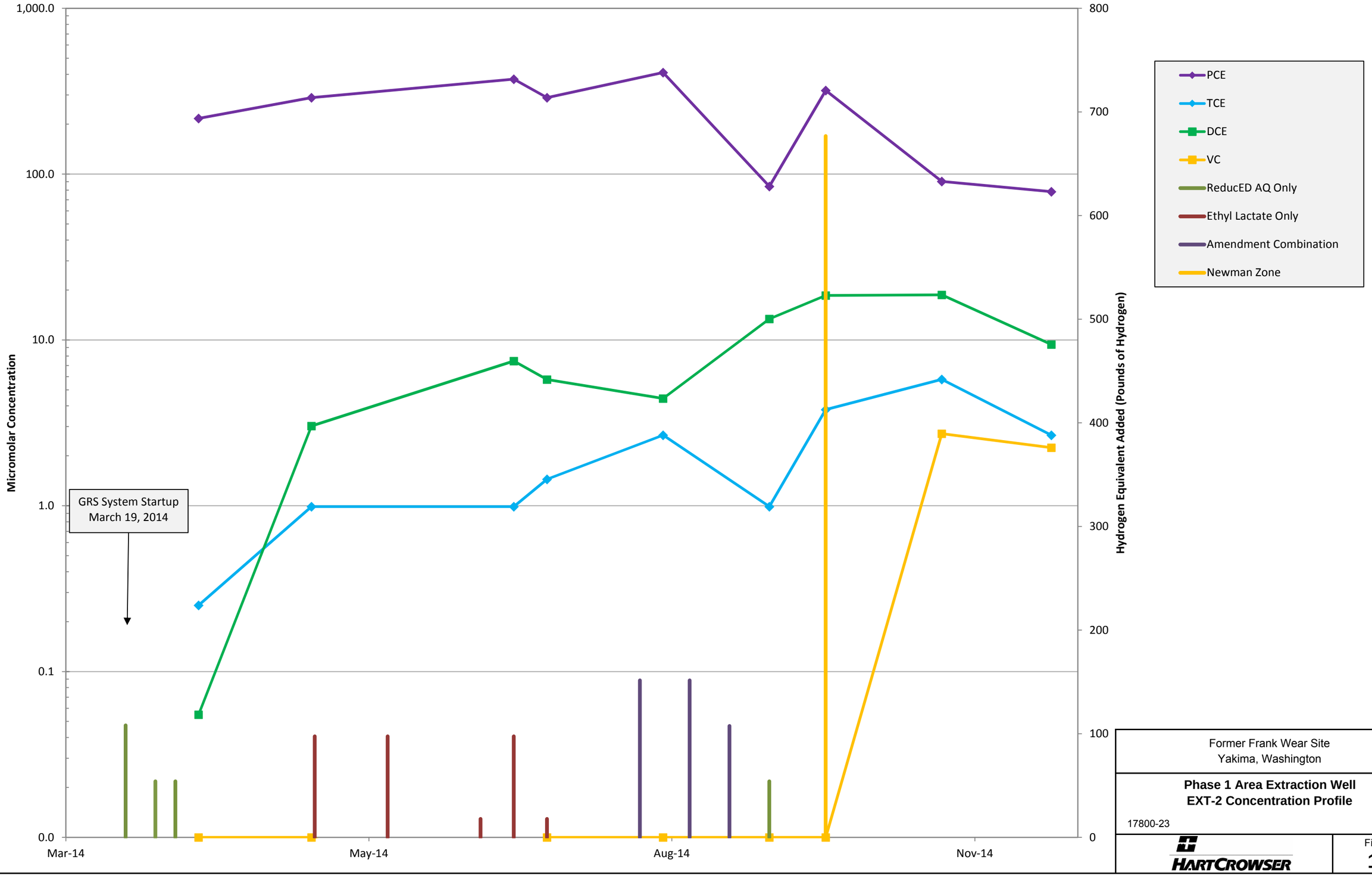
Phase 1 Treatment Area
Well MW-10 Concentration Profile

17800-23 4/15

HARTCROWSER

Figure
12

Phase 1 Area Extraction Well EXT-2 Concentration Profile



F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

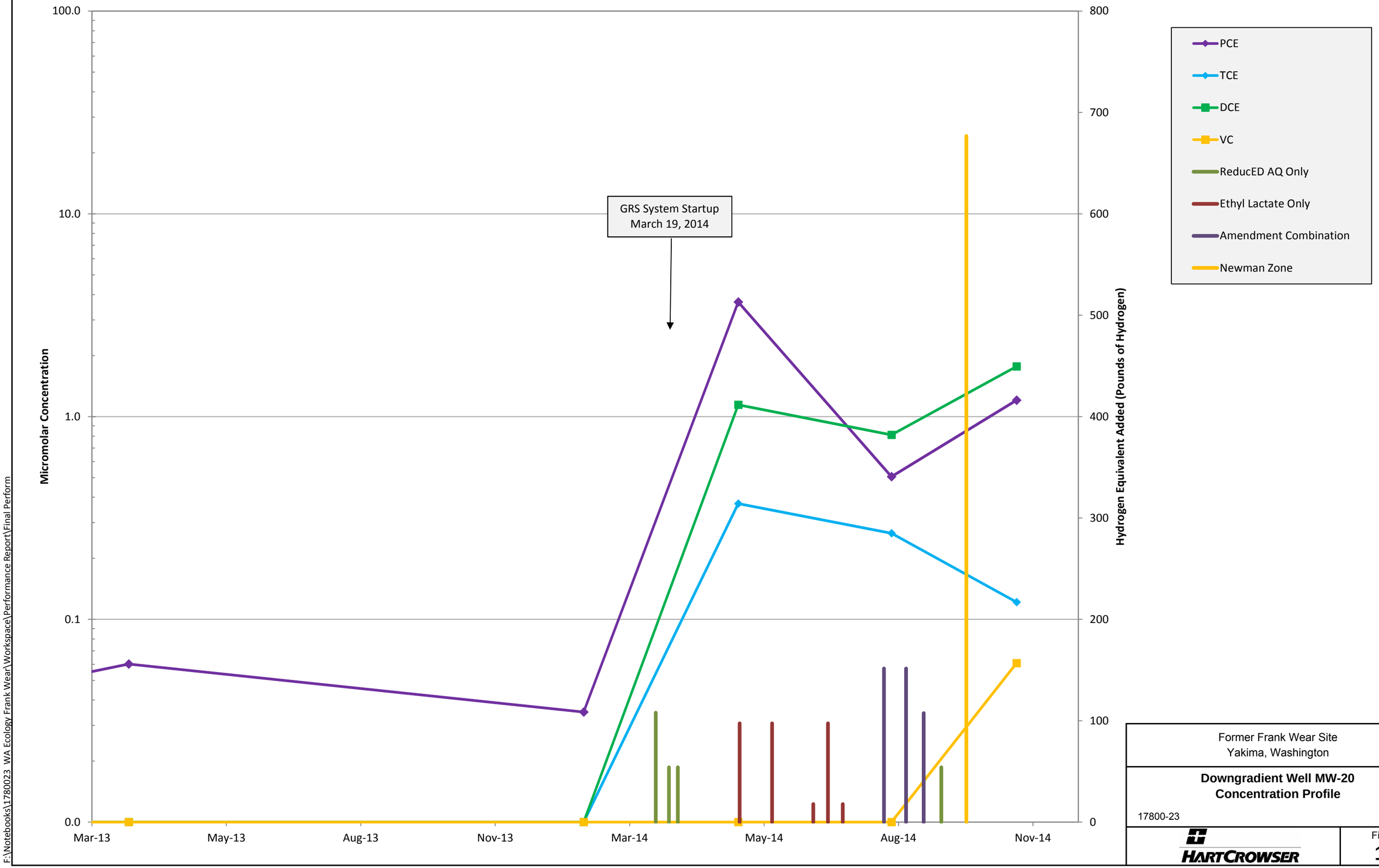
Phase 1 Area Extraction Well
EXT-2 Concentration Profile

17800-23 4/15

HARTCROWSER

Figure
13

Downgradient Well MW-20 Concentration Profile



F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

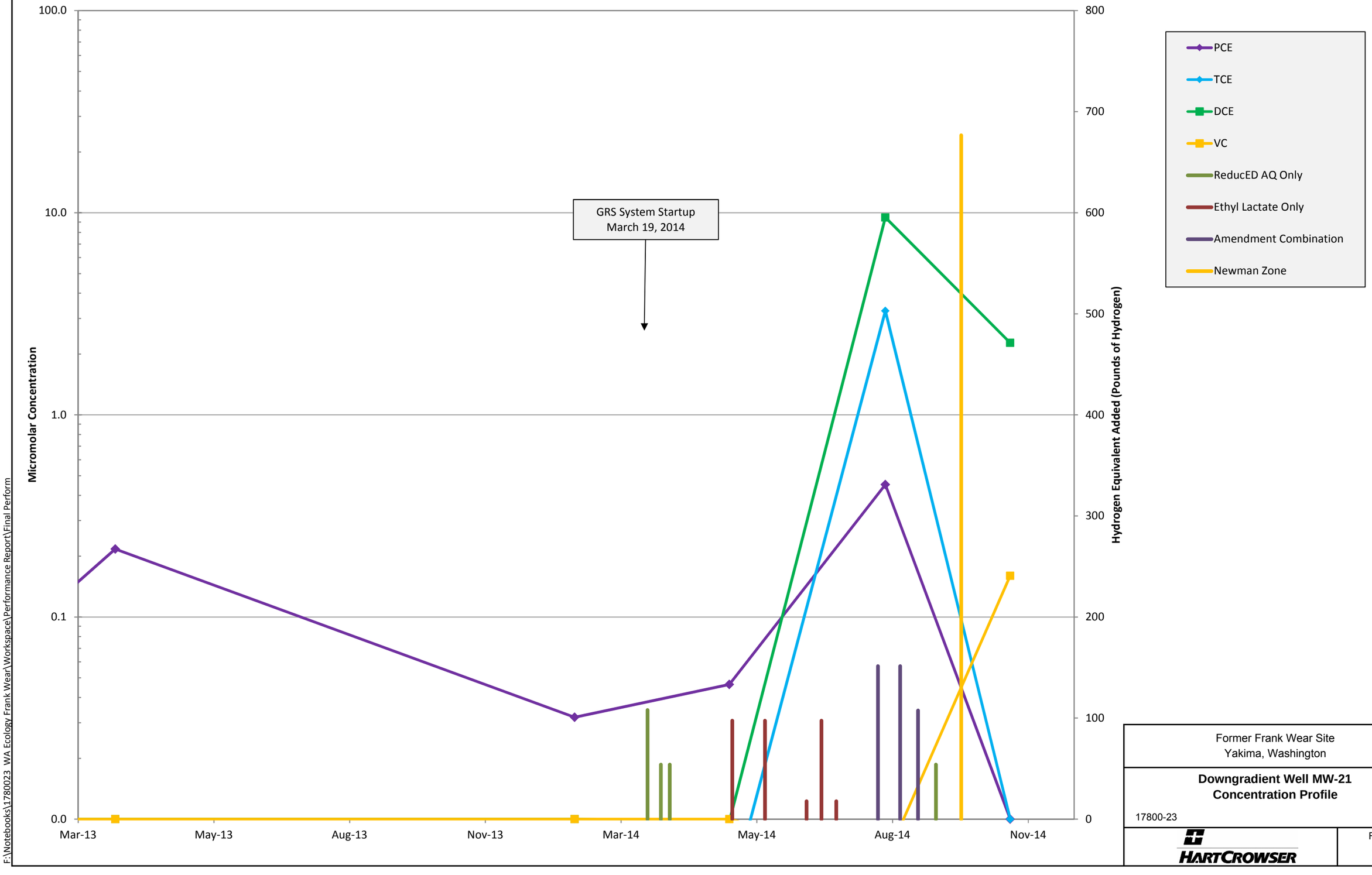
Downgradient Well MW-20
Concentration Profile

17800-23 4/15

HARTCROWSER

Figure
14

Downgradient Well MW-21 Concentration Profile



F:\Notebooks\1780023 WA Ecology Frank Wear\Workspace\Performance Report\Final Perform

Former Frank Wear Site
Yakima, Washington

Downgradient Well MW-21
Concentration Profile

17800-23 4/15

HARTCROWSER

Figure
15

APPENDIX A
Field Logs

HARTCROWSER

FRANK WEAR SITE

DATE March 28, 2014 TECH CM

	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
FLOW TOTALS	INJ-1	12987	0805	12979	1741
	INJ-2	23216	↓	23930	↓
	INJ-3	27388		28105	
	INJ-4	12525		12705	
	EXT-1	14705		15097	
	EXT-2	41188		41968	
	EXT-3	21982		22404	
	EXT-4	15628		16008	
EXT / INJ	~~INJ~~ Totalizer (Flow 1)	86101.13		87945.73	
	~~EXT~~ Totalizer (Flow 3)	75996.66	↓	78883.54	↓

	WELL	DTW	TIME	
GROUNDWATER LEVELS	MW-8	26.76	0818	
	MW-5	24.02	0821	
	MW-6	26.25	0824	
SPW-15 →	SVE WELL	25.93	0826	
	MW-18	30.85	0830	
MW-20 →	SPW-15	25.91	0833	
	SPW-12	18.02	0836	
	MW-1	23.22	0840	
	MW-9	27.25	0842	
	MW-20	25.65	0920	
	MW-4	26.58	0923	
	MW-3	23.72	0927	
	MW-23	28.33	0932	

NOTES

- Re-routed INJ well pipe along W. side of GTS building, Re-routed heat trace wire & reinstalled insulation. Primed pump & tested system. New piping install was successful, system cycles w/out issue.
- Temporary INJ well hose laying on ground is disconnected & stored / NO longer in use. Press. Release Valve is still routed using garden hose w/ valve open. This minimizes syphoning of water from the tank while the transfer pump is off.
- Drilled latches on two INJ wells (3+4) ~~which could not~~ to allow HC lock to fit.
- Added 500 lbs of Reduced AC to the batch tank while it was full. Swapped out damaged Reduced AC bag for a new one.

HARTCROWSER

FRANK WEAR SITE

DATE 4/3/14 TECH CMV

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME	4A 1074
INJ-1	19889	1053	20480	1711	20186
INJ-2	33440		34129		35487
INJ-3	40595		41349		42934
INJ-4	16361		16770		17189
EXT-1	24412		24811		25800
EXT-2	23596 61		60351		62088
EXT-3	32364		32785		33836
EXT-4	23532		23821		24512
INJ Totalizer (Flow 3)	107940.06		110288.67		112746
EXT Totalizer (Flow 2)	129540.53		131279.39		135320

GROUNDWATER LEVELS

WELL	DTW	TIME
MW-8	26.77	1148
MW-5	22.48	1144
MW-6	27.06	1146
~~SPW-15~~	25.96	
MW-18	30.93	
~~SPW-10~~	25.66 69	1208
SPW-12	17.93	
MW-1	23.68	1220
MW-9	27.61	1223
MW-20	25.92	1227
MW-4	26.69	1230
MW-3	23.76	1234
MW-23	28.48	1237

NOTES

- 500 lbs Reduced Acid added to tank
- Dialed back pressure flow on INJ 1,2,3 to match INJ 4. Flow total of ~38 gal/min ~Adj-INJ 1,2,3 to ~12gpm while INJ 4 is ~9gpm
- installed dead bolt. (uses same key as locking handle)
- emptied water from six DOE condensate drums, & 2 HC IDW water drums which were located near 5 3rd Avenue.

INJ flowrate of ~47gpm - flow rates are 5-7 ~~gallons~~ seconds per gallon.

Transfer pump readings • 1415 } almost every hour.
• 1515
• 1610

HARTCROWSER

FRANK WEAR SITE

DATE 4/10/14 TECH [illegible]

FLOW TOTALS	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
	INJ-1	31544	1630	32223	4/11/14 0715
	INJ-2	46230	↓	47375	↓
	INJ-3	51093		52138	
	INJ-4	22799		23535	
	EXT-1	36080		37143	
	EXT-2	80114		81884	
	EXT-3	44661		45712	
	EXT-4	31850		32600	
	INJ Totalizer (Flow 3)	147243		150762	
	EXT Totalizer (Flow 1)	176785	↓	181099	↓

GROUNDWATER LEVELS		WELL	DTW	TIME	
	3	MW-8	27.24	1640	AKN OSS
	1	MW-5	21.58	↓	
	2	MW-6	27.62		
	4	SPW-15	25.82		
	6	MW-18	30.98		
	5	MW-10	25.58		
	7	SPW-12	17.85		
	8	MW-1	23.40		
	9	MW-9	27.21		
	10	MW-20	26.11		
	11	MW-4	26.65	↓	
	12	MW-3	23.42		
	13	MW-23	28.18	1709	

NOTES flow rate/time to INJ tank.

@ 38.5 gpm | open throttle 52gpm | psi when set to 10 gpm

Inj 1	3 psi	1	4 psi	4.49 sec	2 psi	10 gpm
2	3 psi	2	4 psi	3.27	0	
3	5 psi	3	7	4.46 sec	6	
4	13 psi	4	17	7.19 sec	19	
total 15		tot	19			

Transfer pump on 0739 (4/10/14) - 40 gpm - psi ① 2.5 ② 0 ③ 5 ④ 17.5 @ 10 gpm
off 0749

Ext-2: ORP = 306 mV EC = 0.272 mS/cm cond Temp = 17.3°C pH = 7.25
(1450) 0.3159 mS/cm SPC -19.6 pH mV
sampled (1443)
Sulfur odor, clear, NO sheen

next week
- slightly larger drill bit & screws for deadbolt
- wash bucket

HARTCROWSER

FRANK WEAR SITE

DATE 5/14/14

TECH CM/JM 5/15/14

FLOW TOTALS	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
	INJ-1	106653		109432	0947
	INJ-2	108092		110,561	0947
	INJ-3	201965		207,548	0947
	INJ-4	70703		724,428	0948
	EXT-1	128264		131600	0950
	EXT-2	230131		235899	0950
	EXT-3	115275		117447	0950
	EXT-4	80073		81,553	0951
	INJ Totalizer (Flow 3)	384242		396831	0951
	EXT Totalizer (Flow 1)	539783		552,196	0957

GROUNDWATER LEVELS	WELL	DTW	TIME	
	MW-8			
	MW-5			
	MW-6			
	SPW-15			
	MW-18	Completed by JM during Sampling event		
	MW-10			
	SPW-12			
	MW-1			
	MW-9			
	MW-20			
	MW-4			
	MW-3			
	MW-23			

NOTES EXT-5
EXT-6
EXT-7
EXT-8

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23

Field Rep. Jason R. Miles Date 5-12-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-17	1506		31.68											
MW-16			25.13											
MW-5			17.97											
MW-7			25.66											
MW-6			24.75											
MW-23			25.08											
MW-3			21.94											
MW-22	1533		24.84											
MW-24			23.19											
MW-21			24.94											
MW-25			24.73											
MW-4			24.85											
MW-19			28.01											
MW-20			24.35											
MW-9			22.23											
MW-18			28.89											
MW-1			19.94											
SPW-14			21.25											
SPW-13			20.82											
SPW-12			16.16											
MW-2			22.58											
MW-8			22.69											
SPW-15			22.45											
MW-10	1653		23.13											

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23

Field Rep. Jason R. Miles Date 5-13-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-18	(0824) Bio Parameters 8 bottles			Setting 5 CPM 3 80 12.0 8.0 PSI 45		QED Bladder Low flow	Turbid. Grey. brown N. odor, sediment or Sheen.	Int	14.47	8.00	0.195	129.2	5.91	0809
								1	14.75	7.79	0.201	119.2	4.89	0812
								2	14.75	7.75	0.202	117.8	4.97	0815
								3	14.79	7.75	0.202	114.8	4.89	0818
MW-A	(0912)						Grey tint. No Odor, or Sheen.	Int	16.49	7.89	0.206	112.8	6.97	0900
								1	16.45	7.83	0.204	114.3	6.80	0903
								2	16.01	7.74	0.203	117.4	5.52	0906
								3	15.94	7.69	0.203	119.1	5.10	0909
								4	15.90	7.67	0.203	119.7	4.78	0912
MW-17 (1010)							Cloudy, grey. No odor, or Sheen	Int	18.33	7.66	0.247	131.0	3.57	0954
								1	17.59	7.54	0.246	125.9	3.67	0958
								2	17.50	7.53	0.246	120.7	3.04	01
								3	17.53	7.52	0.246	117.5	2.33	1004
								4	17.45	7.53	0.247	113.5	2.37	1007
MW-5 (1103)				Setting 4 CPM 25 PSI	Shallow wells	105 9.0 6.0	Clear water. Tan floc.	Int	18.63	7.40	0.237	118.6	4.00	1049
							No odor or Sheen.	1	17.63	6.75	0.269	123.3	2.80	1054
								2	17.60	6.68	0.271	124.3	2.61	1057
								3	17.12	6.64	0.272	124.4	2.50	1100
MW-7 (1150)							Clear, No odor sediment or Sheen.	Int	19.78	7.42	0.267	134.1	8.18	1136
								1	17.34	6.95	0.280	146.7	8.23	1141
								2	17.12	6.82	0.279	153.1	8.26	1144
								3	17.12	6.85	0.280	152.0	8.36	1147
MW-6 (1244)							Clear. No odor. Sediment, or Sheen	Int	18.60	7.09	0.217	144.0	6.80	122
								1	17.49	6.68	0.237	155.4	6.58	1232
								2	17.33	6.56	0.237	159.4	6.54	1235
								3	17.35	6.53	0.237	159.6	6.51	1238
								4	17.23	6.53	0.237	159.5	6.53	1241

TBH 355 3/27/14

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23

Field Rep. Jason Miles Date 5-13-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW1	(1439)					Low flow with Down hole bladder pump and QED controller	Clear. No odor, sediment, or sheen	Int	21.53	7.51	0.207	128.5	5.06	1423
								1	16.90	6.97	0.289	126.8	3.79	1427
								2	16.60	6.86	0.281	129.7	3.71	1430
								3	16.72	6.79	0.282	132.2	3.87	1433
								4	16.74	6.76	0.282	132.3	3.94	1436
CPW-14	(1516)						Clear. No odor, sediment, or sheen.	Int	17.13	7.18	0.289	-2.36	6.78	1500
								1	16.47	6.96	0.281	2.4	6.50	1504
								2	16.50	6.88	0.281	26.1	6.56	1507
								3	16.46	6.86	0.280	46.5	6.61	1510
								4	16.41	6.87	0.280	59.7	6.71	1513
								5	16.35	6.89	0.279	68.4	6.88	1516
MW-2							Clear. No odor, sediment, or sheen	Int	18.44	7.14	0.333	113.6	6.59	1556
	(1609)							1	16.93	7.15	0.318	110.8	6.10	1600
								2	16.75	7.06	0.317	117.2	6.07	1603
								3	16.63	6.98	0.317	123.4	5.88	1606
MW-24								Int	19.00	7.47	0.237	111.4	2.46	1654
and MW-24 Dup	(1712)						Light grey, cloudy, No odor, or sheen	1	17.94	6.89	0.228	107.0	1.26	1700
								2	17.69	6.75	0.226	112.7	1.13	1703
								3	17.61	6.68	0.226	115.5	1.14	1706
								4	17.54	6.71	0.225	114.9	1.20	1709
MW-21	(1801)						Cloudy, light grey No odor, sediment or sheen	Int	18.31	6.92	0.266	124.3	7.35	1747
								1	17.48	6.74	0.281	129.2	7.27	1752
								2	17.59	6.67	0.283	134.5	7.23	1755
								3	17.48	6.65	0.282	135.0	7.23	1758

Equip Blank 1 5/14/14 0650

Hart Crowser, Inc.

Groundwater Sampling Data

Project: Frank Wool   Job No. 17800-23
Field Rep.: Jason Miles   Date: 5-14-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-3	(0737) Bio parameters collected 8 containers					Low flow Sampling with Downhole bladder pump	Cloudy, brown, gray No odor or Sheen	Int	17.21	7.29	0.188	137.8	6.91	0724
								1	17.00	6.69	0.236	141.3	6.83	0728
								2	16.98	6.58	0.247	143.2	5.59	0731
								3	16.96	6.53	0.253	142.2	5.49	0734
MW-23	(0827) Bio Parameters collected 8 containers					QED controller	Clear No odor, sediment, or Sheen	Int	16.15	7.16	0.308	137.9	7.37	0810
								1	16.09	6.78	0.309	144.0	7.02	0815
								2	15.97	6.75	0.308	143.9	7.01	0818
								3	16.00	6.73	0.308	144.1	7.04	0821
MW-20	(0924) Bio parameters collected 8 containers						Clear, No odor, sediment, or Sheen	Int	17.75	7.31	0.166	135.9	6.91	0907
								1	16.91	6.81	0.222	146.3	5.87	0912
								2	16.79	6.72	0.230	147.6	5.71	0915
								3	16.79	6.68	0.234	148.6	5.69	0918
								4	16.80	6.65	0.235	148.1	5.67	0921
MW-4	(1015)						Clear No odor, sediment, or sheen	Int	21.05	7.62	0.174	127.6	8.22	1001
								1	17.95	6.98	0.426	136.9	7.38	1006
								2	17.64	6.97	0.438	136.5	7.36	1009
								3	17.59	6.95	0.441	137.1	7.36	1012
MW-16	(1109)						Clear No odor, sediment, or sheen	Int	19.53	7.48	0.307	127.1	4.12	1055
								1	17.96	7.40	0.295	127.2	3.60	1100
								2	17.70	7.35	0.293	130.6	3.51	1103
								3	17.54	7.32	0.291	132.7	3.60	1106
MW-8	(1155)						Clear No odor, sediment, or Sheen	Int	23.00	7.64	0.135	143.8	7.47	1141
								1	18.35	6.85	0.234	159.0	6.68	1146
								2	18.08	6.80	0.236	160.7	6.70	1149
								3	18.01	6.73	0.238	163.4	6.67	1152

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23

Field Rep. Jason R. Miles Date 5-14-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
SPW-15	(1239)					Low flow sampling. Down hole bladder pump.	Clear. ~~No~~ Surface/bio odor, sediment, or sheen	Int	21.07	7.00	0.320	-65.9	2.01	1225
								1	17.45	6.81	0.362	-97.3	0.61	1230
								2	17.18	6.78	0.362	-97.5	0.56	1233
								3	17.20	6.75	0.362	98.2	0.53	1236
SPW-13	(1345) and DUP					QED controller	Clear. Slight sulfur odor. No sediment or sheen.	Int	18.42	6.66	0.387	-55.2	1.51	1332
								1	18.67	6.73	0.391	-62.7	1.80	1336
								2	18.27	6.77	0.392	-63.5	2.10	1339
								3	18.27	6.67	0.393	-62.3	1.97	1342
SPW-12	(1421)						Clear. No odor. Sediment or Sheen.	Int	17.45	7.01	0.285	62.0	2.67	1408
								1	16.66	6.89	0.277	64.8	2.41	1412
								2	16.57	6.78	0.276	69.4	2.41	1416
								3	16.57	6.76	0.276	70.0	2.41	1418
MW-25	(1552)						Cloudy, grey No odor, sediment or Sheen	Int	23.10	7.93	0.145	60.0	8.58	1538
								1	16.97	7.39	0.173	76.9	9.57	1543
								2	16.58	7.40	0.172	76.7	9.36	1546
								3	16.48	7.12	0.171	92.8	9.53	1549
								4	16.45	7.07	0.171	96.9	9.57	1552
								5	16.47	7.04	0.171	98.2	9.54	1555
MW-10	B.10 parameters & containers	Collected					Clear. No odor. Sediment, or Sheen	Int	21.76	7.37	0.252	89.2	6.79	1644
								1	18.84	7.09	0.310	77.4	6.02	1649
	(1704)							2	18.63	7.00	0.311	70.8	5.80	1652
								3	18.68	6.98	0.312	69.4	5.49	1655
								4	18.68	6.98	0.312	60.0	5.41	1658
								5	18.57	6.99	0.311	55.5	5.22	1701

Groundwater Sampling Data

Project Frank Weir Job No. 17800-23

Field Rep. Jason R. Miles Date 5-14-14 → 5-15-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
EXT-2	(1750)						Clear. No odor or sheen	Int	18.55	7.28	0.291	93.3	10.54	1747
MW-9	(1827) B,10 Parameters Collected 8 containers						Slight grey tint No odor, sediment or sheen	Int	25.92	7.61	0.138	90.6	7.30	1810
								1	17.37	7.19	0.273	107.2	6.80	1818
								2	17.36	7.17	0.273	109.5	6.71	1821
								3	17.53	7.12	~~0.274~~ 0.277	110.0	6.72	1824
MW-2 5-15-14	(0802)						Clear. No odor, sediment or sheen	Int	16.63	7.44	~~0.276~~ 0.277	~~114.3~~ 114.3	3.74	0745
								1	16.42	7.07	0.277	112.6	3.30	0750
								2	16.31	6.98	0.276	112.5	3.18	0755
								3	16.32	6.92	0.276	112.9	3.14	0756
Equip Blank 2	(0836)							4	16.52	6.88	0.275	112.3	3.13	0759

HARTCROWSER

FRANK WEAR SITE

DATE 6/6/2014 TECH Jason K. Mills

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1	199663	1147	200164	1408
INJ-2	206850	1147	207533	1408
* INJ-3	376349	1148	376349	1409
INJ-4	120549	1148	120783	1409
EXT-1	258265	1148	258202	1410
EXT-2	353535	1202	354802	1411
EXT-3	277847	1201	278725	1411
EXT-4	127603	1201	127859	1412
INJ Totalizer (Flow 3)	794807	1202	796373	1412
EXT Totalizer (Flow 1)	943152	1202	944728	1412

GROUNDWATER LEVELS

WELL	DTW	TIME	
MW-8	21.42	1232	
MW-5	16.55	1225	
MW-6	21.59	1227	
SPW-15	21.24	1235	
MW-18	26.57	1322	
MW-10	22.09	1333	
SPW-12	15.95	1330	
MW-1	18.69	1324	
MW-9	21.25	1252	
MW-20	22.15	1259	
MW-4	22.14	1258	
MW-3	20.84	1301	
MW-23	22.21	1305	

NOTES * Turned off INJ-3 at 12:00 (Jason Shirdel). He checked if this was running and it was showing no pressure. Jason believes right after there is a vacuum. There still a lot of green water in the parking lot that needs to evaporate.

HARTCROWSER

FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB NO. _____

FIELD REPORT NO. _____

PAGE _____ of _____

DATE 6/12/14

S M T W Th F S

JOB Frank Vrieau

ARRIVAL TIME: _____

LOCATION Yakima

DEPARTURE TIME: _____

CLIENT Dept. of Ecology

WEATHER: _____

PURPOSE OF OBSERVATIONS _____

HC REP _____ PHONE _____ HC PROJECT MGR. _____

CONTRACTOR _____ PERMIT NO. _____

CONTRACTOR REP. _____ JOB PHONE _____

COMMENTS:

- Installed 4 siphon breaks on INJ 0214 lines
- INJ-3 has been plugged up for over a week.
- INJ-4 is pumping slowly & while I was on site, stopped pumping. Pressure built up to 25 psi in INJ 4 in the GTS.
- I shut down INJ 4. currently INJ-1 & 2 are the only ones pumping
- After running through a pump cycle it appears that the siphon breaks are effective.

BY: _____ REVIEWED BY: _____ I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE _____ HART CROWSER PROJECT MANAGER _____ CONTRACTOR REPRESENTATIVE

HARTCROWSER

FRANK WEAR SITE

DATE 7/14/2014 TECH Jason Miles / Kaylan Sm

FLOW TOTALS	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
	INJ-1			494235	18:08
	INJ-2			518410	↓
	INJ-~~3~~			496042	
	INJ-4			363966	
	EXT-1			521419	18:09
	EXT-2			499974	18:10
	EXT-3			513309	18:10
	EXT-4			286637	18:1
	INJ Totalizer (Flow 3)				
	EXT Totalizer (Flow 1)				

GROUNDWATER LEVELS	WELL	DTW	TIME	
	MW-8	17.95	1310	
	MW-5	16.00	1245	
	MW-6	17.87	1247	
	SPW-~~15~~12	15.55	1318	
	MW-18	24.10	1240	
	MW-10	17.83	1337	
	SPW-~~12~~15	17.77	1315	
	MW-1	18.02	1324	
	MW-9	17.72	1321	
	MW-20	17.27	1304	
	MW-4	17.93	1259	
	MW-3	18.03	1255	
	MW-23	18.18	1250	

NOTES

8:00 - Arrived @ site

Injection well #4 was overflowing - Pump manually shut down

8:20 - Excavation Crew is here to move Barrels

09:30 Collected EXT-2. Temp-20.05 pH-6.33 Cond-0.330 ORP-161.7 DO-9.48

1100 Changed INJ-3 4 fence coupling with reinforced.

- Pressure tested INJ-3. Up to 110 PSI

1800 Final Alarm settings to 26 and 30

HARTCROWSER

FRANK WEAR SITE

DATE 7/24 TECH CM

FLOW TOTALS	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
	INJ-1	618053	10:30	621721	
	INJ-2	702797		708677	
	INJ-3	496041		496047	
	INJ-4	467559		471071	
	EXT-1	587619		589795	
	EXT-2	549085		550914	
	EXT-3	343599		625693	
	EXT-4	624005		345974	
	INJ Totalizer (Flow 3)	T 2,102,911		2101374	
	EXT Totalizer (Flow 1)	T 2048742		2057447	

- Flushed measurement

GROUNDWATER LEVELS	WELL	DTW	TIME	
	MW-8			
	MW-5			
	MW-6			
	SPW-15			
	MW-18			
	MW-10			
	SPW-12			
	MW-1			
	MW-9			
	MW-20			
	MW-4			
	MW-3			
	MW-23			

NOTES

- Scrubbed INJ-3, injected ~10 gal Ethyl Lactate into the well & will let sit for ~1 week before turning on
- Pumped ~20 gallons from INJ-3 bottom, bits of gravel & bio-fouling
- Sampled Ext-1 through 4 for DC & VOCs
- Fixed gate post.
- Locked all doors & all systems running when I left except INJ-3.
- covered holding tank w/ black visqueen

On-site 1015
off site 1540

HARTCROWSER

FRANK WEAR SITE

DATE July 30, 14 TECH CML & KS

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1			657,591	1600
INJ-2			765,702	
INJ-3			496,526	
INJ-4			525,691	
EXT-1			613,688	
EXT-2			570,235	
EXT-3			657,886	
EXT-4			373,456	
INJ Totalizer (Flow 1)			T 2,156,666	
EXT Totalizer (Flow 3)			T 2,173,943	

GROUNDWATER LEVELS

WELL	DTW	TIME
MW-8		
MW-5		
MW-6		
SVE WELL		
MW-18		
SPW-15		
SPW-12		
MW-1		
MW-9		
MW-20		
MW-4		
MW-3		
MW-23		

NOTES

Fixed gate post.

- Scrubbed batch tank, recirculated batch tank into sump screening out algae. Water pumped from sump back into batch tank.
- Surge/Purge INJ-1 inject 1 gal ethlac & let sit
- throttle back ext. Rates → Ext-1 ~ 2 gpm @ 78 psi, Ext-2 ~ 4 gpm @ 78 psi, Ext-3 ~ 8 gpm @ 85 psi. Ext-4 ~ 10 gpm @ 0 psi (Not throttled back)
- INJ into INJ 1 & 2 only INJ-1 ~ 22 gpm @ 7 psi, INJ-2 ~ 21 gpm @ 9 psi

- System off on arrival, running when leaving.

HARTCROWSER
Delivering smarter solutions

8-14 → 8-15

Project Frank Wear
Calculations for

Page of
Job No.
Made By Date
Checked By Date

1130 onsite system off. Tank full of algae, can't see 2" into water.

to

begin physically removing excess algae from tank (Recirc.)

		Color	pH	Alk	Hardness
① Initial	①	0	7.5	160	~150
② After	②	0	8.0	160	100
	③	0	7.8	160	150
	④	10 ppm	7.5	100	150
1.5 wks	⑤	2	7.5	120	150
3 mo	⑥	1	8.4	100	100

- Second reading after mixing ~45minutes
- add 1gal. drums to reduce pH.
- take 3rd reading after ~15min mixing
- add ~1gal conc. bleach w/ test ~15minutes

- System turned back on @ 10am 8/14/14 8/15/14

- Entire well turned full throttle 10:40

- Ran all inj wells ~10-12gpm for a cycle or two to check Pressure.
  Then to keep only INJ #2 on full throttle

- switched out pressure gauges on INJ #2 to 0-30psi

INJ flow rate #2 Ext 35

		psi @ bridle	psi @ vault	
INJ	1	12	5-6	43 gpm total
	2	12	0-1	

HARTCROWSER

FRANK WEAR SITE

system has been off for at least a week. Check. test

DATE ~~8/14~~ 8/15/14 TECH _____

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1	670814	10 min	672737	
INJ-2	779154		780099	
INJ-3	496537		496865	
INJ-4	525704		525905	
EXT-1	616601		617371	
EXT-2	574799		575542	
EXT-3	668487		670294	
EXT-4	378919		379492	
INJ Totalizer (Flow ~~1~~)	T137577.63		T142521424.60	
EXT Totalizer (Flow ~~3~~)	T216,0037		T2,163,567	

FLOW 1 = Top
3 = bottom

GROUNDWATER LEVELS

WELL	DTW	TIME	
MW-8			
MW-5			
MW-6			
SVE WELL			
MW-18			
SPW-15			
SPW-12			
MW-1			
MW-9			
MW-20			
MW-4			
MW-3			
MW-23			

NOTES

covered tank w/ insulation
psi alarm set to 24psi
shut off @ 28psi.

HARTCROWSER

FRANK WEAR SITE

DATE 8/21/14 TECH CM

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1	795624	0950	802966	1540
INJ-2	892752		899983	
INJ-3	496665		496724	
INJ-4	~~25~~ 525905		52~~8~~598	
EXT-1	668204		671392	
EXT-2	626756		629647	
EXT-3	806005		813767	
EXT-4	407119		408715	
3 INJ Totalizer (Flow ~~1~~)	T2428061.5		2440904	
1 EXT Totalizer (Flow ~~3~~)	T468242		487073	

GROUNDWATER LEVELS

WELL	DTW	TIME	
MW-8			
MW-5			
MW-6			
SVE WELL			
MW-18			
SPW-15			
SPW-12			
MW-1			
MW-9			
MW-20			
MW-4			
MW-3			
MW-23			

NOTES curve @ ~~950~~ water in tank is clear System running good (as I left it) No alarms psi @ 21 while injecting into 1&2 Q=~~4~~2

add 55 gal ethylac. to full tank ~800 gallons

500 lb Reducol AQ

- Install camlock fittings on INJ-3&4

INJ 3&4 are off- as soon Ethylact./Reducol mixture was injected into 3&4

HARTCROWSER FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB NO. 17800-23 / TASK 5
FIELD REPORT NO.
PAGE 1 of 4
DATE 8/25/2014
S (M) T W Th F S

JOB Frank Wear Site
LOCATION Yakima, WA
CLIENT Dept. of Ecology
PURPOSE OF OBSERVATIONS GW Measurements & Sampling
HC REP Kaylan Smyth PHONE HC PROJECT MGR. Jill Kiernan
CONTRACTOR N/A
CONTRACTOR REP. N/A

ARRIVAL TIME: 15:00
DEPARTURE TIME: 19:00
WEATHER: Sunny
PERMIT NO.
JOB PHONE

COMMENTS:

07:00 - DECON of well tubing @ HC Beaverton Shop
11:00 - Left HC Beaverton to go to Yakima
15:00 - Arrive on Site / Start Measuring GW Depths

WELL ID:	BELOW CASING	WELL ID	BELOW CASING
MW-1	15.25	MW-21	16.80
MW-2	13.97	MW-22	14.82
MW-3/Ext-5	13.40	MW-23	15.53
MW-4/Ext-8	15.00	MW-24	13.90
MW-5	13.84	MW-25	18.84
MW-6	14.50		
MW-7	14.24		
MW-8	14.87		
MW-9	20.75		
MW-10	21.86	19:00 - Left Site	
SPW-12	13.86		
SPW-13	14.78		
SPW-14	15.27		
SPW-15	14.72		
MW-16	16.60		
MW-17	24.21		
MW-18	14.79		
MW-19	20.75		
MW-20	15.79		

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

HARTCROWSER
FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB NO. 17800-23 / Task 5
FIELD REPORT NO.
PAGE 2 of 4
DATE 8/26/2014
S M (T) W Th F S

JOB Frank Wear Site
LOCATION Yakima, WA
CLIENT Dept. of Ecology
PURPOSE OF OBSERVATIONS GW Measurements & Sampling
HC REP Kaylan Smyth PHONE — HC PROJECT MGR. Jill Kiernan
CONTRACTOR — PERMIT NO. —
CONTRACTOR REP. — JOB PHONE —

ARRIVAL TIME: 08:00
DEPARTURE TIME: 18:00
WEATHER: Sunny

This report presents opinions formed as a result of our observation of the contractor's activities relating to geotechnical engineering. We rely on the contractor to comply with the plans and specifications throughout the duration of the project irrespective of the presence of the Hart Crowser representative. The presence of our field representative will be for the purpose of providing observation and field testing. Our work does not include supervision or direction of the actual work of the contractor, nor the contractor's employees and agents. Neither the presence of our representative nor the observation and testing by our firm shall excuse the contractor in any way for defects discovered in the contractor's work. Our firm will not be responsible for job or site safety on this project. The conclusions and recommendations of this field report are subject to review by the Hart Crowser Project Manager.

COMMENTS: 0800 - Arrived on Site / Organized Notes & Equipment
- Going to Sample in the same order that Jason Miles did last time
- Decon Pump Screen

0930 - Readings (Meters)

~~Event~~	ID	PSI	FLOW TOTAL
	IN-1	12	~~283730~~
	IN-2	14	969790
	IN-3	—	496724
	IN-4	—	526088
	EX-1	—	701716
	EX-2	3	665841
	EX-3	4	912747
	EX-4	1	428905

FLOW 1 - 717216 Gal @ 16.8 GPM
FLOW 3 - 261783 Gal @ 49 GPM

1130 - Began Sampling Wells
1730 - Finished Sampling Wells
1800 - Off Site

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

HARTCROWSER
Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

FIELD REPORT

JOB NO. 17800-23/T-5 1
FIELD REPORT NO.
PAGE 3 of 4
DATE 8/27/14
S M T (W) Th F S

JOB FRANK WEAR
ARRIVAL TIME: 6:45
LOCATION Yakima, WA
DEPARTURE TIME: 20:00
CLIENT Dept. of Ecology
WEATHER: Sunny
PURPOSE OF OBSERVATIONS GW Sampling & measurements
HC REP Kaylan Smyth PHONE 541-990-0658 HC PROJECT MGR. Jill Kierney
CONTRACTOR —
PERMIT NO. —
CONTRACTOR REP. —
JOB PHONE —

COMMENTS: 6:45 - KS Arrives on Site, Calibrate YSI pH (2-point), Conductivity
7:15 - Begin Sampling Well #4
07:45 - 1/4" poly tubing / Gas Fitting is damaged - Went to CASCADE INDUSTRIAL to pick up replacement part
09:30 - Begin Sampling Again @ MW-25
11:10 - Bladder Pump ≠ malfunction
Called Field Instrument Equipment / talked to Technician
Ball Valve was clogged with silt
13:20 - Sampling MW-16
15:00 - Take Samples to FED-EX for Shipping to T.A - Seattle
16:30 - Back on Site - Start sampling MW-7
20:00 - Leave Site

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

HARTCROWSER
Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

FIELD REPORT

JOB NO. 17800-23/T-5
FIELD REPORT NO.
PAGE 4 of 4
DATE 8/28/2014 & 8/29/2014
S M T W (Th) (F) S

JOB Frank Wear Site
ARRIVAL TIME: 6:30
LOCATION Yakima, WA
DEPARTURE TIME:
CLIENT Dept. of Ecology
WEATHER: Sunny / Overcast
PURPOSE OF OBSERVATIONS GW Sampling & measurements
HC REP Kaylan Smyth PHONE 541-990-0658 HC PROJECT MGR. Jill Kierney
CONTRACTOR —
PERMIT NO. —
CONTRACTOR REP. —
JOB PHONE —

COMMENTS: 06:30 - Set Up Decon Station, Calibrate YSI pH & Conduct.
06:45 - Start Sampling
11:30 - Lunch
12:00 - Start Sampling MW-17
20:00 - Leave Site

8/29/2014

07:30 - Arrive on Site
- Put Safety (First Aid) Kit in both treatment bldgs
- Total Purged Volumed ≈ 60 gallons
- Collect EXT-1 sample

FLOW DATA

IN-1	923524	Flow 1 - 828820 @ 39 GPM
IN-2	1001861	Flow 2 - 26.86 @ 0.0 GPM - OFF
IN-3	496724	Flow 3 - 2717631 @ 0.0 GPM
IN-4	526088	
EXT-1	716535 @ 3 psi	
EXT-2	688425 @ 3 psi	12:00 - Dropped Samples off @ TA in Tacoma
EXT-3	953095 @ 3 psi	
EXT-4	445754 @ 2 psi	15:30 - Back in Beaverton Office

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

Groundwater Sampling Data

Project FRANK WEAR SITE Job No. 17800-23/T-5

Field Rep. KAYLAN SMYTH Date 8/26/2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-24	8/26/14 (12:04)	35.83	13.90			Bladder Pump & Grab	Clear, No Odor	1	18.67	7.47	0.278	103.0	1.26	11:46
								2.5	17.67	8.58	0.321	48.0	0.47	11:50
								5.0	17.48	8.13	0.321	87	0.47	11:57
								7.5	17.37	8.11	0.320	81	0.74	12:00
MW-24 DUP	(12:04)	35.83	13.90			"	"	10.0	17.37	7.96	0.320	84	0.81	12:04
MW-21	(13:51)	35.58	16.80				Very Turbid, No odor No Sheen Became Clear →	1	18.37	8.77	0.357	-17	0.6	13:37
								3.0	17.94	9.21	0.347	-35	0.71	13:42
								5.5	17.92	9.14	0.333	-33	1.31	13:47
								7.5	17.86	9.07	0.326	-27	1.91	13:51
MW-19	(15:36)	93.50	20.75				Slightly Turbid Clear - - - - -	1	17.89	7.52	0.211	62.9	5.95	15:23
								3.0	17.23	8.64	0.208	2.9	4.91	15:27
								5.0	16.78	9.08	0.206	4.5	4.71	15:32
								8.0	16.71	8.77	0.207	33	4.61	15:36
MW-20	(16:46)	34.75	15.79				Clear, No Turbidity	1	18.78	7.34	0.209	75.3	7.01	16:30
								3.0	17.70	8.86	0.212	6.1	8.15	16:37
								6.0	17.78	8.50	0.220	24	7.28	16:41
								9.0	17.57	8.22	0.221	26.2	6.15	16:46
Equip Blank 1	(17:15)													

Hart Crowser, Inc.

Groundwater Sampling Data

Project FRANK WEAR SITE Job No. 17800-23/ T-5

Field Rep. KAYLAN SMYTH Date 8/27/14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-4	8-27-14 (7:29)	35.0	15.0				Slightly ~~Mod~~ Turbid No odor, No sheen	1	17.47	8.93	0.365	-93	5.8	7:17
								4	17.33	9.44	0.365	-115	5.6	7:22
								7	17.34	9.40	0.364	-112	6.2	7:25
								10	17.32	9.20	0.362	-100	6.0	7:29
MW-25	(9.58)	34.92	18.84				Clear, No Odor No Sheen	1	17.54	7.79	0.240	-25	5.5	9:45
								4	16.95	8.62	0.236	-66	4.4	9:50
								7	16.78	8.66	0.224	-64	4.0	9:54
								10	16.78	8.52	0.234	-42	4.0	9:58
MW-22	(10:56)	35.50	14.82				Clear, No Odor No Sheen	1	18.38	7.31	0.307	13	7.32	10:44
								4	17.97	8.19	0.304	-34.2	7.42	10:48
								7	17.95	8.12	0.303	-28	7.63	10:52
								10	17.95	7.96	0.303	-20	7.84	10:56
MW-16	(13:41)	35.00	16.60				Turbid, No Odor No Sheen	1	18.39	7.92	0.280	-87	4.23	13:29
								4	17.50	9.05	0.274	-153	4.4	13:33
								7	17.49	9.45	0.275	-160	4.7	13:37
								10	17.49	9.31	0.274	-155	4.7	13:41
MW-5	(14:33)	35.0	13.84				Turbid, No Odor No Sheen	1	21.36	8.52	0.422	-137	1.74	14:22
								4	19.58	9.79	0.407	-220	1.08	14:26
								7	19.07	9.56	0.403	-233	1.00	14:30
								10	19.22	9.50	0.402	-230	1.10	14:33
MW-7	(17:36)	35.0	14.24				Very Turbid, No Odor Slightly Turbid →	1	19.85	9.24	0.404	-147	4.79	17:24
								4	19.31	10.11	0.412	-193	5.79	17:27
								7	19.69	9.52	0.430	-170	5.11	17:31
								10	19.78	9.48	0.431	-167	5.07	17:34
								12	19.75	9.32	0.432	-154	5.17	17:36

Hart Crowser, Inc.

Groundwater Sampling Data

Project FRANK WEAR SITE Job No. 17800-23 / T-5

Field Rep. KAYLAN SMYTH Date 8/27/2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-6	8/27/14 (18:39)	35.0	14.50				Clear, No Odor No Sheen	1	21.08	7.93	0.441	-62	4.02	18:25
								4	19.28	8.76	0.443	-122	1.6	18:29
								7	18.87	9.59	0.422	-172	1.0	18:33
								10	18.78	9.63	0.424	-163	1.0	18:36
								12	18.79	9.53	0.422	-160	1.0	18.39
MW-2	(19:26)	35.0	13.97				Slightly Turbid Slight Odor No Sheen	2	19.75	8.15	0.551	125	1.36	19:15
								4	19.27	8.87	0.554	-189	4.50	19:20
								6	19.0	8.88	0.543	-191	2.08	19:23
								9	19.01	8.82	0.531	-182	2.60	19:26
Eq. Blank #2	(19:45)													

Hart Crowser, Inc.

Groundwater Sampling Data

Project Frank WEAR SITE Job No. 17800-23/T-5

Field Rep. Kaylan Smyth Date 8/28/2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
MW-8	8/28/14 (6:58)	35.0	14.87				Turbid, No Odor No Sheen	1	18.49	7.97	0.514	-125	2.0	6:48
								4	18.00	8.12	0.511	-140	0.80	6:51
								7	18.02	9.08	0.512	-136	1.00	6:55
								10	18.08	8.04	0.500	-130	0.95	6:58
SPW-15	(7:42)	35.0	14.72				Turbid, No Odor No Sheen	1	17.79	8.54	0.541	-184	3.2	7:32
								4	18.04	8.71	0.506	-180	6.0	7:35
								7	18.20	8.65	0.506	-179	5.8	7:38
								10	18.21	8.70	0.507	-170	5.35	7:42
SPW-14	(8:49)	35.0	15.27				Turbid, No Odor No Sheen	1	18.77	7.41	0.462	-130	3.22	8:39
								4	18.52	7.62	0.461	-144	4.12	8:42
								7	19.59	7.72	0.461	-162	4.55	8:45
								10	18.59	7.85	0.460	-162	4.59	8:49
MW-1	(9:30)	35.0	15.25				~~Clear~~ Slight Turbidity No Sheen, No Odor	1	20.11	7.69	0.477	-140	2.90	9:20
								4	19.11	8.23	0.459	-170	2.12	9:23
								7	18.99	8.38	0.455	-180	2.62	9:26
								10	18.89	8.28	0.453	-172	2.80	9:30
SPW-12	(10:30)	35.0	13.86				Clear, No Sheen No Odor	1	20.05	7.79	0.532	-115	3.11	10:19
								4	18.72	7.70	0.526	-138	5.40	10:23
								7	18.69	7.90	0.520	-140	5.30	10:26
								10	18.71	7.95	0.516	-155	5.19	10:30
SPW-13	(11:08)	35.0	14.78				Slightly Turbid No Odor, No Sheen	1	19.95	7.65	0.414	-120	4.84	10:57
								4	19.91	8.59	0.442	-160	3.89	11:00
								7	19.82	8.50	0.441	-165	2.39	11:04
								10	19.70	8.51	0.441	-164	2.41	11:08

Groundwater Sampling Data

Project FRANK WEAR SITE Job No. 17800-23/T-5

Field Rep. Kaylan Smyth Date 8/28/2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm	ORP mV	DO mg/L	TIME
SPW-13 DUP	8/28/14 (11:08)	35.0	14.78				Slightly Turbid No Odor, No Sheen							
MW-17	(13:11)	93.50	24.21				Turbid, No Sheen No Odor	1	18.96	8.02	0.268	-96	4.58	12:57
								4	18.13	9.30	0.268	-163	3.10	13:01
								7	17.93	9.74	0.257	-189	2.83	13:05
								10	17.91	9.69	0.255	-186	2.87	13:08
								13	17.90	9.66	0.254	-185	2.88	13:11
								~~1~~	~~17.88~~	~~9.51~~	~~0.280~~	~~73~~	~~8.88~~	~~14:19~~
														14:22
														14:26
MW-3	(14:31)	35.0	13.40					1	22.0	7.39	0.290	-73	8.00	~~14:30~~ 14:19
								4	20.0	8.85	0.260	-131	8.77	14:23
								7	19.78	8.89	0.268	-127	8.80	14:26
								10	19.70	8.79	0.267	-113	9.19	14:31
Ext-2	(15:37)					Grab	Clear, lots of Gas in facet							
Ext-3	(15:48)					Grab								

Groundwater Sampling Data

Project FRANK WEAR SITE Job No. 17800 / E-5

Field Rep. KAYLAN SMYTH Date 8/28/14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
EXT-4	16:00													
MW-9	16:47	34.5	20.75				Clear, No Odor No Sheen	1	19.24	8.73	0.439	-191	5.79	16:36
								4	19.26	9.09	0.448	-217	5.46	16:40
								7	19.23	9.09	0.447	-220	4.60	16:43
								10	19.19	9.05	0.447	-217	3.18	16:47
MW-23	17:34	35.58	15.53				Clear, No Odor No Sheen	1	17.85	9.26	0.302	-106	9.41	17:23
								4	17.35	9.25	0.288	-120	9.81	17:27
								7	17.28	9.20	0.300	-116	9.87	17:30
								10	17.15	9.27	0.293	-117	9.70	17:34
MW-10	18:47	35.0	21.86				Slightly turbid, No Odor, No Sheen	1	20.39	8.06	0.425	-125	3.20	18:36
								4	18.71	9.34	0.417	-213	5.37	18:40
								7	18.78	9.37	0.417	-220	5.40	18:43
								10	18.80	9.38	0.417	-214	5.42	18:47
MW-18	19:48	92.0	14.72				Turbid, No Odor No Sheen	1	17.42	8.49	0.213	-98	5.52	19:37
								4	1683	9.82	0.248	-166	5.57	19:40
								7	16.90	9.90	0.248	-160	5.50	19:44
								10	1690	9.85	0.248	-155	5.48	19:48
Eq. Blank #3	20:00													

Ext-1 8/29/2014 (7:40)

Trip Blank 7/31/14 8260/GX/8021/624

HARTCROWSER FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB NO. 17[illegible]0.23 Task 9
FIELD REPORT NO.
PAGE 1 of 1
DATE 9/5/2014
S M T W Th (F) S

JOB Frank Wear
ARRIVAL TIME: 11:00 AM
LOCATION Yakima, WA
DEPARTURE TIME:
CLIENT Dept. of Ecology
WEATHER: Sunny
PURPOSE OF OBSERVATIONS Chemical Addition
HC REP K.S. PHONE 541-990-0658 HC PROJECT MGR. Jill Kiernan
CONTRACTOR / PERMIT NO. /
CONTRACTOR REP. / JOB PHONE /

COMMENTS: 11:00 - Flowrates & Pressure

Katlyn Read gauge

IN-1	1,022,574		12 psi	
IN-2	1,087,225		14 psi	FLOW 1 - 1118172 GAL @ 25 GPM
IN-3	496,724	- OFFLINE	–	
IN-4	526,998	- OFFLINE	–	
EX-1	761,790	525,998	≈ 3 psi	FLOW 3 - 2974760 GAL @ 49 GPM
EX-2	739,403			
EX-3	1,037,185			
EX-4	477,605			

11:30 - Turned System OFF (Ext, Inj)
Started Ethyl Lactate Injection
11:55 - Finished Injection / Rinsed Pumped with Batch Water
12:00 - Started Adding ReducED-Ag
Added 10 Bags (500 lbs)
12:40 - Finished
Allowed 15 minutes For Mixing / dilution, Stirred tank with pvc rod to break up chuncks, dissolved, homogenized
12:55 - Turned the system back ON (Ext, Inj, Mixer)
13:00 - Check condition of Vault 1 & 2. Both are in good condition, No leaking & zero pressure at the vaults
Pressure @ Control Bldg Vault 1 - 12 psi
Vault 2 - 14 psi
13:30 - Left Site

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

HARTCROWSER

FRANK WEAR SITE

DATE 9/17/14 TECH CW

	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
FLOW TOTALS	INJ-1	1154862	1500		
	INJ-2	1217742			
	INJ-3	496724			
	INJ-4	525998			
	EXT-1	822510			
	EXT-2	816968			
	EXT-3	1164330			
	EXT-4	519679			
	INJ Totalizer (Flow 3)	3373735			
	EXT Totalizer (Flow 1)	1470418			

	WELL	DTW	TIME	
GROUNDWATER LEVELS	MW-8	14.43	1254	GW INJ/EXT shut off
	MW-5	14.10	1249	@ 1240
	MW-6	14.97	1251	
	SPW-15	14.37	1302	- parameters measured below.
	MW-18	22.69	1300	
	MW-10	14.68	1259	
	SPW-12	13.75	1301	
	MW-1	15.11	1304	
	MW-9	14.85	1307	
	MW-20	14.93	1311	
	MW-4	14.87	1313	
	MW-3	13.59	1318	- some H2O in vault, Hotel/weather all other vaults dry.
	MW-23	15.90	1322	

NOTES System shutoff @ 1240

Well	EL. ini.	Chase H_2O gallons	Well	EL	Chase
MW-5	5	60	MW-6	2.5	20
MW-7	2.5	20	SPW-15	10	60

- Injections - 35 gallons into batch tank -> - slug injections
- Ethyl Lactate added to batch tank (full) & injected into INJ 1&2 for one full cycle then 500-lbs Reduced-AQ added to batch tank.
- 1000-lbs Reduced-AQ remain on-site, NO Ethyl Lac. remain.

- Parameters of SPW-15 measured:
  - using pool strip; Free Chlorine= 0; Alkalinity= ~240 ppm; pH=6.8; Hardness= ~200
  - using handheld probes; pH=6.38; temp=19.6°C; ORP= -6mV; EC=0.50 mS

HARTCROWSER

FRANK WEAR SITE

DATE 9/29/14 TECH CWM

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1	1263721	0800	1264597	1102
INJ-2	1323627	shut off	1324488	↓
INJ-3	496743		496743	
INJ-4	526013		526013	
EXT-1	875847		876262	
EXT-2	876174		876497	
EXT-3	1260033		1260693	
EXT-4	558355		558629	
INJ Totalizer (Flow 3)	T 350620	↓	T 350620	↓
EXT Totalizer (Flow 1)	T 1770002		T 1772148	

GROUNDWATER LEVELS

WELL	DTW	TIME	
MW-8	14.39	0814	
MW-5	14.09	0807	
MW-6	14.41	0809	-E.L. odor from well
SPW-15	14.32	0825	-E.L. odor from well
MW-18	21.82	0820	
MW-10	14.48	0817	
SPW-12	13.73	0822	
MW-1	14.94	0830	-Needs 2" Locking Cap
MW-9	14.65	0833	
MW-20	14.75	0837	
MW-4	14.72	0839	
MW-3	13.50	0844	
MW-23	16.01	0848	

NOTES
- System shut off @ 0800/tank full, restarted @0910
- INJections - 5-gallons of ReleaseEDX & 500-lbs ReducED-AQ into batch tank (full) within the same batch.
  -500-lbs ReducED-Aq remain on-site.
- From an Email from Jason S. (9/25/14) system was shutdown for ~12hrs due to alarms.
- Placed additional sealant (tar) across two seams on the roof of the GTS
- INJ totalizer is not working. Flow rate reads 0.0 during inj., totalizer not moving. pulse light not working as in Ext totalizer. (blinking)
- Ext-2 Sampled for VOCs & TOC (10:52)

Handheld probes

Reading	ORP	EC	pH	Temp	Notes
1	99mV	0.40mS	6.90	16.4°C	initial reading
2	-24mV	0.40mS	7.10	16.9°C	after pump run through cycles.

Fedex Tracking # 798-9196

HARTCROWSER

FRANK WEAR SITE

DATE 10/26/14 TECH

FLOW TOTALS

WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
INJ-1	1398512	0910	1399504	1520
INJ-2	1477099		1475530	
INJ-3	496768		497835	
INJ-4	526051		527806	
EXT-1	954763		955664	
EXT-2	944197		945199	
EXT-3	1390929		1393454	
EXT-4	606630		607530	
INJ Totalizer (Flow 3)	3506327		3512263	
EXT Totalizer (Flow 1)	2157131		2161299	

GROUNDWATER LEVELS

WELL	DTW	TIME	
MW-8	15.11	0929	
MW-5	14.49	0923	
MW-6	15.56	0926	
SPW-15	15.08	0933	
MW-18	15.64	0930	
MW-10	22.73	0940	
SPW-12	14.14	0942	
MW-1	15.87	0945	
MW-9	15.62	0947	
MW-20	16.05	0951	
MW-4	15.57	0954	
MW-3	14.20	0959	
MW-23	16.98	1002	

NOTES 0900 Repair Flow 3 which has not been working (Not registering flow)
Replaced Flow 3 paddle wheel & bearings (Plastic screws) ~~from~~ w/ hardware
From Flow 2 sensor (Not currently used). Flow paddle wheel was clogged w/
bio fowl material / unable to spin. once cleaned up & replaced I noticed the
bearings were a little rough so I replaced those were replaced as well
0900 - Turned all inj wells on. (previously only INJ 1 & 2 were on)
1345 - Ext-2 sample collected
1400 - Fedex Truck arrives w/ delivery of 2 totes of Nervan Zone
1415 - Begin injections into batch tank w/ all EXT & INT wells running on Auto
1515 - Stop injection 2 totes injected ~540 gallons

INJ	1	10.2 gpm	7psi	3	10.8 gpm 7psi
	2	15.5 gpm	6psi	4	20.0 gpm 5psi

HARTCROWSER

FRANK WEAR SITE

DATE 11-17-14 TECH Kaylan Smyth

FLOW TOTALS	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
	INJ-1	1491684.3	09:40		
	INJ-2	1582131.9	09:41		
	INJ-3	555843.5	09:41		
	INJ-4	641021.0	09:42		
	EXT-1	1048421.8	09:42		
	EXT-2	1067540.4	09:43		
	EXT-3	1508611.4	09:43		
	EXT-4	664126.6	09:44		
	INJ Totalizer (Flow 3)	39378385	09:45		
	EXT Totalizer (Flow 1)	2550361.00	09:45		

GROUNDWATER LEVELS	WELL	DTW	TIME	
	MW-8	18.11	13:38	
	MW-5	15.83	13:28	
	MW-6	18.59	13:33	
	SPW-15	18.21	13:46	
	MW-18	24.53	13:51	
	MW-10	18.88	13:49	
	SPW-12	15.42	14:10	
	MW-1	17.11	14:01	
	MW-9	17.14	14:05	
	MW-20	19.84	13:12	
	MW-4	18.71	13:00	
	MW-3	18.06	12:37	
	MW-23	20.75	13:25	

NOTES

WATER LEVEL MEASUREMENTS

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23-T9

Field Rep. Kaylan Smyth Date 11-17-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter / Time	T °C / Depth (ft)	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
							MW-24	12:15	18.00					
							MW-21	12:28	20.01					
							MW-25	12:33	19.54					
							MW-3	12:37	18.06					
							MW-22	12:41	19:11					
							MW-4	13:00	18.71					
							MW-19	13:10	23.54					
							MW-20	13:12	19.84					
							MW-17	13:16	27.32					
							MW-16	13:19	20.52					
							MW-23	13:25	20.75					
							MW-5	13:28	15.83					
							MW-7	13:30	17.33					
							MW-6	13:33	18.59					
							MW-2	13:36	16.98					
							MW-8	13:38	18.11					
							SPW-15	13:46	18.21					
							MW-10	13:49	18.88					
							MW-18	13:51	24:53					
							SPW-14	13:59	16.75					
							MW-1	14:01	17.11					
							MW-9	14:05	17.14					
							SPW-12	14:10	15:42					
							SPW-13	14:13	17.53					

Groundwater Sampling Data

Project FRANK WEAR Job No. 17800-23 T9

Field Rep. Kaylan Smyth Date 11-17-2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC (mS/cm) (mS/cm°)	ORP mV	DO mg/L	TIME
MW-24	11-17-14 15:51					Bladder Pump/ (Geotech 1.66 SS 18) QED MP50 Controller/ Compresser Low Flow	Clear, No Sheen, No Odor,	1	15.79	7.35	0.250	144	3.60	15:36
								2	16.34	7.25	0.248	147	1.85	15:40
								3	16.50	7.22	0.248	146	1.20	15:44
								7	16.20	7.22	0.248	140	0.76	15:51
DUP-1	11-17-14 15:51							1						
MW-22	11-18-14 8:20					Pump Settings ≈ 30 psi 113, 5/10, 6 oz Per Purge →	Clear, No Sheen, No Odor →	1	14.02	7.60	0.229	155	7.00	8:05
								3	15.83	7.19	0.237	165	4.56	8:10
								5	16.47	7.11	0.241	169	4.06	8:15
								7	16.50	7.10	0.240	170	4.10	8:20
MW-21	11-18-14 9:15						Clear, No Sheen Sulfer, Purge 3 oz / 110 6.5/8.5	1	14.91	7.36	0.242	-117	3.59	9:00
								3	14.92	7.36	0.241	-115	3.29	9:05
								4	15.11	7.35	0241	-114	2.29	9:10
								5	15.36	7.32	0.241	-112	1.55	9:15
MW-25	11-18-14 10:20						Slightly turbid, Gray Sulfer, No Sheen Bubbles in Line, Slow Purge Purge 2 oz 110 6.5/8.5	1	15.01	7.36	0.364	~~46~~	3.72	10:05
								2	15.12	7.32	0.353	~~60~~	4.64	10:10
								3	15.53	7.32	0.344	~~58~~	3.90	10:15
								4	15.66	7.32	0.342	~~58~~	5.6	10:20
MW-16	11-18-14 11:36						Clear, No Sheen No Odor, Some bubbles in Line Purge 3 oz 113 5/10 20psi Refill/Discharge Time	2	14.50	7.66	0.253	39	7.6	11:25
								3	14.63	7.61	0.254	40	6.26	11:28
								4	14.71	7.56	0.254	45	6.05	11:32
								5	14.70	7.55	0.256	46	6.0	11:36

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23 T9

Field Rep. Kaylan Smyth Date 11/18/14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
MW-17	11-18-14 12:32					Optical Sensor For DO Not Working-Switched Sensor	Turbid, Gray/White, No sheen, No odor	1	12.84	7.60	0.216	41	4.55	12:16
								3	13.72	7.76	0.241	20.3	4.40	12:24
								4	14.01	7.75	0.248	20.9	3.41	12:28
							Purge 3oz 113 5/10 42psi	5	13.96	7.73	0.250	22.9	3.13	12:32
MW-23	11-19-14 14:18						Clear, No sheen No Odor	1	15.18	7.08	0.250	112	8.44	14:07
								2	15.27	6.96	0.250	117	8.43	14:10
								3	15.32	6.87	0.247	122	8.24	14:14
							Purge 4oz 113 5/10 20psi	4	15:16	6.85	0.246	123	8.19	14:18
MW-19	11-18-14 15:36						Turbid, White, ~~slightly~~ KS ~~Red~~, Gray, No sheen No Odor	4	14:43	7.96	0.191	75	0.68	15:27
								5	14:36	7.95	0.191	74	0.66	15:30
								6	14:35	7.93	0.191	74	1.03	15:33
							Purge 3oz 113 5/10 40psi	7	14:37	7.93	0.191	73	0.66	15:36
MW-20	11-19-14						Clear, No sheen, No Oder	1	12.12	7.44	0.208	117	0.99	6:52
								2	13.83	7.24	0.224	130	0.71	6:57
								3	13.52	7.21	0.220	140	0.53	7:00
							Purge 3oz 113 5/10 20psi	4	13.79	7.24	0.225	145	0.20	7:05
MW-5	11-19-14 8:11						Clear, No sheen Sulfer, White particles/Floc	1	9.67	6.83	0.330	-59	1.12	7:58
								2	12.90	6.89	0.364	-61	1.06	8:02
								3	15.30	6.95	0.430	-71	0.80	8:05
								4	15.35	6.92	0.439	-71	0.93	8:08
								5	15.4	6.92	0.445	-71	0.89	8:11

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23-19

Field Rep. KAYLAN SMYTH Date 11-19-2014

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
MW-7	11-19-14 9:09					Slow Recharge Purge: Variable ≈3.0oz 113 5/10	Slightly Turbid, grey, No Sheen Sulfer, White particles/Floc, Bubbles in Line / Pump Clogged	1	13.50	7.11	0.597	-67	1.11	8:59
								2	15.30	7.09	6.582	-62	1.14	9:03
								3	15.02	7.09	0.579	-60	1.32	9:06
								4	15:00	7.10	0.580	-61	1.17	9:09
MW-2	11-19-14 10:45					Purge: 3oz 109 7/8	Clear, No Sheen No Odor	1	15.62	6.71	0.428	-30	1.12	10:30
								2	16.13	6.76	0.433	-42	0.79	10:33
								3.5	15.52	6.68	0.428	-32	1.16	10:38
								5	15.16	6.63	0.425	-27	0.89	10:45
EQB-1	11-19-14 11:03						DI water from HC Lab - Bear.	1	11:00					
MW-6	11-19-14 12:03					4oz 110 6.5/8.5	Clear, No Sheen No Odor	1	14.60	6.95	0.211	69	0.83	11:53
								2	15.48	6.86	0.219	74	0.98	11:57
								3	16.00	6.81	0.225	80	1.00	12:00
								4	16.20	6.80	0.227	82	0.96	12:03
MW-8	11-19-14 12:50					≈3oz 110 6.5/8.5	Clear, No Color, white Floc, No Sheen Sulfer odor	1	14.09	6.58	0.535	8.0	0.33	12:41
								2	14.95	6.57	0.550	-11	0.83	12:44
								3	15.78	6.58	0.566	-21	0.97	12:47
								4	16.15	6.59	0.574	-26	0.48	12:50
SPW-15	11-19-14 14:41		AT 82' (Previous of white floc Raise to 25'—		tubing length)	Very low pH, High ORP Lots (3.5) (200) Clear, some Floc - Ave pH, ORP Sulfer, No Sheen	→	1	15.31	6.26	0.501	30	0.66	14:30
								2	15.43	6.37	0.504	-10.5	0.86	14:34
								3	15.47	6.41	0.507	-16.0	.98	14:37
						3oz 110 6.5/8.5 20psi		4	15.49	6.44	0.509	-19.0	1.12	14:41

Hart Crowser, Inc.

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23 T9

Field Rep. Kaylen Smyth Date 11-19-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
MW-10	11-19-14 15:48					@ 30' 3oz, 103, 10.0/5.0 20psi	Clear, No Odor No sheen, Bubbles in line even @ slowest discharge rate	2	12.50	7.45	0.501	-28	1.11	15:36
								3	12.70	7.41	0.528	-25	0.89	15:40
								4	12.99	7.39	0.534	-23	0.90	15:44
								5	13.13	7.40	0.537	-24	0.87	15:48
EXT-1	11-19-14 16:56							1	15.35	7.72	0.304	22.9	1.13	16:48
								2	15.71	7.52	0.303	32.7	0.96	16:53
								3	15.52	7.53	0.304	32.0	0.92	16:56
MW-3	11-20-14 7:24					Purge 4oz 113 5/10 20psi	Clear, No Odor No Sheen	1	14.96	6.38	0.208	201	0.20	7:13
								2	15.55	6.43	0.216	195	0.23	7:17
								3	15.92	6.54	0.222	189	0.51	7:20
								4	16.07	6.59	0.225	187	0.50	7:24
MW-4/ Ext-8	11-20-14 8:30						Clear, No Odor No Sheen, Some very fine sediment particles	1	8.36	6.88	0.206	172	0.79	8:18
								3	12.52	6.76	0.238	165	1.08	8:24
								4	14.27	6.74	0.248	161	0.85	8:27
								5	14.99	6.75	0.250	160	0.50	8:30
MW-18	11-20-14 9:42					Purge 4oz 113 5/10 40 psi	Slightly Turbid, white, cloudy No Odor, No Sheen tube inlet at 86'	3	13.14	7.61	0.187	107	1.05	9:30
								5	13.28	7.68	0.189	102	0.86	9:34
								7	13.56	7.75	0.190	95	1.40	9:38
								9	13.64	7.80	0.191	90	0.89	9:42
SPW-12	11-20-12 10:55					Purge 3oz 110 6.5/8.5 20psi	Clear, Sulfer, No Sheen, Bubbles in line, difficult to dial in pump	1	13.45	6.79	0.372	-55	0.82	10:32
								3	14.31	6.75	0.382	-76	0.83	10:44
								4	15.72	6.90	0.396	-86	0.96	10:48
								5	14.90	6.85	0.316	-82	1.07	10:55

Groundwater Sampling Data

Project Frank Wear — Job No. 17800-23 T9

Field Rep. Kaylan Smyth — Date 11-20-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
SPW-13	11-20-14 (12:21)					Purge: 108, 20 psi 2oz 7.5/7.5	Slightly Turbid White Color Sulfur, No Sheen	2	15:35	6.50	0.372	-43	0.49	12:09
								3	14.33	6.42	0.365	-37	0.39	12:13
								4	14.43	6.38	0.366	-36	0.22	12:17
								5	14:45	6.40	0.372	-34	0.41	12:22
DUP-2 (SPW-13)	11-20-14 12:40					4 "	" "	3	15					
SPW-14	11-20-14 (13:40)					At sample time, Turbid, Gray, Black & white Floc. Purge 108 7.5/7.5 20 psi	Very Turbid, Black Color, Strong Sulfer Sheen Fine Black particles	3	15.86	6.35	0.569	-75	0.48	13:29
								4	15.75	6.40	0.596	-85	0.48	13:33
								5	15.64	6.40	0.595	-85	0.82	13:36
								6	15.60	6.40	0.595	-83	0.60	13:40
MW-1	11-20-14 (14:26)					111 619 22 psi	Clear, Slight Sulfur, No Sheen	1	13.45	6.72	0.493	-37	0.58	14:15
								2	15.76	6.73	0.498	-50	0.68	14:19
								3	16.04	6.74	0.492	-53	0.63	14:23
								4	16.39	6.74	0.495	-54	0.79	14:26
EXT-4	(15:10)					GRAB	Clear, Sulfer, No Sheen, Some floc (White)	1	15.47	7.40	0.298	-45	1.33	15:03
								2	15.41	7.32	0.298	-47	1.02	15:07
								3	15.36	7.30	0.297	-45	0.83	15:10
MW-9	(15:27)					113 22 4oz 5/10 psi	Clear, Slight Sulfur, No Sheen Some Floc (Very Little)	1	14.34	6.91	0.379	-46	1.17	15:15
								2	15.12	6.87	0.401	-61	0.65	15:19
								3	16.06	6.86	0.417	-66	0.80	15:23
								4	16.28	6.87	0.420	-69	1.12	15:27

Groundwater Sampling Data

Project Frank Wear Job No. 17800-23 T9

Field Rep. Kaylan Smyth Date 11-20-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME
EXT-3	11-20-14 ~~(16:00)~~ 16:09					2 Grab Samples ↓	Clear, Sulfur Smell, Very few floc particulates	~~1~~	~~15.94~~	~~7.30~~	~~69 0.356~~	~~69~~		~~16:00~~
								1	16.77	7.24	0.428	-62	0.94	16:00
								2	16.50	7.20	0.420	-62	0.93	16:04
								3	16.57	7.24	0.430	-63	0.92	16:09
EXT-2	11-20-14 16:30						Clear, Sulfur Very few floc particulates	1	16.31	7.36	0.340	-40	0.85	16:20
								2	16.50	7.40	0.340	-41	0.86	16:25
								3	16.35	7.38	0.339	-40	0.87	16:30

Hart Crowser, Inc.

JOB NO. 17800-23 T9

FIELD REPORT NO.

PAGE _____ of _____

DATE 11/17/2014

S (M) T W Th F S

HARTCROWSER FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB Frank Wear

ARRIVAL TIME: 09:40

LOCATION Yakima, WA

DEPARTURE TIME: 17:00

CLIENT Ecology

WEATHER: Clear

PURPOSE OF OBSERVATIONS GW Monitoring

HC REP Kaylan Smyth PHONE _____ HC PROJECT MGR. Jill Kiernan

CONTRACTOR ✓

PERMIT NO. ✓

CONTRACTOR REP. ✓

JOB PHONE ✓

COMMENTS: 09:40 - HC Rep (KS) arrives onsite / collects system flow data / inspects batch tank

- System appears to be fully functional, No signs of freezing in the batch tank

09:50 - Started Opening Well Lids

11:30 - Finished opening well lids, went to Lunch

12:00 - HC Rep. back onsite - starting to measure water levels

14:30 - Finished Measuring wells - Starting to purge/sample wells

16:00 - Finished sampling MW-24.

17:00 - HC Rep Offsite

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE HART CROWSER PROJECT MANAGER CONTRACTOR REPRESENTATIVE

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

FIELD REPORT

JOB NO. 17800-23
FIELD REPORT NO.
PAGE ____ of ____
DATE 11-18-2014
S M (T) W Th F S

JOB Frank Wear
LOCATION Yakima, WA
CLIENT Ecology
PURPOSE OF OBSERVATIONS GW Monitoring
HC REP Kaylan Smyth PHONE ____ HC PROJECT MGR. Jill Kiernan
CONTRACTOR — PERMIT NO. —
CONTRACTOR REP. — JOB PHONE —

ARRIVAL TIME: 07:00
DEPARTURE TIME: 17:00
WEATHER: Clear, Cold

This report presents opinions formed as a result of our observation of the contractor's activities relating to geotechnical engineering. We rely on the contractor to comply with the plans and specifications throughout the duration of the project irrespective of the presence of the Hart Crowser representative. The presence of our field representative will be for the purpose of providing observation and field testing. Our work does not include supervision or direction of the actual work of the contractor, nor the contractor's employees and agents. Neither the presence of our representative nor the observation and testing by our firm shall excuse the contractor in any way for defects discovered in the contractor's work. Our firm will not be responsible for job or site safety on this project. The conclusions and recommendations of this field report are subject to review by the Hart Crowser Project Manager.

COMMENTS: 07:00 - HC Rep arrives onsite, prepares for gw sampling

- MW-25 - The length of tubing for MW-25 is far to long, Very Murkey - Shortened Length so sample point is within the screen

10:00 - Replaced Batteries on YSI, Repaired Flow-Cell

13:00 - Went to Lunch - Called FedEx For Tomarrow Pickup

16:30 - Began sampling at MW-20 ~ Batteries died on QED Pump Controller

17:00 - HC Rep offsite

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

JOB NO. 17800-23 -T9

FIELD REPORT NO.

PAGE _____ of _____

DATE 11-19-2014

S M T (W) Th F S

HARTCROWSER FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB FRANK WEAR

ARRIVAL TIME: 06:00

LOCATION Yakima, WA

DEPARTURE TIME: 17:30

CLIENT Ecology

WEATHER: Cold, Clear

PURPOSE OF OBSERVATIONS GW Monitoring

HC REP Kaylen Smyth PHONE _____ HC PROJECT MGR. Jill Kiernan

CONTRACTOR ✓ PERMIT NO. ✓

CONTRACTOR REP. ✓ JOB PHONE ✓

COMMENTS: 06:00 - HC Rep arrives onsite - preps for the day and begins sampling @ MW-20.

+ MW-7 was given extra time to purge, because it was very turbid - Lots of white floc - clogged pump screen
+ MW-10 had significant bubble in the line during purge - tried multiple pressures & flowrates, but could never get rid of bubbles

13:30 - FedEx picked up ~~Bottle~~ KS sample shipment for express delivery

17:30 - HC Rep offsite

BY: REVIEWED BY: I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE HART CROWSER PROJECT MANAGER CONTRACTOR REPRESENTATIVE

JOB NO. 17800-23 T9

FIELD REPORT NO.

PAGE _____ of _____

DATE 11-20-14

S M T W (Th) F S

HARTCROWSER FIELD REPORT

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Fax: 503.620.7284
Tel: 503.620.6918

JOB FRANK WEAR

ARRIVAL TIME: 06:00

LOCATION Yakima, WA

DEPARTURE TIME: 17:30

CLIENT Ecology

WEATHER: Clear, Cold

PURPOSE OF OBSERVATIONS GW Monitoring

HC REP KARAN SMYTH PHONE _____ HC PROJECT MGR. Jill Kiernan

CONTRACTOR ✓

PERMIT NO. ✓

CONTRACTOR REP. ✓

JOB PHONE ✓

COMMENTS: 06:00 - HC Rep onsite - Prep & Begin Sampling

12:00 - Jason Shira arrives onsite

12:30 - FEDEX picks up samples for express delivery

16:30 - Finish collecting samples

- HC Rep inspects the overall system - Batch tank Heater appears to be working, the thermostat heating cable is functional

17:30 - HC Rep offsite

BY: _____ REVIEWED BY: _____ I have read and understand the content of this Field Report

HART CROWSER REPRESENTATIVE | HART CROWSER PROJECT MANAGER | CONTRACTOR REPRESENTATIVE

HARTCROWSER

FRANK WEAR SITE

DATE 12-23-14 TECH KS

	WELL	INITIAL GALLONS	TIME	FINAL GALLONS	TIME
FLOW TOTALS	INJ-1	1572718.9	10:30	1573192.0	14:43
	INJ-2	1689163.8	10:30	1689756.3	14:43
	INJ-3	647758.3	10:31	648286.5	14:44
	INJ-4	738750.9	10:31	739250.1	14:44
	EXT-1	1136922.2	10:32	1137365.1	14:45
	EXT-2	1214437.5	10:32	1215133.9	14:45
	EXT-3	1591574.5	10:33	1591848.9	14:46
	EXT-4	712096.8	10:33	712264.0	14:46
	INJ Totalizer (Flow 3)	4359948.50	10:34	4362159.50	14:47
	EXT Totalizer (Flow 1)	2798456.00	10:34	2799339.75	14:47

	WELL	DTW	TIME	
GROUNDWATER LEVELS	MW-8	21.22	11:22	
	MW-5	17.30	11:14	
	MW-6	21.83	11:19	
	SPW-15	20.93	11:25	
	MW-18	25.83	11:30	
	MW-10	21.90	11:28	
	SPW-12	16.39	11:35	
	MW-1	18.80	11:48	
	MW-9	19.72	11:51	
	MW-20	22.17	11:55	
	MW-4	22.20	12:00	
	MW-3	21.34	12:02	
	MW-23	23.65	12:05	

NOTES 10:00 - HC Rep (Kaylon Smyth) arrives on site & collects flow data

10:40 - Opened all well lids & caps to allow gw to equilibrate

11:20 - Begin measuring gw depths

12:05 - Begin measuring field parameters / sampling @ Extraction wells

14:15 - Finished sampling wells

14:40 - Collected flow data / Removed some gabage offsite

15:15 - HC Rep offsite

Groundwater Sampling Data

Project Frank Wear Job No. 17800-00 T

Field Rep. KAYLAN SMYTH Date 12-23-14

WELL NUMBER	DATE (TIME)	WELL DEPTH IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	METHOD OF SAMPLING	COMMENTS	Liter	T °C	pH mV	EC mS/cm (mS/cm°)	ORP mV	DO mg/L	TIME	YSI DO Do mg/L
Ext-1	12.23.14 (12:30)					Grab YSI 6820 (T, pH, Ec, ORP, DO) YSI Pro DO (DO)	Clear, slight Sulfer Odor	1	16.74	7.40	0.252	186	6.35	12:20	5.7
								2	16.75	7.09	0.292	200	7.50	12:25	6.8
								3	16.38	7.34	0.271	190	9.96	12:30	7.4
Ext-2	12.23.14 (13:20)						Clear, Bubble in line, strong Sulfer Odor Bubble form in VOAs Over 100% Do	1	16.44	7.40	0.339	180	NA	13:10	10.5
								2	16.98	7.44	0.343	178	9.04	13:15	10.5
								3	16.90	7.39	0.340	178	9.00	13:20	10.5
Ext-3	12.23.14 (13:55)						Clear, Bubbles in Line, Sulfer Some white Floc	1	16.30	7.46	0.429	110	8.20	13:45	7.94
								2	16.34	7.36	0.437	59	3.48	13:50	3.8
								3	16.34	7.40	0.431	57	3.30	13.55	3.76
Ext-4	12.24.12 (14:10)						Clear, Bubbles in Line, Slight Sulfer	1	16.52	7.57	0.394	60.7	10.23	14:00	10.3
								2	16.29	7.55	0.306	22.4	6.35	14:05	5.66
								3	15.95	7.63	0.301	10.3	5.92	14:10	5.94

Hart Crowser, Inc.

APPENDIX B
Quality Assurance Review and Analytical Laboratory Reports

APPENDIX B
Quality Assurance Review

This appendix documents the results of a quality assurance (QA) review of the analytical data for samples collected for the groundwater remediation system (GRS) performance monitoring and quarterly groundwater monitoring events during 2014. TestAmerica Laboratories, Inc. (TA) of Tacoma, Washington, under subcontract to Hart Crowser, performed all of the groundwater chemical analyses with the exception of ethene/ethane/methane. These analyses were performed by TA's Canton, Ohio, laboratory. Copies of the analytical laboratory reports are included in this appendix.

Table 1 below provides a description of the GRS performance and groundwater monitoring events, including dates, wells sampled, and analytical methods performed on the samples.

Table 1 – GRS Performance and Groundwater Monitoring

Date	Monitoring Type	Wells Sampled	Analytical
January 27 – 30, 2014 (Pre-GRS Startup)	Quarterly Groundwater Monitoring	All monitoring wells	VOCs
		MW-3, MW- 9, MW-10, MW-18, MW-23	Bioremediation parameters and ethene/ethane/methane
April 10, 2014	System Performance	EXT-2	VOCs, TOC
May 12 -15, 2014	Quarterly Groundwater Monitoring	All monitoring wells	VOCs
		MW-3, MW-9, MW-10, MW-18, MW-20, MW-23	Bioremediation parameters and ethene/ethane/methane
		EXT-2	VOCs, TOC
July 14, 2014	System Performance	EXT-2	VOCs, TOC
July 24, 2014	System Performance	EXT-1, EXT-2, EXT-3, EXT-4	VOCs, TOC
August 25 - 28, 2014	Quarterly Groundwater Monitoring	All monitoring and extraction wells	VOCs
		MW-3, MW-7, MW-8, SPW-12, MW-9, MW-10, MW-18, MW-20, MW-23	Bioremediation parameters and ethene/ethane/methane
		EXT-2	Bioremediation parameters
September 29, 2014	System Performance	EXT-2	VOCs, TOC
October 16, 2014	System Performance	EXT-2	VOCs, TOC
November 17 - 20, 2014	Quarterly Groundwater Monitoring	All monitoring and extraction wells	VOCs
		MW-3, MW-7, MW-8, SPW-12, MW-9, MW-10, MW-18, MW-20, MW-23	Bioremediation parameters and ethene/ethane/methane
		EXT-2	Bioremediation parameters
December 23, 2014	System Performance	EXT-1, EXT-2, EXT-3, EXT-4	VOCs, TOC

VOCs = volatile organic compounds
Bioremediation parameters = nitrate, sulfate, total organic carbon (TOC), chloride.

The QA review included examination and validation of the laboratory summary reports, including:

- Analytical methods;
- Reporting limits;
- Sample holding times;
- Custody records;
- Surrogates, spikes, and blanks;
- Initial and continuing calibration verification; and
- Field and laboratory duplicates.

The QA review did not include a review of raw data.

1.0 Analytical Methods and Reporting Limits

The analytical methods and method reporting limits used in the sample analyses for 2014 are described below.

1.1 Analytical Methods

Groundwater samples collected from the extraction and monitoring wells were analyzed for VOCs by EPA Method 8260B. Bioremediation parameters were analyzed on select samples. Nitrate, sulfate, and chloride were analyzed by Method 300.0; methane, ethane, and ethene by Method RSK-175, and TOC by Method 415.1/5310C.

1.2 Method Reporting Limits

Method reporting limits (MRLs) are set by the laboratory and are based on instrumentation abilities, sample matrix, and suggested detection limits by the EPA or the Department of Ecology. In some cases, the MRLs are elevated because of high analyte concentrations in the samples, matrix interferences, or insufficient sample volumes. MRLs are generally consistent with industry standards and below promulgated standards (if not elevated as discussed above).

The MRLs for EPA Method 8260B for the chlorinated volatile organic compounds (cVOCs) were generally at 1.0 microgram per liter (µg/L) for the samples collected in January 2014. The MRLs for the cVOCs were generally at 0.1 µg/L for the April, May, July 14, and December 2014 sampling events. The July 24, 2014, sampling event had MRLs at 25 µg/L for the cVOCs. For the August 2014 sampling event, the cVOC MRLs for most of the samples were 0.1 µg/L, except for the extraction wells with high cVOC concentrations that had MRLs elevated to 100 µg/L. For the September and October 2014 sampling events, the MRLs were elevated to 50 µg/L and 250 µg/L, respectively, for the cVOCs. For the November 2014 event, the MRLs ranged between 0.1 and 5.0 µg/L.

2.0 Data Quality Assurance

Data quality is indicated by assessing the completeness, representativeness, accuracy, precision, and comparability of the data. An evaluation of the data follows.

2.1 Completeness

Completeness is defined as the percentage of measurements made that are judged to be valid. The completeness goal is essentially that a sufficient amount of valid data be generated to meet the objectives of the monitoring (i.e., assess groundwater conditions and progress of the GRS operation). Sixteen laboratory reports were received and are included in this appendix. The data completeness for the samples is 100 percent for all requested analyses.

2.2 Representativeness

Representativeness is a measure of how closely the results reflect the actual concentration of the parameters in the medium sampled. It is not possible to measure this directly; therefore, representativeness is controlled and ensured by using standard protocols for sample handling and custody, analyzing samples within prescribed holding times, and analyzing blank samples.

2.2.1 Sample Handling and Custody

Hart Crowser collected samples in general accordance with industry standards. These included requirements for collection, containers, labeling, packaging, shipping, and storage. Compliance with these procedures has been documented on chain-of-custody forms. Copies of the chain-of-custody forms are included with the laboratory reports.

2.2.2 Holding Times

Collection dates for all samples submitted are documented on the chain-of-custody forms. Collection and analysis dates are indicated in the laboratory report. Holding times required by EPA Contract Laboratory Program (CLP) protocols were met for all applicable analyses for all water samples collected except for the nitrate samples collected from EXT-2 and MW-9 during the November sampling event. The laboratory had insufficient time to analyze these samples within the 48-hour holding time once the samples were received.

2.2.3 Sample Quality

All samples were collected in general accordance with industry standards. For the cVOC water samples, the sample jars and containers were fully filled, leaving no observed headspace.

For the August 2014 event, one of three of the sample vials for MW-16 and MW-22 were received broken by the lab. These vials were not used by the lab.

2.2.4 Blanks

Blanks are analyzed to check for the possibility that the sample may become contaminated during sample collection and handling (field or equipment blanks), transport (trip blanks), or the analysis

process (method blanks). Method blanks were analyzed for VOCs, ethene/ethane/methane, nitrate, sulfate, chloride, and TOC for each batch of samples submitted for these analyses.

No analytes were detected in the method blanks, trip blanks, or equipment blanks for the 2014 sampling events, except for the following:

- For the January 2014 event, sample batches 153054, 153117, and 152941 contained hexachlorobutadiene above the reporting limit in the method blanks for the VOCs analyses. None of the samples associated with these method blanks contained the target compound, therefore, re-extraction and/or re-analysis of samples was not performed.
- For the April 10 sampling event, the method blank for VOCs contained tetrachloroethene (PCE) above the MRL. Associated samples were not re-extracted or re-analyzed because results were greater than 10 times the value found in the method blank.
- For the May sampling event, sample batch 159275 contained PCE in the VOCs method blank above the MRL. The samples from this batch were re-analyzed for PCE and most of them required dilution. Also, the trip blank contained PCE above the MRL due to instrument contamination from very hot samples in the previous run. PCE was also detected in one of the two equipment blank samples.
- For the August sampling event, chloroform and *cis*-1,2-dichloroethene (DCE) were detected in two of the three equipment blanks. PCE was detected in one of the equipment blanks and toluene was detected in another equipment blank.
- Toluene was detected in one of the equipment blanks for the November 2014 sampling event.

2.3 Accuracy

Accuracy is the closeness of agreement between the measured value and the true or expected value, and is assessed by the following.

2.3.1 Surrogates

A surrogate is a compound added to each sample and to batch QA samples which is similar in composition and behavior to the target analytes, but is not normally found in samples. The surrogate analysis assesses the accuracy of a chemical measurement by comparing the measured value to the actual spiked value. Up to five surrogates are typically added to each sample for VOCs analyses.

Surrogates analyzed by TA for each of the EPA Method 8260B VOCs analyses included 4-bromofluorobenzene, toluene-d8, trifluorotoluene, dibromofluoromethane, and 1,2-dichoroethane-d4. The surrogate recoveries for all five surrogates were within the acceptable range of surrogate recovery control limits for the VOC analyses for all sampling events, with the following exceptions:

- The surrogate recovery of trifluorotoluene for VOC analyses of the MW-1, MW-2, MW-5, MW-9, SPW-12, SPW-14, and SPW-15 samples from the May 2014 event was outside the upper control limit. Evidence of matrix interference was present in MW-5. The remaining samples did not contain the surrogate more than the reporting limit. Therefore, re-extraction and re-analysis of these samples were not performed.

For the ethene/ethane/methane analyses by Method RSK-175, the surrogate analyzed was 1,1,1-trifluoroethane. The surrogate recoveries for this compound were within the acceptable range of surrogate recovery control limits for all samples that were analyzed by Method RSK-175, except for the following:

- The surrogate recovery of 1,1,1-trifluoroethane for the RSK-175 analysis in the method blank and lab control sample was outside the acceptable range of recovery control limits for sample batch 159321 of the November 2014 samples. The recoveries of 1,1,1-trifluoroethane in both samples were above the upper recovery range limit. The surrogate recoveries in the original sample were within acceptable criteria.
- The surrogate recovery of 1,1,1-trifluoroethane for the RSK-175 analysis of the SPW-12 sample for the November 2014 sampling event was outside the acceptable recovery range control limits. The recovery of 1,1,1-trifluoroethane in the sample was above the upper recovery range limit. Because the target analyte recoveries were consistent with established calibration curves, the samples were qualified and the data reported.

2.3.2 Matrix Spike Samples

Matrix spike (MS) analyses are performed on the water samples submitted to the laboratory to assess the potential for matrix interference with recovery or detection of the constituents of interest and the accuracy of the determination. The MS sample is spiked with known quantities of the constituents of interest and analyzed, then the results compared to the expected result. These results are reported as percent recovery. One MS is typically analyzed for each sample batch delivered to the laboratory.

The following MS samples were analyzed for the 2014 sampling events:

- MS samples were analyzed for nitrate, sulfate, and chloride for the samples collected in January, May, and August 2014. The MS recoveries for each of these analytes were within their respective acceptable recovery ranges.
- MS samples were analyzed for TOC for the samples collected in April 2014. The MS recoveries were within the acceptable ranges for this analyte.
- For the July 14 and 24, 2014, events, MS samples were analyzed for TOC and the MS recoveries for both samples were within the acceptable range.
- MS samples were analyzed for VOCs and TOC for the September 29, 2014, event. The MS recoveries for PCE in both sample batches 30955 and 31094 were outside the acceptable recovery range limits. The PCE concentration in the MS sample was less than the lower limit of the recovery range. PCE was detected in the original sample at a concentration greater than four times the MS concentration; therefore, the control limits were not applicable.
- For the October 16, 2014, event, MS samples were analyzed for VOCs and TOC. The MS recovery for benzene was outside the acceptable recovery range limits. Benzene was non-detect in the original sample. The MS recoveries for the TOC analyses were within the acceptable recovery ranges.

- MS samples were analyzed for RSK-175, TOC, nitrate, sulfate, and chloride for the November 2014 sampling event. The MS recoveries for all of the analyses were within the acceptable recovery ranges for all analytes.

2.3.3 Laboratory Control Samples

Laboratory control samples (LCS) are analyzed by the laboratories to assess the accuracy of the analytical equipment. The samples are prepared from the analyte-free matrix, which is then spiked with known levels of the constituents of interest (i.e., a standard). The concentrations are measured, and the results are compared to the known spiked levels. This comparison is expressed as percent recovery.

LCS were analyzed for VOCs, ethene/ethane/methane, nitrate, sulfate, chloride, and TOC for each batch of samples submitted for these analyses. The percent recoveries of the LCS of all analytes were within the acceptable range of recovery limits for all sampling events except for the following:

- For the January 2014 event, the VOC LCS for sample batches 153305 and 153453 recovered outside the acceptable recovery range limits for dichlorodifluoromethane. This analyte exceeded the upper control limit in both of the batches and was biased high. However, it was not detected in the associated samples and therefore, the data were reported.
- For the July 14, 2014, event, the VOC LCS for sample batch 164390 recovered outside the acceptable recovery range limits for isopropylbenzene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data were reported.
- For the August 2014 event, the VOC LCS recovered outside the acceptable recovery range limits for bromomethane for sample batches 168799, 168915, and 169196. Also, the LCS in sample batch 169196 exceeded the upper recovery range limits for xylene and n-propylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data were reported.

2.3.4 Initial and Continuing Calibration Verification

Initial and continuing calibration verification (ICV or ICAL, and CCV) samples are similar to the LCS. They are analyzed to ensure the analytical equipment continues to retain its initial calibration. Results of the ICV/CCV analyses are expressed as percent recovery. The percent recoveries of the ICVs and CCVs of all analytes were within the acceptable range of recoveries for all sampling events except for the following:

- The CCV associated with sample batch 164390 for the July 14, 2014, event recovered above the upper acceptable recovery range limit for 1,1,1-trichloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data were reported.
- For the October 16, 2014, event, dichlorodifluoromethane in the CCV was above the upper acceptable recovery range limit. The LCS and LCS duplicate recoveries were compliant and all samples were non-detect for this analyte.

2.4 Precision

Precision is defined as the closeness of agreement between two or more separate measurements of duplicate or replicate samples, and is assessed by the following.

2.4.1 Field Duplicates

Field duplicate samples are collected in the field in conjunction with the original sample and both are submitted for analyses. The analytical results of the duplicate sample are compared to the original sample to assess the precision of the analytical method and the potential variability of the sample matrix and bias due to sampling procedures. This comparison is reported as the relative percent difference (RPD) between the original and the duplicate samples. RPDs up to 50 percent are considered to be acceptable.

Field duplicates were collected for each of the quarterly monitoring events in 2014 (January, May, August, and November) and analyzed for VOCs. The RPDs for all field duplicate samples collected were within the acceptable RPD.

2.4.2 Laboratory Duplicates

A laboratory duplicate is a second laboratory sample taken from a submitted sample to monitor method performance. The duplicate is then prepared along with the original. It is analyzed and compared to the first to assess the precision of the analytical method and the potential variability of the sample matrix. This comparison is reported as the RPD.

Laboratory duplicates were analyzed for the following:

- A laboratory duplicate was analyzed for nitrate, sulfate, and chloride for the samples collected in January, May, August, and November 2014. The RPDs for these sample were within the acceptable limits.
- A laboratory duplicate was analyzed for TOC samples for the April 10, July 24, September 29, October 16, and November 2014, events. The RPDs were within the acceptable limit for these samples.

2.4.3 Matrix Spike Sample Duplicates

For the VOC analyses, a duplicate matrix spike sample is also typically analyzed for each sample batch. The results of the duplicate sample are compared to the initial matrix spike sample to assess the precision of the analytical method (i.e., RPD). For this method, both a percent recovery and an RPD are reported.

The following matrix spike duplicate samples were analyzed:

- An MS duplicate sample was analyzed for TOC samples collected in April 2014. The MS duplicate was recovered outside the acceptable recovery range limits with the TOC concentration below the lower recovery range limit. The RPD was within the acceptable limit.

- For the July 14 and 24, 2014, events, MS duplicate samples were analyzed for TOC and the MS duplicate recoveries were within the acceptable range for these samples.
- MS duplicates were analyzed for the VOCs and TOC samples collected on September 29, 2014. The MS duplicate recoveries were within the acceptable range for both analyses.
- MS duplicates were analyzed for the VOCs and TOC samples collected on October 16, 2014. The MS duplicate recovery for PCE was outside the acceptable recovery range limits with the PCE concentration at less than the lower limit of the recovery range. PCE was present in the original sample at greater than four times the MS duplicate concentration; therefore, the control limits are not applicable. The MS duplicate recovery for TOC was within the acceptable range.
- MS duplicates were analyzed for RSK-175 and TOC samples collected in November 2014. The MS duplicate recovery of methane in the RSK-175 analysis was outside the acceptable recovery range limits for sample batch 159321, with the methane concentration at less than the lower limit of the acceptable recovery range. The MS duplicate recovery for TOC was within the acceptable range.

2.4.4 Lab Control Sample Duplicate

Laboratory control sample duplicates are also typically analyzed for each sample batch. The duplicate is a second analysis of an LCS. The results of the duplicate sample are compared to the initial LCS sample to assess the precision of the analytical method and potential variability of the sample matrix. For this method a percent recovery and RPD are reported.

LCS duplicates were analyzed for VOCs, ethene/ethane/methane, nitrate, sulfate, chloride, and TOC for each batch of samples submitted for these analyses. The percent recoveries of the LCS duplicates of all analytes were within the acceptable range of recovery limits and the RPDs within the acceptable limits for all sampling events except for the following:

- For the January 2014 event, the VOC LCS duplicates for sample batch 153305 recovered outside the acceptable recovery range limits for dichlorodifluoromethane and chloromethane. The VOC LCS duplicate for sample batch 153453 recovered outside the acceptable recovery range limits for dichlorodifluoromethane. These analytes exceeded their respective upper control limits and were biased high. However, because these analytes were not detected in the associated samples, the data were reported.
- For the May 2014 event, the VOC LCS duplicate for sample batch 159432 recovered above the RPD limits for chloroethane and bromomethane. The individual recoveries of both the LCS and LCS duplicate met the acceptance criteria for these analytes.
- For the July 14, 2014, event, the VOC LCS duplicate for sample batch 164390 recovered above the upper recovery range limits for isopropylbenzene and n-propylbenzene. These analytes were not detected in the associated samples and the data were reported.
- For the July 24, 2014, event, the VOC LCS duplicate for sample batch 29090 recovered above the RPD limit for acetone and exceeded the upper acceptable recovery range limit. Acetone was not detected in the associated samples and the data were reported.

- For the August 2014 event, the VOC LCS duplicate for sample batches 168655 and 168915 recovered above the upper recovery range limit for bromomethane. This analyte was not detected in the associated samples and the data were reported. In addition, the LCS duplicate recovered above the RPD limit for dichlorodifluoromethane in sample batch 168613.
- The VOC LCS duplicate for sample batch 179268 for the December 23, 2014, event recovered above the upper recovery control range limit for sec-butylbenzene. Also for this sampling event, the VOC LCS duplicate for sample batch 179491 recovered above the RPD limit for chloroethane.

2.5 Comparability

Comparability is a measure of the confidence with which one data set or method can be compared to another.

Generally, all samples were analyzed in accordance with accepted EPA analytical methods. Because similar or the same methods were used for subsequent sampling events, the quality of the data collected is consistent for all data sets, and therefore, are comparable.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-42109-1
Client Project/Site: Yakima/Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
2/4/2014 4:33:23 PM

Kristine Allen, Manager of Project Management
(253)922-2310
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Job ID: 580-42109-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 1/29/2014 11:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

GC/MS VOA - Method(s) 8260B
The method blank for analysis batch 152941contained Hexachlorobutadiene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No other analytical or quality issues were noted.

GC VOA - Method(s) RSK-175
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 118374.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-19
Date Collected: 01/28/14 11:20
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,1-Dichloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,1-Dichloroethene	ND		1.0		ug/L			01/30/14 19:49	1
1,1-Dichloropropene	ND		1.0		ug/L			01/30/14 19:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/30/14 19:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			01/30/14 19:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,2-Dichloroethane	ND		1.0		ug/L			01/30/14 19:49	1
1,2-Dichloropropane	ND		1.0		ug/L			01/30/14 19:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
1,3-Dichloropropane	ND		1.0		ug/L			01/30/14 19:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
2,2-Dichloropropane	ND		1.0		ug/L			01/30/14 19:49	1
2-Chlorotoluene	ND		1.0		ug/L			01/30/14 19:49	1
4-Chlorotoluene	ND		1.0		ug/L			01/30/14 19:49	1
4-Isopropyltoluene	ND		1.0		ug/L			01/30/14 19:49	1
Benzene	ND		1.0		ug/L			01/30/14 19:49	1
Bromobenzene	ND		1.0		ug/L			01/30/14 19:49	1
Bromoform	ND		1.0		ug/L			01/30/14 19:49	1
Bromomethane	ND		5.0		ug/L			01/30/14 19:49	1
Carbon tetrachloride	ND		1.0		ug/L			01/30/14 19:49	1
Chlorobenzene	ND		1.0		ug/L			01/30/14 19:49	1
Chlorobromomethane	ND		1.0		ug/L			01/30/14 19:49	1
Chlorodibromomethane	ND		1.0		ug/L			01/30/14 19:49	1
Chloroethane	ND		5.0		ug/L			01/30/14 19:49	1
Chloroform	ND		1.0		ug/L			01/30/14 19:49	1
Chloromethane	ND		5.0		ug/L			01/30/14 19:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 19:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 19:49	1
Dibromomethane	ND		1.0		ug/L			01/30/14 19:49	1
Dichlorobromomethane	ND		1.0		ug/L			01/30/14 19:49	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/30/14 19:49	1
Ethylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
Ethylene Dibromide	ND		1.0		ug/L			01/30/14 19:49	1
Hexachlorobutadiene	ND		1.0		ug/L			01/30/14 19:49	1
Isopropylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/30/14 19:49	1
Methylene Chloride	ND		3.0		ug/L			01/30/14 19:49	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/30/14 19:49	1
Naphthalene	ND		1.0		ug/L			01/30/14 19:49	1
n-Butylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
N-Propylbenzene	ND		1.0		ug/L			01/30/14 19:49	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-19
Date Collected: 01/28/14 11:20
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/30/14 19:49	1
sec-Butylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
Styrene	ND		1.0		ug/L			01/30/14 19:49	1
tert-Butylbenzene	ND		1.0		ug/L			01/30/14 19:49	1
Tetrachloroethene	ND		1.0		ug/L			01/30/14 19:49	1
Toluene	ND		1.0		ug/L			01/30/14 19:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 19:49	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 19:49	1
Trichloroethene	ND		1.0		ug/L			01/30/14 19:49	1
Trichlorofluoromethane	ND		1.0		ug/L			01/30/14 19:49	1
Vinyl chloride	ND		1.0		ug/L			01/30/14 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*01/30/14 19:49*	*1*
Toluene-d8 (Surr)	*102*		*85 - 120*		*01/30/14 19:49*	*1*
Trifluorotoluene (Surr)	*114*		*80 - 120*		*01/30/14 19:49*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*01/30/14 19:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*		*01/30/14 19:49*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-18
Date Collected: 01/28/14 10:09
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,1-Dichloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,1-Dichloroethene	ND		1.0		ug/L			01/30/14 20:36	1
1,1-Dichloropropene	ND		1.0		ug/L			01/30/14 20:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/30/14 20:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			01/30/14 20:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,2-Dichloroethane	ND		1.0		ug/L			01/30/14 20:36	1
1,2-Dichloropropane	ND		1.0		ug/L			01/30/14 20:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
1,3-Dichloropropane	ND		1.0		ug/L			01/30/14 20:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
2,2-Dichloropropane	ND		1.0		ug/L			01/30/14 20:36	1
2-Chlorotoluene	ND		1.0		ug/L			01/30/14 20:36	1
4-Chlorotoluene	ND		1.0		ug/L			01/30/14 20:36	1
4-Isopropyltoluene	ND		1.0		ug/L			01/30/14 20:36	1
Benzene	ND		1.0		ug/L			01/30/14 20:36	1
Bromobenzene	ND		1.0		ug/L			01/30/14 20:36	1
Bromoform	ND		1.0		ug/L			01/30/14 20:36	1
Bromomethane	ND		5.0		ug/L			01/30/14 20:36	1
Carbon tetrachloride	ND		1.0		ug/L			01/30/14 20:36	1
Chlorobenzene	ND		1.0		ug/L			01/30/14 20:36	1
Chlorobromomethane	ND		1.0		ug/L			01/30/14 20:36	1
Chlorodibromomethane	ND		1.0		ug/L			01/30/14 20:36	1
Chloroethane	ND		5.0		ug/L			01/30/14 20:36	1
Chloroform	ND		1.0		ug/L			01/30/14 20:36	1
Chloromethane	ND		5.0		ug/L			01/30/14 20:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 20:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 20:36	1
Dibromomethane	ND		1.0		ug/L			01/30/14 20:36	1
Dichlorobromomethane	ND		1.0		ug/L			01/30/14 20:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/30/14 20:36	1
Ethylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
Ethylene Dibromide	ND		1.0		ug/L			01/30/14 20:36	1
Hexachlorobutadiene	ND		1.0		ug/L			01/30/14 20:36	1
Isopropylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/30/14 20:36	1
Methylene Chloride	ND		3.0		ug/L			01/30/14 20:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/30/14 20:36	1
Naphthalene	ND		1.0		ug/L			01/30/14 20:36	1
n-Butylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
N-Propylbenzene	ND		1.0		ug/L			01/30/14 20:36	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-18
Date Collected: 01/28/14 10:09
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/30/14 20:36	1
sec-Butylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
Styrene	ND		1.0		ug/L			01/30/14 20:36	1
tert-Butylbenzene	ND		1.0		ug/L			01/30/14 20:36	1
Tetrachloroethene	ND		1.0		ug/L			01/30/14 20:36	1
Toluene	ND		1.0		ug/L			01/30/14 20:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 20:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 20:36	1
Trichloroethene	ND		1.0		ug/L			01/30/14 20:36	1
Trichlorofluoromethane	ND		1.0		ug/L			01/30/14 20:36	1
Vinyl chloride	ND		1.0		ug/L			01/30/14 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*01/30/14 20:36*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*01/30/14 20:36*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 120*		*01/30/14 20:36*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*01/30/14 20:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 120*		*01/30/14 20:36*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 17:58	1
Ethane	ND		0.50		ug/L			02/03/14 17:58	1
Ethene	ND		0.50		ug/L			02/03/14 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*90*		*66 - 132*		*02/03/14 17:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.1**		0.90		mg/L			01/31/14 11:57	1
Nitrate as N	**2.5**		0.90		mg/L			01/30/14 01:00	1
Sulfate	**8.6**		1.2		mg/L			01/31/14 11:57	1
Total Organic Carbon	ND		1.0		mg/L			01/30/14 13:28	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-17
Date Collected: 01/28/14 09:07
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,1-Dichloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,1-Dichloroethene	ND		1.0		ug/L			01/30/14 21:23	1
1,1-Dichloropropene	ND		1.0		ug/L			01/30/14 21:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/30/14 21:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			01/30/14 21:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,2-Dichloroethane	ND		1.0		ug/L			01/30/14 21:23	1
1,2-Dichloropropane	ND		1.0		ug/L			01/30/14 21:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
1,3-Dichloropropane	ND		1.0		ug/L			01/30/14 21:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
2,2-Dichloropropane	ND		1.0		ug/L			01/30/14 21:23	1
2-Chlorotoluene	ND		1.0		ug/L			01/30/14 21:23	1
4-Chlorotoluene	ND		1.0		ug/L			01/30/14 21:23	1
4-Isopropyltoluene	ND		1.0		ug/L			01/30/14 21:23	1
Benzene	ND		1.0		ug/L			01/30/14 21:23	1
Bromobenzene	ND		1.0		ug/L			01/30/14 21:23	1
Bromoform	ND		1.0		ug/L			01/30/14 21:23	1
Bromomethane	ND		5.0		ug/L			01/30/14 21:23	1
Carbon tetrachloride	ND		1.0		ug/L			01/30/14 21:23	1
Chlorobenzene	ND		1.0		ug/L			01/30/14 21:23	1
Chlorobromomethane	ND		1.0		ug/L			01/30/14 21:23	1
Chlorodibromomethane	ND		1.0		ug/L			01/30/14 21:23	1
Chloroethane	ND		5.0		ug/L			01/30/14 21:23	1
Chloroform	ND		1.0		ug/L			01/30/14 21:23	1
Chloromethane	ND		5.0		ug/L			01/30/14 21:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 21:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 21:23	1
Dibromomethane	ND		1.0		ug/L			01/30/14 21:23	1
Dichlorobromomethane	ND		1.0		ug/L			01/30/14 21:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/30/14 21:23	1
Ethylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
Ethylene Dibromide	ND		1.0		ug/L			01/30/14 21:23	1
Hexachlorobutadiene	ND		1.0		ug/L			01/30/14 21:23	1
Isopropylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/30/14 21:23	1
Methylene Chloride	ND		3.0		ug/L			01/30/14 21:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/30/14 21:23	1
Naphthalene	ND		1.0		ug/L			01/30/14 21:23	1
n-Butylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
N-Propylbenzene	ND		1.0		ug/L			01/30/14 21:23	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-17
Date Collected: 01/28/14 09:07
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/30/14 21:23	1
sec-Butylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
Styrene	ND		1.0		ug/L			01/30/14 21:23	1
tert-Butylbenzene	ND		1.0		ug/L			01/30/14 21:23	1
Tetrachloroethene	ND		1.0		ug/L			01/30/14 21:23	1
Toluene	ND		1.0		ug/L			01/30/14 21:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 21:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 21:23	1
Trichloroethene	ND		1.0		ug/L			01/30/14 21:23	1
Trichlorofluoromethane	ND		1.0		ug/L			01/30/14 21:23	1
Vinyl chloride	ND		1.0		ug/L			01/30/14 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*01/30/14 21:23*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*01/30/14 21:23*	*1*
Trifluorotoluene (Surr)	*116*		*80 - 120*		*01/30/14 21:23*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*01/30/14 21:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 120*		*01/30/14 21:23*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,1-Dichloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,1-Dichloroethene	ND		1.0		ug/L			01/30/14 22:09	1
1,1-Dichloropropene	ND		1.0		ug/L			01/30/14 22:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/30/14 22:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			01/30/14 22:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,2-Dichloroethane	ND		1.0		ug/L			01/30/14 22:09	1
1,2-Dichloropropane	ND		1.0		ug/L			01/30/14 22:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
1,3-Dichloropropane	ND		1.0		ug/L			01/30/14 22:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
2,2-Dichloropropane	ND		1.0		ug/L			01/30/14 22:09	1
2-Chlorotoluene	ND		1.0		ug/L			01/30/14 22:09	1
4-Chlorotoluene	ND		1.0		ug/L			01/30/14 22:09	1
4-Isopropyltoluene	ND		1.0		ug/L			01/30/14 22:09	1
Benzene	ND		1.0		ug/L			01/30/14 22:09	1
Bromobenzene	ND		1.0		ug/L			01/30/14 22:09	1
Bromoform	ND		1.0		ug/L			01/30/14 22:09	1
Bromomethane	ND		5.0		ug/L			01/30/14 22:09	1
Carbon tetrachloride	ND		1.0		ug/L			01/30/14 22:09	1
Chlorobenzene	ND		1.0		ug/L			01/30/14 22:09	1
Chlorobromomethane	ND		1.0		ug/L			01/30/14 22:09	1
Chlorodibromomethane	ND		1.0		ug/L			01/30/14 22:09	1
Chloroethane	ND		5.0		ug/L			01/30/14 22:09	1
Chloroform	ND		1.0		ug/L			01/30/14 22:09	1
Chloromethane	ND		5.0		ug/L			01/30/14 22:09	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 22:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 22:09	1
Dibromomethane	ND		1.0		ug/L			01/30/14 22:09	1
Dichlorobromomethane	ND		1.0		ug/L			01/30/14 22:09	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/30/14 22:09	1
Ethylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
Ethylene Dibromide	ND		1.0		ug/L			01/30/14 22:09	1
Hexachlorobutadiene	ND		1.0		ug/L			01/30/14 22:09	1
Isopropylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/30/14 22:09	1
Methylene Chloride	ND		3.0		ug/L			01/30/14 22:09	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/30/14 22:09	1
Naphthalene	ND		1.0		ug/L			01/30/14 22:09	1
n-Butylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
N-Propylbenzene	ND		1.0		ug/L			01/30/14 22:09	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/29/14 11:25

Lab Sample ID: 580-42109-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/30/14 22:09	1
sec-Butylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
Styrene	ND		1.0		ug/L			01/30/14 22:09	1
tert-Butylbenzene	ND		1.0		ug/L			01/30/14 22:09	1
Tetrachloroethene	ND		1.0		ug/L			01/30/14 22:09	1
Toluene	ND		1.0		ug/L			01/30/14 22:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 22:09	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 22:09	1
Trichloroethene	ND		1.0		ug/L			01/30/14 22:09	1
Trichlorofluoromethane	ND		1.0		ug/L			01/30/14 22:09	1
Vinyl chloride	ND		1.0		ug/L			01/30/14 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*01/30/14 22:09*	*1*
Toluene-d8 (Surr)	*102*		*85 - 120*		*01/30/14 22:09*	*1*
Trifluorotoluene (Surr)	*110*		*80 - 120*		*01/30/14 22:09*	*1*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*01/30/14 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*01/30/14 22:09*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-152941/5
Matrix: Water
Analysis Batch: 152941

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,1-Dichloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,1-Dichloroethene	ND		1.0		ug/L			01/30/14 11:37	1
1,1-Dichloropropene	ND		1.0		ug/L			01/30/14 11:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/30/14 11:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			01/30/14 11:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,2-Dichloroethane	ND		1.0		ug/L			01/30/14 11:37	1
1,2-Dichloropropane	ND		1.0		ug/L			01/30/14 11:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
1,3-Dichloropropane	ND		1.0		ug/L			01/30/14 11:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
2,2-Dichloropropane	ND		1.0		ug/L			01/30/14 11:37	1
2-Chlorotoluene	ND		1.0		ug/L			01/30/14 11:37	1
4-Chlorotoluene	ND		1.0		ug/L			01/30/14 11:37	1
4-Isopropyltoluene	ND		1.0		ug/L			01/30/14 11:37	1
Benzene	ND		1.0		ug/L			01/30/14 11:37	1
Bromobenzene	ND		1.0		ug/L			01/30/14 11:37	1
Bromoform	ND		1.0		ug/L			01/30/14 11:37	1
Bromomethane	ND		5.0		ug/L			01/30/14 11:37	1
Carbon tetrachloride	ND		1.0		ug/L			01/30/14 11:37	1
Chlorobenzene	ND		1.0		ug/L			01/30/14 11:37	1
Chlorobromomethane	ND		1.0		ug/L			01/30/14 11:37	1
Chlorodibromomethane	ND		1.0		ug/L			01/30/14 11:37	1
Chloroethane	ND		5.0		ug/L			01/30/14 11:37	1
Chloroform	ND		1.0		ug/L			01/30/14 11:37	1
Chloromethane	ND		5.0		ug/L			01/30/14 11:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 11:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 11:37	1
Dibromomethane	ND		1.0		ug/L			01/30/14 11:37	1
Dichlorobromomethane	ND		1.0		ug/L			01/30/14 11:37	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/30/14 11:37	1
Ethylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
Ethylene Dibromide	ND		1.0		ug/L			01/30/14 11:37	1
Hexachlorobutadiene	1.26		1.0		ug/L			01/30/14 11:37	1
Isopropylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/30/14 11:37	1
Methylene Chloride	ND		3.0		ug/L			01/30/14 11:37	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/30/14 11:37	1
Naphthalene	ND		1.0		ug/L			01/30/14 11:37	1
n-Butylbenzene	ND		1.0		ug/L			01/30/14 11:37	1

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

Lab Sample ID: MB 580-152941/5
Matrix: Water
Analysis Batch: 152941

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
o-Xylene	ND		1.0		ug/L			01/30/14 11:37	1
sec-Butylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
Styrene	ND		1.0		ug/L			01/30/14 11:37	1
tert-Butylbenzene	ND		1.0		ug/L			01/30/14 11:37	1
Tetrachloroethene	ND		1.0		ug/L			01/30/14 11:37	1
Toluene	ND		1.0		ug/L			01/30/14 11:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/30/14 11:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/30/14 11:37	1
Trichloroethene	ND		1.0		ug/L			01/30/14 11:37	1
Trichlorofluoromethane	ND		1.0		ug/L			01/30/14 11:37	1
Vinyl chloride	ND		1.0		ug/L			01/30/14 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*01/30/14 11:37*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*01/30/14 11:37*	*1*
Trifluorotoluene (Surr)	*120*		*80 - 120*		*01/30/14 11:37*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*01/30/14 11:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*01/30/14 11:37*	*1*

Lab Sample ID: LCS 580-152941/7
Matrix: Water
Analysis Batch: 152941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	21.4		ug/L		107	80 - 130
1,1,1-Trichloroethane	20.1	21.3		ug/L		106	65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.5		ug/L		102	65 - 130
1,1,2-Trichloroethane	20.1	19.6		ug/L		98	75 - 125
1,1-Dichloroethane	20.1	19.8		ug/L		98	70 - 135
1,1-Dichloroethene	20.1	21.2		ug/L		106	70 - 130
1,1-Dichloropropene	20.1	21.1		ug/L		105	75 - 130
1,2,3-Trichlorobenzene	20.1	21.0		ug/L		105	55 - 140
1,2,3-Trichloropropane	20.1	20.8		ug/L		104	75 - 125
1,2,4-Trichlorobenzene	20.1	20.8		ug/L		104	65 - 135
1,2,4-Trimethylbenzene	20.1	22.5		ug/L		112	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	20.7		ug/L		103	50 - 130
1,2-Dichlorobenzene	20.1	22.1		ug/L		110	70 - 120
1,2-Dichloroethane	20.1	20.1		ug/L		100	70 - 130
1,2-Dichloropropane	20.1	20.8		ug/L		104	75 - 125
1,3,5-Trimethylbenzene	20.1	23.2		ug/L		115	75 - 130
1,3-Dichlorobenzene	20.1	21.8		ug/L		108	75 - 125
1,3-Dichloropropane	20.1	20.2		ug/L		101	75 - 125
1,4-Dichlorobenzene	20.1	21.5		ug/L		107	75 - 125
2,2-Dichloropropane	20.1	21.9		ug/L		109	70 - 135
2-Chlorotoluene	20.1	22.6		ug/L		113	75 - 125
4-Chlorotoluene	20.1	22.9		ug/L		114	75 - 130
4-Isopropyltoluene	20.1	22.2		ug/L		111	75 - 130

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

Lab Sample ID: LCS 580-152941/7
Matrix: Water
Analysis Batch: 152941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.1	20.1		ug/L		100	80 - 120
Bromobenzene	20.1	22.3		ug/L		111	75 - 125
Bromoform	20.1	19.7		ug/L		98	70 - 130
Bromomethane	20.1	19.2		ug/L		96	30 - 145
Carbon tetrachloride	20.1	22.0		ug/L		110	65 - 140
Chlorobenzene	20.1	21.0		ug/L		105	80 - 120
Chlorobromomethane	20.1	21.0		ug/L		105	65 - 130
Chlorodibromomethane	20.1	21.3		ug/L		106	60 - 135
Chloroethane	20.1	19.8		ug/L		99	60 - 135
Chloroform	20.1	20.5		ug/L		102	65 - 135
Chloromethane	20.1	18.9		ug/L		94	40 - 125
cis-1,2-Dichloroethene	20.1	21.1		ug/L		105	70 - 125
cis-1,3-Dichloropropene	20.1	21.2		ug/L		106	70 - 130
Dibromomethane	20.1	20.3		ug/L		101	75 - 125
Dichlorobromomethane	20.1	19.4		ug/L		97	75 - 120
Dichlorodifluoromethane	20.1	18.9		ug/L		94	30 - 155
Ethylbenzene	20.1	21.2		ug/L		106	75 - 125
Ethylene Dibromide	20.1	21.5		ug/L		107	80 - 120
Hexachlorobutadiene	20.1	22.7		ug/L		113	50 - 140
Isopropylbenzene	20.1	21.3		ug/L		106	75 - 125
Methyl tert-butyl ether	20.1	19.2		ug/L		96	65 - 125
Methylene Chloride	20.1	19.4		ug/L		97	55 - 140
m-Xylene & p-Xylene	20.1	20.5		ug/L		102	75 - 130
Naphthalene	20.1	19.9		ug/L		99	55 - 140
n-Butylbenzene	20.1	22.5		ug/L		112	70 - 135
N-Propylbenzene	20.1	22.0		ug/L		110	70 - 130
o-Xylene	20.1	20.4		ug/L		102	80 - 120
sec-Butylbenzene	20.1	22.7		ug/L		113	70 - 125
Styrene	20.1	21.4		ug/L		107	65 - 135
tert-Butylbenzene	20.1	22.3		ug/L		111	70 - 130
Tetrachloroethene	20.1	18.8		ug/L		94	45 - 150
Toluene	20.1	21.6		ug/L		108	75 - 120
trans-1,2-Dichloroethene	20.1	20.3		ug/L		101	60 - 140
trans-1,3-Dichloropropene	20.1	20.8		ug/L		104	55 - 140
Trichloroethene	20.1	19.4		ug/L		97	70 - 125
Trichlorofluoromethane	20.1	21.7		ug/L		108	60 - 145
Vinyl chloride	20.1	19.2		ug/L		96	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Toluene-d8 (Surr)	*104*		*85 - 120*
Trifluorotoluene (Surr)	*120*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 120*

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

Lab Sample ID: LCSD 580-152941/9
Matrix: Water
Analysis Batch: 152941

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
1,1,1,2-Tetrachloroethane	20.1	21.5		ug/L		107	80 - 130	0	30
1,1,1-Trichloroethane	20.1	21.1		ug/L		105	65 - 130	1	30
1,1,2,2-Tetrachloroethane	20.1	20.8		ug/L		103	65 - 130	1	30
1,1,2-Trichloroethane	20.1	21.0		ug/L		104	75 - 125	7	30
1,1-Dichloroethane	20.1	20.8		ug/L		103	70 - 135	5	30
1,1-Dichloroethene	20.1	21.3		ug/L		106	70 - 130	0	30
1,1-Dichloropropene	20.1	22.1		ug/L		110	75 - 130	5	30
1,2,3-Trichlorobenzene	20.1	20.9		ug/L		104	55 - 140	1	30
1,2,3-Trichloropropane	20.1	21.2		ug/L		106	75 - 125	2	30
1,2,4-Trichlorobenzene	20.1	21.5		ug/L		107	65 - 135	3	30
1,2,4-Trimethylbenzene	20.1	22.2		ug/L		111	75 - 130	1	30
1,2-Dibromo-3-Chloropropane	20.1	20.2		ug/L		101	50 - 130	2	30
1,2-Dichlorobenzene	20.1	22.0		ug/L		110	70 - 120	0	30
1,2-Dichloroethane	20.1	20.8		ug/L		104	70 - 130	3	30
1,2-Dichloropropane	20.1	20.4		ug/L		101	75 - 125	2	30
1,3,5-Trimethylbenzene	20.1	23.6		ug/L		118	75 - 130	2	30
1,3-Dichlorobenzene	20.1	22.4		ug/L		112	75 - 125	3	30
1,3-Dichloropropane	20.1	21.0		ug/L		105	75 - 125	4	30
1,4-Dichlorobenzene	20.1	21.8		ug/L		109	75 - 125	2	30
2,2-Dichloropropane	20.1	21.3		ug/L		106	70 - 135	3	30
2-Chlorotoluene	20.1	23.2		ug/L		116	75 - 125	3	30
4-Chlorotoluene	20.1	22.6		ug/L		113	75 - 130	2	30
4-Isopropyltoluene	20.1	21.8		ug/L		109	75 - 130	2	30
Benzene	20.1	20.6		ug/L		103	80 - 120	2	30
Bromobenzene	20.1	22.6		ug/L		113	75 - 125	1	30
Bromoform	20.1	20.1		ug/L		100	70 - 130	2	30
Bromomethane	20.1	19.7		ug/L		98	30 - 145	3	30
Carbon tetrachloride	20.1	21.8		ug/L		109	65 - 140	1	30
Chlorobenzene	20.1	20.9		ug/L		104	80 - 120	1	30
Chlorobromomethane	20.1	21.0		ug/L		104	65 - 130	0	30
Chlorodibromomethane	20.1	21.8		ug/L		109	60 - 135	3	30
Chloroethane	20.1	17.2		ug/L		86	60 - 135	14	30
Chloroform	20.1	20.3		ug/L		101	65 - 135	1	30
Chloromethane	20.1	18.2		ug/L		91	40 - 125	4	30
cis-1,2-Dichloroethene	20.1	20.9		ug/L		104	70 - 125	1	30
cis-1,3-Dichloropropene	20.1	22.0		ug/L		110	70 - 130	4	30
Dibromomethane	20.1	20.2		ug/L		101	75 - 125	1	30
Dichlorobromomethane	20.1	20.4		ug/L		102	75 - 120	5	30
Dichlorodifluoromethane	20.1	18.5		ug/L		92	30 - 155	2	30
Ethylbenzene	20.1	21.5		ug/L		107	75 - 125	1	30
Ethylene Dibromide	20.1	21.6		ug/L		107	80 - 120	0	30
Hexachlorobutadiene	20.1	23.9		ug/L		119	50 - 140	5	30
Isopropylbenzene	20.1	21.6		ug/L		108	75 - 125	1	30
Methyl tert-butyl ether	20.1	20.3		ug/L		101	65 - 125	6	30
Methylene Chloride	20.1	19.9		ug/L		99	55 - 140	3	30
m-Xylene & p-Xylene	20.1	21.4		ug/L		107	75 - 130	4	30
Naphthalene	20.1	20.6		ug/L		103	55 - 140	3	30
n-Butylbenzene	20.1	22.5		ug/L		112	70 - 135	0	30

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

Lab Sample ID: LCSD 580-152941/9
Matrix: Water
Analysis Batch: 152941

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
N-Propylbenzene			20.1	22.7		ug/L		113	70 - 130	3	30
o-Xylene			20.1	20.3		ug/L		101	80 - 120	1	30
sec-Butylbenzene			20.1	23.6		ug/L		118	70 - 125	4	30
Styrene			20.1	20.8		ug/L		104	65 - 135	3	30
tert-Butylbenzene			20.1	22.1		ug/L		110	70 - 130	1	30
Tetrachloroethene			20.1	22.0		ug/L		110	45 - 150	16	30
Toluene			20.1	21.7		ug/L		108	75 - 120	1	30
trans-1,2-Dichloroethene			20.1	20.8		ug/L		104	60 - 140	2	30
trans-1,3-Dichloropropene			20.1	20.5		ug/L		102	55 - 140	1	30
Trichloroethene			20.1	21.2		ug/L		106	70 - 125	9	30
Trichlorofluoromethane			20.1	21.6		ug/L		107	60 - 145	1	30
Vinyl chloride			20.1	18.7		ug/L		93	50 - 145	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Toluene-d8 (Surr)	*103*		*85 - 120*
Trifluorotoluene (Surr)	*112*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-118374/4
Matrix: Water
Analysis Batch: 118374

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 15:44	1
Ethane	ND		0.50		ug/L			02/03/14 15:44	1
Ethene	ND		0.50		ug/L			02/03/14 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*96*		*66 - 132*		*02/03/14 15:44*	*1*

Lab Sample ID: LCS 240-118374/5
Matrix: Water
Analysis Batch: 118374

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	121		ug/L		104	76 - 120
Ethane			218	228		ug/L		105	80 - 120
Ethene			203	205		ug/L		101	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*94*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-152910/3
Matrix: Water
Analysis Batch: 152910

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			01/29/14 20:54	1

Lab Sample ID: LCS 580-152910/4
Matrix: Water
Analysis Batch: 152910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.77		mg/L		98	90 - 110

Lab Sample ID: LCSD 580-152910/5
Matrix: Water
Analysis Batch: 152910

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
Nitrate as N	1.80	1.78		mg/L		99	90 - 110	1	15

Lab Sample ID: 580-42109-2 MS
Matrix: Water
Analysis Batch: 152910

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.5		1.80	4.33		mg/L		100	90 - 110

Lab Sample ID: MB 580-153065/3
Matrix: Water
Analysis Batch: 153065

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			01/31/14 08:15	1
Sulfate	ND		1.2		mg/L			01/31/14 08:15	1

Lab Sample ID: LCS 580-153065/4
Matrix: Water
Analysis Batch: 153065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.19		mg/L		102	90 - 110
Sulfate	12.0	11.3		mg/L		95	90 - 110

Lab Sample ID: LCSD 580-153065/5
Matrix: Water
Analysis Batch: 153065

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
Chloride	9.00	9.15		mg/L		102	90 - 110	0	15
Sulfate	12.0	11.5		mg/L		96	90 - 110	1	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-42109-2 MS — **Client Sample ID: MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 153065

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.1		9.00	17.1		mg/L		100	90 - 110
Sulfate	8.6		12.0	19.3	F1	mg/L		89	90 - 110

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-152951/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 152951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			01/30/14 13:28	1

Lab Sample ID: LCS 580-152951/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 152951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	15.0	15.2		mg/L		101	85 - 115

Lab Sample ID: 580-42109-2 MS — **Client Sample ID: MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 152951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	ND		10.0	10.8		mg/L		102	85 - 115

Lab Sample ID: 580-42109-2 MSD — **Client Sample ID: MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 152951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	ND		10.0	10.9		mg/L		103	85 - 115	1	20

Lab Sample ID: 580-42109-2 DU — **Client Sample ID: MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 152951

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	ND		ND		mg/L		NC	20

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Client Sample ID: MW-19

Lab Sample ID: 580-42109-1

Date Collected: 01/28/14 11:20

Matrix: Water

Date Received: 01/29/14 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	152941	01/30/14 19:49	EB1	TAL SEA

Client Sample ID: MW-18

Lab Sample ID: 580-42109-2

Date Collected: 01/28/14 10:09

Matrix: Water

Date Received: 01/29/14 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	152941	01/30/14 20:36	EB1	TAL SEA
Total/NA	Analysis	RSK-175		1	118374	02/03/14 17:58	BPM	TAL CAN
Total/NA	Analysis	300.0		1	152910	01/30/14 01:00	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	152951	01/30/14 13:28	IWH	TAL SEA
Total/NA	Analysis	300.0		1	153065	01/31/14 11:57	RSB	TAL SEA

Client Sample ID: MW-17

Lab Sample ID: 580-42109-3

Date Collected: 01/28/14 09:07

Matrix: Water

Date Received: 01/29/14 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	152941	01/30/14 21:23	EB1	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-42109-4

Date Collected: 01/23/14 00:00

Matrix: Water

Date Received: 01/29/14 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	152941	01/30/14 22:09	EB1	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	02-28-14 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-42109-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-42109-1	MW-19	Water	01/28/14 11:20	01/29/14 11:25
580-42109-2	MW-18	Water	01/28/14 10:09	01/29/14 11:25
580-42109-3	MW-17	Water	01/28/14 09:07	01/29/14 11:25
580-42109-4	Trip Blank	Water	01/23/14 00:00	01/29/14 11:25

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☒ Short Hold

Chain of Custody Record

2/4/2014

Client	Client Contact	Date	Chain of Custody Number
Hart Crowser, Inc	Jill Kiernan	01-28-2014	20513
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
8910 SW Gemini Drive	503-620-7284 / 503-620-6918	42109	
City / **State** / **Zip Code**	**Sampler**	**Lab Contact**	
Beaverton / OR / 97008	Jason Miles		
Project Name and Location (State)	**Billing Contact**		
Frank Wear Yakima, WA	Jill Kiernan		
Contract/Purchase Order/Quote No.			
17800-23			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs 8260B Nitrate/Sulfate/Chloride by 300.0	TOC SM5310B	RSK-175 Ethane Ethene Methane	Special Instructions/ Conditions of Receipt
MW-19	1-28-14	1120		X						3			X			
MW-18		1009		X			1	1		6			X	X	X	
MW-17	↓	0907		X						3			X			
Trip Blank	1-23-14	–		X						2			X			

580-42109 Chain of Custody

Fed SO
Lg Blu/whi
wet/bub
ATB = 4.9/4.9 WCS

Page 23 of 24

Cooler	Possible Hazard Identification	Sample Disposal	(A fee may be assessed if samples are retained longer than 1 month)
☒ Yes ☐ No Cooler Temp: ____	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months	

Turn Around Time Required (business days)
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard

QC Requirements (Specify)

1. Relinquished By Sign/Print	Date	Time	1. Received By Sign/Print	Date	Time
	1-28-14	12:25	Tom Blankinship	1/29/14	1125
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-42109-1

Login Number: 42109

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-42139-1
Client Project/Site: Frank Wear Yakima,WA

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
2/12/2014 12:03:24 PM

Kristine Allen, Manager of Project Management
(253)922-2310
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Job ID: 580-42139-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 1/31/2014 11:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5º C.

GC/MS VOA - Method(s) 8260B
The method blank for preparation batch 153117 contained hexachlorobutadiene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 153305 recovered outside control limits for the following analytes: Dichlorodifluoromethane and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 153453 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The following samples were re-analyzed for Tetrachloroethene due to carryover in original run: MW-8 (580-42139-4), MW-25 (580-42139-8), Equip Blank 3 (580-42139-13).

The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-10 (580-42139-6), MW-9 (580-42139-5), MW-22 (580-42139-7), SPW-12 (580-42139-9), SPW-13 (580-42139-10), SPW-13 Dup (580-42139-11), SPW-15 (580-42139-12). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA
Method(s) RSK-175: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 118374.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Equip Blank 2
Date Collected: 01/29/14 16:35
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 17:13	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 17:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 17:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 17:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 17:13	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 17:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 17:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 17:13	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 17:13	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 17:13	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 17:13	1
Benzene	ND		1.0		ug/L			02/07/14 17:13	1
Bromobenzene	ND		1.0		ug/L			02/07/14 17:13	1
Bromoform	ND		1.0		ug/L			02/07/14 17:13	1
Bromomethane	ND		5.0		ug/L			02/07/14 17:13	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 17:13	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 17:13	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 17:13	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 17:13	1
Chloroethane	ND		5.0		ug/L			02/07/14 17:13	1
Chloroform	ND		1.0		ug/L			02/07/14 17:13	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 17:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 17:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 17:13	1
Dibromomethane	ND		1.0		ug/L			02/07/14 17:13	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 17:13	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 17:13	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 17:13	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 17:13	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 17:13	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 17:13	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 17:13	1
Naphthalene	ND		1.0		ug/L			02/07/14 17:13	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 17:13	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Equip Blank 2
Date Collected: 01/29/14 16:35
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 17:13	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
Styrene	ND		1.0		ug/L			02/07/14 17:13	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 17:13	1
Tetrachloroethene	ND		1.0		ug/L			02/07/14 17:13	1
Toluene	ND		1.0		ug/L			02/07/14 17:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 17:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 17:13	1
Trichloroethene	ND		1.0		ug/L			02/07/14 17:13	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 17:13	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/07/14 17:13*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/07/14 17:13*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 120*		*02/07/14 17:13*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/07/14 17:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 120*		*02/07/14 17:13*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 16:11	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 16:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 16:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 16:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 16:11	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 16:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 16:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 16:11	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 16:11	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 16:11	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 16:11	1
Benzene	ND		1.0		ug/L			02/04/14 16:11	1
Bromobenzene	ND		1.0		ug/L			02/04/14 16:11	1
Bromoform	ND		1.0		ug/L			02/04/14 16:11	1
Bromomethane	ND		5.0		ug/L			02/04/14 16:11	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 16:11	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 16:11	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 16:11	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 16:11	1
Chloroethane	ND		5.0		ug/L			02/04/14 16:11	1
Chloroform	ND		1.0		ug/L			02/04/14 16:11	1
Chloromethane	ND		5.0		ug/L			02/04/14 16:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 16:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 16:11	1
Dibromomethane	ND		1.0		ug/L			02/04/14 16:11	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 16:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 16:11	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 16:11	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 16:11	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 16:11	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 16:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 16:11	1
Naphthalene	ND		1.0		ug/L			02/04/14 16:11	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 16:11	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 16:11	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
Styrene	ND		1.0		ug/L			02/04/14 16:11	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 16:11	1
Tetrachloroethene	ND		1.0		ug/L			02/04/14 16:11	1
Toluene	ND		1.0		ug/L			02/04/14 16:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 16:11	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 16:11	1
Trichloroethene	ND		1.0		ug/L			02/04/14 16:11	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 16:11	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*02/04/14 16:11*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/04/14 16:11*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 16:11*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*02/04/14 16:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 120*		*02/04/14 16:11*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-4
Date Collected: 01/30/14 11:27
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,1-Dichloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,1-Dichloroethene	ND		1.0		ug/L			02/11/14 14:05	1
1,1-Dichloropropene	ND		1.0		ug/L			02/11/14 14:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/11/14 14:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/11/14 14:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,2-Dichloroethane	ND		1.0		ug/L			02/11/14 14:05	1
1,2-Dichloropropane	ND		1.0		ug/L			02/11/14 14:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
1,3-Dichloropropane	ND		1.0		ug/L			02/11/14 14:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
2,2-Dichloropropane	ND		1.0		ug/L			02/11/14 14:05	1
2-Chlorotoluene	ND		1.0		ug/L			02/11/14 14:05	1
4-Chlorotoluene	ND		1.0		ug/L			02/11/14 14:05	1
4-Isopropyltoluene	ND		1.0		ug/L			02/11/14 14:05	1
Benzene	ND		1.0		ug/L			02/11/14 14:05	1
Bromobenzene	ND		1.0		ug/L			02/11/14 14:05	1
Bromoform	ND		1.0		ug/L			02/11/14 14:05	1
Bromomethane	ND		5.0		ug/L			02/11/14 14:05	1
Carbon tetrachloride	ND		1.0		ug/L			02/11/14 14:05	1
Chlorobenzene	ND		1.0		ug/L			02/11/14 14:05	1
Chlorobromomethane	ND		1.0		ug/L			02/11/14 14:05	1
Chlorodibromomethane	ND		1.0		ug/L			02/11/14 14:05	1
Chloroethane	ND		5.0		ug/L			02/11/14 14:05	1
Chloroform	**4.0**		1.0		ug/L			02/11/14 14:05	1
Chloromethane	ND		5.0		ug/L			02/11/14 14:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/11/14 14:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/11/14 14:05	1
Dibromomethane	ND		1.0		ug/L			02/11/14 14:05	1
Dichlorobromomethane	ND		1.0		ug/L			02/11/14 14:05	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/11/14 14:05	1
Ethylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
Ethylene Dibromide	ND		1.0		ug/L			02/11/14 14:05	1
Hexachlorobutadiene	ND		1.0		ug/L			02/11/14 14:05	1
Isopropylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/11/14 14:05	1
Methylene Chloride	ND		3.0		ug/L			02/11/14 14:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/11/14 14:05	1
Naphthalene	ND		1.0		ug/L			02/11/14 14:05	1
n-Butylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
N-Propylbenzene	ND		1.0		ug/L			02/11/14 14:05	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-4
Date Collected: 01/30/14 11:27
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/11/14 14:05	1
sec-Butylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
Styrene	ND		1.0		ug/L			02/11/14 14:05	1
tert-Butylbenzene	ND		1.0		ug/L			02/11/14 14:05	1
Tetrachloroethene	**150**		1.0		ug/L			02/11/14 14:05	1
Toluene	ND		1.0		ug/L			02/11/14 14:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/11/14 14:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/11/14 14:05	1
Trichloroethene	ND		1.0		ug/L			02/11/14 14:05	1
Trichlorofluoromethane	ND		1.0		ug/L			02/11/14 14:05	1
Vinyl chloride	ND		1.0		ug/L			02/11/14 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/11/14 14:05*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/11/14 14:05*	*1*
Trifluorotoluene (Surr)	*104*		*80 - 120*		*02/11/14 14:05*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/11/14 14:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/11/14 14:05*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-8
Date Collected: 01/30/14 07:36
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 18:00	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 18:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 18:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 18:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 18:00	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 18:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 18:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 18:00	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 18:00	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 18:00	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 18:00	1
Benzene	ND		1.0		ug/L			02/07/14 18:00	1
Bromobenzene	ND		1.0		ug/L			02/07/14 18:00	1
Bromoform	ND		1.0		ug/L			02/07/14 18:00	1
Bromomethane	ND		5.0		ug/L			02/07/14 18:00	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 18:00	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 18:00	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 18:00	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 18:00	1
Chloroethane	ND		5.0		ug/L			02/07/14 18:00	1
Chloroform	**1.1**		1.0		ug/L			02/07/14 18:00	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 18:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 18:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 18:00	1
Dibromomethane	ND		1.0		ug/L			02/07/14 18:00	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 18:00	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 18:00	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 18:00	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 18:00	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 18:00	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 18:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 18:00	1
Naphthalene	ND		1.0		ug/L			02/07/14 18:00	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 18:00	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-8
Date Collected: 01/30/14 07:36
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 18:00	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
Styrene	ND		1.0		ug/L			02/07/14 18:00	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 18:00	1
Toluene	ND		1.0		ug/L			02/07/14 18:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 18:00	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 18:00	1
Trichloroethene	ND		1.0		ug/L			02/07/14 18:00	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 18:00	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/07/14 18:00*	*1*
Toluene-d8 (Surr)	*103*		*85 - 120*		*02/07/14 18:00*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 120*		*02/07/14 18:00*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/07/14 18:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 120*		*02/07/14 18:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			02/10/14 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/10/14 13:38*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/10/14 13:38*	*1*
Trifluorotoluene (Surr)	*101*		*80 - 120*		*02/10/14 13:38*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/10/14 13:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 120*		*02/10/14 13:38*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-9
Date Collected: 01/30/14 12:22
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 21:37	1
1,1,1-Trichloroethane	**2.0**		1.0		ug/L			02/07/14 21:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 21:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 21:37	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 21:37	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 21:37	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 21:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 21:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 21:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 21:37	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 21:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 21:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 21:37	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 21:37	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 21:37	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 21:37	1
Benzene	ND		1.0		ug/L			02/07/14 21:37	1
Bromobenzene	ND		1.0		ug/L			02/07/14 21:37	1
Bromoform	ND		1.0		ug/L			02/07/14 21:37	1
Bromomethane	ND		5.0		ug/L			02/07/14 21:37	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 21:37	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 21:37	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 21:37	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 21:37	1
Chloroethane	ND		5.0		ug/L			02/07/14 21:37	1
Chloroform	**8.5**		1.0		ug/L			02/07/14 21:37	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 21:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 21:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 21:37	1
Dibromomethane	ND		1.0		ug/L			02/07/14 21:37	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 21:37	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 21:37	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 21:37	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 21:37	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 21:37	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 21:37	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 21:37	1
Naphthalene	ND		1.0		ug/L			02/07/14 21:37	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 21:37	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-9
Date Collected: 01/30/14 12:22
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 21:37	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
Styrene	ND		1.0		ug/L			02/07/14 21:37	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 21:37	1
Toluene	ND		1.0		ug/L			02/07/14 21:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 21:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 21:37	1
Trichloroethene	ND		1.0		ug/L			02/07/14 21:37	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 21:37	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 21:37*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/07/14 21:37*	*1*
Trifluorotoluene (Surr)	*104*		*80 - 120*		*02/07/14 21:37*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*02/07/14 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*		*02/07/14 21:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**2000**		100		ug/L			02/07/14 16:27	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/07/14 16:27*	*100*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/07/14 16:27*	*100*
Trifluorotoluene (Surr)	*100*		*80 - 120*		*02/07/14 16:27*	*100*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/07/14 16:27*	*100*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/07/14 16:27*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 20:37	1
Ethane	ND		0.50		ug/L			02/03/14 20:37	1
Ethene	ND		0.50		ug/L			02/03/14 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*89*		*66 - 132*		*02/03/14 20:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.90		mg/L			01/31/14 14:57	1
Nitrate as N	**3.1**		0.90		mg/L			01/31/14 14:57	1
Sulfate	**9.1**		1.2		mg/L			01/31/14 14:57	1
Total Organic Carbon	**1.1**		1.0		mg/L			02/04/14 13:48	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-10
Date Collected: 01/30/14 15:16
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 22:00	1
1,1,1-Trichloroethane	**3.0**		1.0		ug/L			02/07/14 22:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 22:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 22:00	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 22:00	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 22:00	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 22:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 22:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 22:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 22:00	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 22:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 22:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 22:00	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 22:00	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 22:00	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 22:00	1
Benzene	ND		1.0		ug/L			02/07/14 22:00	1
Bromobenzene	ND		1.0		ug/L			02/07/14 22:00	1
Bromoform	ND		1.0		ug/L			02/07/14 22:00	1
Bromomethane	ND		5.0		ug/L			02/07/14 22:00	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 22:00	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 22:00	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 22:00	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 22:00	1
Chloroethane	ND		5.0		ug/L			02/07/14 22:00	1
Chloroform	**4.0**		1.0		ug/L			02/07/14 22:00	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 22:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 22:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 22:00	1
Dibromomethane	ND		1.0		ug/L			02/07/14 22:00	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 22:00	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 22:00	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 22:00	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 22:00	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 22:00	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 22:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 22:00	1
Naphthalene	ND		1.0		ug/L			02/07/14 22:00	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 22:00	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-10
Date Collected: 01/30/14 15:16
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 22:00	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
Styrene	ND		1.0		ug/L			02/07/14 22:00	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 22:00	1
Toluene	ND		1.0		ug/L			02/07/14 22:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 22:00	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 22:00	1
Trichloroethene	ND		1.0		ug/L			02/07/14 22:00	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 22:00	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*02/07/14 22:00*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/07/14 22:00*	*1*
Trifluorotoluene (Surr)	*98*		*80 - 120*		*02/07/14 22:00*	*1*
Dibromofluoromethane (Surr)	*94*		*85 - 115*		*02/07/14 22:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 120*		*02/07/14 22:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**3300**		100		ug/L			02/07/14 16:50	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 16:50*	*100*
Toluene-d8 (Surr)	*103*		*85 - 120*		*02/07/14 16:50*	*100*
Trifluorotoluene (Surr)	*102*		*80 - 120*		*02/07/14 16:50*	*100*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/07/14 16:50*	*100*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*02/07/14 16:50*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 20:49	1
Ethane	ND		0.50		ug/L			02/03/14 20:49	1
Ethene	ND		0.50		ug/L			02/03/14 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*88*		*66 - 132*		*02/03/14 20:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		0.90		mg/L			01/31/14 15:41	1
Nitrate as N	**3.0**		0.90		mg/L			01/31/14 15:41	1
Sulfate	**7.6**		1.2		mg/L			01/31/14 15:41	1
Total Organic Carbon	ND		1.0		mg/L			02/03/14 11:24	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-22
Date Collected: 01/30/14 14:22
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 18:55	1
1,1,1-Trichloroethane	**2.8**		1.0		ug/L			02/07/14 18:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 18:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 18:55	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 18:55	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 18:55	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 18:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 18:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 18:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 18:55	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 18:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 18:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 18:55	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 18:55	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 18:55	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 18:55	1
Benzene	ND		1.0		ug/L			02/07/14 18:55	1
Bromobenzene	ND		1.0		ug/L			02/07/14 18:55	1
Bromoform	ND		1.0		ug/L			02/07/14 18:55	1
Bromomethane	ND		5.0		ug/L			02/07/14 18:55	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 18:55	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 18:55	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 18:55	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 18:55	1
Chloroethane	ND		5.0		ug/L			02/07/14 18:55	1
Chloroform	**2.4**		1.0		ug/L			02/07/14 18:55	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 18:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 18:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 18:55	1
Dibromomethane	ND		1.0		ug/L			02/07/14 18:55	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 18:55	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 18:55	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 18:55	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 18:55	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 18:55	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 18:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 18:55	1
Naphthalene	ND		1.0		ug/L			02/07/14 18:55	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 18:55	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-22
Date Collected: 01/30/14 14:22
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 18:55	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
Styrene	ND		1.0		ug/L			02/07/14 18:55	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 18:55	1
Toluene	ND		1.0		ug/L			02/07/14 18:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 18:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 18:55	1
Trichloroethene	ND		1.0		ug/L			02/07/14 18:55	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 18:55	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/07/14 18:55*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 18:55*	*1*
Trifluorotoluene (Surr)	*105*		*80 - 120*		*02/07/14 18:55*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/07/14 18:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*		*02/07/14 18:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**2300**		100		ug/L			02/10/14 14:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/10/14 14:25*	*100*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/10/14 14:25*	*100*
Trifluorotoluene (Surr)	*95*		*80 - 120*		*02/10/14 14:25*	*100*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*02/10/14 14:25*	*100*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*		*02/10/14 14:25*	*100*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-25
Date Collected: 01/30/14 08:29
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 19:18	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 19:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 19:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 19:18	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 19:18	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 19:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 19:18	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 19:18	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 19:18	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 19:18	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 19:18	1
Benzene	ND		1.0		ug/L			02/07/14 19:18	1
Bromobenzene	ND		1.0		ug/L			02/07/14 19:18	1
Bromoform	ND		1.0		ug/L			02/07/14 19:18	1
Bromomethane	ND		5.0		ug/L			02/07/14 19:18	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 19:18	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 19:18	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 19:18	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 19:18	1
Chloroethane	ND		5.0		ug/L			02/07/14 19:18	1
Chloroform	**5.9**		1.0		ug/L			02/07/14 19:18	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 19:18	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 19:18	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 19:18	1
Dibromomethane	ND		1.0		ug/L			02/07/14 19:18	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 19:18	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 19:18	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 19:18	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 19:18	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 19:18	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 19:18	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 19:18	1
Naphthalene	ND		1.0		ug/L			02/07/14 19:18	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 19:18	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-25
Date Collected: 01/30/14 08:29
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 19:18	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
Styrene	ND		1.0		ug/L			02/07/14 19:18	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 19:18	1
Toluene	ND		1.0		ug/L			02/07/14 19:18	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 19:18	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 19:18	1
Trichloroethene	ND		1.0		ug/L			02/07/14 19:18	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 19:18	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*02/07/14 19:18*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 19:18*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 120*		*02/07/14 19:18*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*02/07/14 19:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*		*02/07/14 19:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**28**		1.0		ug/L			02/10/14 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/10/14 14:02*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/10/14 14:02*	*1*
Trifluorotoluene (Surr)	*93*		*80 - 120*		*02/10/14 14:02*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/10/14 14:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*		*02/10/14 14:02*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-12
Date Collected: 01/30/14 13:24
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 19:42	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 19:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 19:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 19:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 19:42	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 19:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 19:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 19:42	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 19:42	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 19:42	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 19:42	1
Benzene	ND		1.0		ug/L			02/07/14 19:42	1
Bromobenzene	ND		1.0		ug/L			02/07/14 19:42	1
Bromoform	ND		1.0		ug/L			02/07/14 19:42	1
Bromomethane	ND		5.0		ug/L			02/07/14 19:42	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 19:42	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 19:42	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 19:42	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 19:42	1
Chloroethane	ND		5.0		ug/L			02/07/14 19:42	1
Chloroform	**2.0**		1.0		ug/L			02/07/14 19:42	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 19:42	1
cis-1,2-Dichloroethene	**4.9**		1.0		ug/L			02/07/14 19:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 19:42	1
Dibromomethane	ND		1.0		ug/L			02/07/14 19:42	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 19:42	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 19:42	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 19:42	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 19:42	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 19:42	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 19:42	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 19:42	1
Naphthalene	ND		1.0		ug/L			02/07/14 19:42	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 19:42	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-12
Date Collected: 01/30/14 13:24
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 19:42	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
Styrene	ND		1.0		ug/L			02/07/14 19:42	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 19:42	1
Toluene	ND		1.0		ug/L			02/07/14 19:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 19:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 19:42	1
Trichloroethene	**1.7**		1.0		ug/L			02/07/14 19:42	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 19:42	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*02/07/14 19:42*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 19:42*	*1*
Trifluorotoluene (Surr)	*102*		*80 - 120*		*02/07/14 19:42*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*02/07/14 19:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*		*02/07/14 19:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**1500**		100		ug/L			02/10/14 14:48	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/10/14 14:48*	*100*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/10/14 14:48*	*100*
Trifluorotoluene (Surr)	*99*		*80 - 120*		*02/10/14 14:48*	*100*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*02/10/14 14:48*	*100*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*02/10/14 14:48*	*100*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-13
Date Collected: 01/30/14 09:17
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 20:05	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 20:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 20:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 20:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 20:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:05	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:05	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:05	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 20:05	1
Benzene	ND		1.0		ug/L			02/07/14 20:05	1
Bromobenzene	ND		1.0		ug/L			02/07/14 20:05	1
Bromoform	ND		1.0		ug/L			02/07/14 20:05	1
Bromomethane	ND		5.0		ug/L			02/07/14 20:05	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 20:05	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 20:05	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 20:05	1
Chloroethane	ND		5.0		ug/L			02/07/14 20:05	1
Chloroform	**3.1**		1.0		ug/L			02/07/14 20:05	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 20:05	1
cis-1,2-Dichloroethene	**7.7**		1.0		ug/L			02/07/14 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:05	1
Dibromomethane	ND		1.0		ug/L			02/07/14 20:05	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 20:05	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 20:05	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 20:05	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 20:05	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 20:05	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 20:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 20:05	1
Naphthalene	ND		1.0		ug/L			02/07/14 20:05	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 20:05	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-13
Date Collected: 01/30/14 09:17
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 20:05	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
Styrene	ND		1.0		ug/L			02/07/14 20:05	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 20:05	1
Toluene	ND		1.0		ug/L			02/07/14 20:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 20:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:05	1
Trichloroethene	**3.0**		1.0		ug/L			02/07/14 20:05	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 20:05	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/07/14 20:05*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/07/14 20:05*	*1*
Trifluorotoluene (Surr)	*104*		*80 - 120*		*02/07/14 20:05*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/07/14 20:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*02/07/14 20:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**190**		10		ug/L			02/10/14 15:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/10/14 15:12*	*10*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/10/14 15:12*	*10*
Trifluorotoluene (Surr)	*97*		*80 - 120*		*02/10/14 15:12*	*10*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*02/10/14 15:12*	*10*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*		*02/10/14 15:12*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-13 Dup
Date Collected: 01/30/14 09:17
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 20:28	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 20:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 20:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 20:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 20:28	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 20:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:28	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:28	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:28	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 20:28	1
Benzene	ND		1.0		ug/L			02/07/14 20:28	1
Bromobenzene	ND		1.0		ug/L			02/07/14 20:28	1
Bromoform	ND		1.0		ug/L			02/07/14 20:28	1
Bromomethane	ND		5.0		ug/L			02/07/14 20:28	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 20:28	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 20:28	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 20:28	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 20:28	1
Chloroethane	ND		5.0		ug/L			02/07/14 20:28	1
Chloroform	**3.4**		1.0		ug/L			02/07/14 20:28	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 20:28	1
cis-1,2-Dichloroethene	**8.6**		1.0		ug/L			02/07/14 20:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:28	1
Dibromomethane	ND		1.0		ug/L			02/07/14 20:28	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 20:28	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 20:28	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 20:28	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 20:28	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 20:28	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 20:28	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 20:28	1
Naphthalene	ND		1.0		ug/L			02/07/14 20:28	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 20:28	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-13 Dup
Date Collected: 01/30/14 09:17
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 20:28	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
Styrene	ND		1.0		ug/L			02/07/14 20:28	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 20:28	1
Toluene	ND		1.0		ug/L			02/07/14 20:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 20:28	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:28	1
Trichloroethene	**3.1**		1.0		ug/L			02/07/14 20:28	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 20:28	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/07/14 20:28*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/07/14 20:28*	*1*
Trifluorotoluene (Surr)	*100*		*80 - 120*		*02/07/14 20:28*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/07/14 20:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*		*02/07/14 20:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**200**		10		ug/L			02/10/14 15:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/10/14 15:35*	*10*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/10/14 15:35*	*10*
Trifluorotoluene (Surr)	*97*		*80 - 120*		*02/10/14 15:35*	*10*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/10/14 15:35*	*10*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/10/14 15:35*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-15
Date Collected: 01/30/14 10:19
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 20:50	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 20:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 20:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 20:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 20:50	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 20:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 20:50	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:50	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 20:50	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 20:50	1
Benzene	ND		1.0		ug/L			02/07/14 20:50	1
Bromobenzene	ND		1.0		ug/L			02/07/14 20:50	1
Bromoform	ND		1.0		ug/L			02/07/14 20:50	1
Bromomethane	ND		5.0		ug/L			02/07/14 20:50	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 20:50	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 20:50	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 20:50	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 20:50	1
Chloroethane	ND		5.0		ug/L			02/07/14 20:50	1
Chloroform	**2.9**		1.0		ug/L			02/07/14 20:50	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 20:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 20:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:50	1
Dibromomethane	ND		1.0		ug/L			02/07/14 20:50	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 20:50	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 20:50	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 20:50	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 20:50	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 20:50	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 20:50	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 20:50	1
Naphthalene	ND		1.0		ug/L			02/07/14 20:50	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 20:50	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-15
Date Collected: 01/30/14 10:19
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 20:50	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
Styrene	ND		1.0		ug/L			02/07/14 20:50	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 20:50	1
Toluene	ND		1.0		ug/L			02/07/14 20:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 20:50	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 20:50	1
Trichloroethene	ND		1.0		ug/L			02/07/14 20:50	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 20:50	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 20:50*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/07/14 20:50*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 120*		*02/07/14 20:50*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*02/07/14 20:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/07/14 20:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**220**		10		ug/L			02/10/14 15:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/10/14 15:58*	*10*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/10/14 15:58*	*10*
Trifluorotoluene (Surr)	*95*		*80 - 120*		*02/10/14 15:58*	*10*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/10/14 15:58*	*10*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 120*		*02/10/14 15:58*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Equip Blank 3
Date Collected: 01/30/14 16:15
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 21:14	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 21:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 21:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 21:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 21:14	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 21:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 21:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 21:14	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 21:14	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 21:14	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 21:14	1
Benzene	ND		1.0		ug/L			02/07/14 21:14	1
Bromobenzene	ND		1.0		ug/L			02/07/14 21:14	1
Bromoform	ND		1.0		ug/L			02/07/14 21:14	1
Bromomethane	ND		5.0		ug/L			02/07/14 21:14	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 21:14	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 21:14	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 21:14	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 21:14	1
Chloroethane	ND		5.0		ug/L			02/07/14 21:14	1
Chloroform	ND		1.0		ug/L			02/07/14 21:14	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 21:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 21:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 21:14	1
Dibromomethane	ND		1.0		ug/L			02/07/14 21:14	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 21:14	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 21:14	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 21:14	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 21:14	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 21:14	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 21:14	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 21:14	1
Naphthalene	ND		1.0		ug/L			02/07/14 21:14	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 21:14	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: Equip Blank 3
Date Collected: 01/30/14 16:15
Date Received: 01/31/14 11:40

Lab Sample ID: 580-42139-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 21:14	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
Styrene	ND		1.0		ug/L			02/07/14 21:14	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 21:14	1
Toluene	ND		1.0		ug/L			02/07/14 21:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 21:14	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 21:14	1
Trichloroethene	ND		1.0		ug/L			02/07/14 21:14	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 21:14	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 21:14*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/07/14 21:14*	*1*
Trifluorotoluene (Surr)	*101*		*80 - 120*		*02/07/14 21:14*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*02/07/14 21:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/07/14 21:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			02/10/14 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*02/10/14 13:15*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/10/14 13:15*	*1*
Trifluorotoluene (Surr)	*96*		*80 - 120*		*02/10/14 13:15*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/10/14 13:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/10/14 13:15*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-153117/5
Matrix: Water
Analysis Batch: 153117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 12:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 12:37	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 12:37	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 12:37	1
Benzene	ND		1.0		ug/L			02/04/14 12:37	1
Bromobenzene	ND		1.0		ug/L			02/04/14 12:37	1
Bromoform	ND		1.0		ug/L			02/04/14 12:37	1
Bromomethane	ND		5.0		ug/L			02/04/14 12:37	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 12:37	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Chloroethane	ND		5.0		ug/L			02/04/14 12:37	1
Chloroform	ND		1.0		ug/L			02/04/14 12:37	1
Chloromethane	ND		5.0		ug/L			02/04/14 12:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
Dibromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 12:37	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 12:37	1
Hexachlorobutadiene	1.75		1.0		ug/L			02/04/14 12:37	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 12:37	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 12:37	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 12:37	1
Naphthalene	ND		1.0		ug/L			02/04/14 12:37	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1

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

Lab Sample ID: MB 580-153117/5
Matrix: Water
Analysis Batch: 153117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
o-Xylene	ND		1.0		ug/L			02/04/14 12:37	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Styrene	ND		1.0		ug/L			02/04/14 12:37	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Tetrachloroethene	ND		1.0		ug/L			02/04/14 12:37	1
Toluene	ND		1.0		ug/L			02/04/14 12:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
Trichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 12:37	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/04/14 12:37*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/04/14 12:37*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 12:37*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*02/04/14 12:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/04/14 12:37*	*1*

Lab Sample ID: LCS 580-153117/7
Matrix: Water
Analysis Batch: 153117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	21.8		ug/L		109	80 - 130
1,1,1-Trichloroethane	20.1	23.4		ug/L		116	65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.0		ug/L		100	65 - 130
1,1,2-Trichloroethane	20.1	20.1		ug/L		100	75 - 125
1,1-Dichloroethane	20.1	22.0		ug/L		110	70 - 135
1,1-Dichloroethene	20.1	21.8		ug/L		109	70 - 130
1,1-Dichloropropene	20.1	23.1		ug/L		115	75 - 130
1,2,3-Trichlorobenzene	20.1	18.2		ug/L		91	55 - 140
1,2,3-Trichloropropane	20.1	19.7		ug/L		98	75 - 125
1,2,4-Trichlorobenzene	20.1	19.8		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	20.1	23.1		ug/L		115	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	17.4		ug/L		87	50 - 130
1,2-Dichlorobenzene	20.1	21.4		ug/L		107	70 - 120
1,2-Dichloroethane	20.1	22.6		ug/L		113	70 - 130
1,2-Dichloropropane	20.1	20.0		ug/L		100	75 - 125
1,3,5-Trimethylbenzene	20.1	23.3		ug/L		116	75 - 130
1,3-Dichlorobenzene	20.1	21.1		ug/L		105	75 - 125
1,3-Dichloropropane	20.1	19.8		ug/L		99	75 - 125
1,4-Dichlorobenzene	20.1	21.2		ug/L		106	75 - 125
2,2-Dichloropropane	20.1	24.6		ug/L		123	70 - 135
2-Chlorotoluene	20.1	22.0		ug/L		110	75 - 125
4-Chlorotoluene	20.1	22.7		ug/L		113	75 - 130
4-Isopropyltoluene	20.1	21.8		ug/L		109	75 - 130

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

Lab Sample ID: LCS 580-153117/7
Matrix: Water
Analysis Batch: 153117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.1	21.9		ug/L		109	80 - 120
Bromobenzene	20.1	21.7		ug/L		108	75 - 125
Bromoform	20.1	18.4		ug/L		92	70 - 130
Bromomethane	20.0	22.7		ug/L		113	30 - 145
Carbon tetrachloride	20.1	23.7		ug/L		118	65 - 140
Chlorobenzene	20.1	20.6		ug/L		103	80 - 120
Chlorobromomethane	20.1	21.7		ug/L		108	65 - 130
Chlorodibromomethane	20.1	20.9		ug/L		104	60 - 135
Chloroethane	20.0	19.8		ug/L		99	60 - 135
Chloroform	20.1	21.3		ug/L		106	65 - 135
Chloromethane	20.0	21.1		ug/L		105	40 - 125
cis-1,2-Dichloroethene	20.1	22.3		ug/L		111	70 - 125
cis-1,3-Dichloropropene	20.1	20.9		ug/L		104	70 - 130
Dibromomethane	20.1	21.2		ug/L		106	75 - 125
Dichlorobromomethane	20.1	21.4		ug/L		106	75 - 120
Dichlorodifluoromethane	20.0	19.8		ug/L		99	30 - 155
Ethylbenzene	20.1	21.4		ug/L		107	75 - 125
Ethylene Dibromide	20.1	20.6		ug/L		103	80 - 120
Hexachlorobutadiene	20.1	23.2		ug/L		116	50 - 140
Isopropylbenzene	20.1	21.7		ug/L		108	75 - 125
Methyl tert-butyl ether	20.1	21.0		ug/L		104	65 - 125
Methylene Chloride	20.1	21.3		ug/L		106	55 - 140
m-Xylene & p-Xylene	20.1	21.3		ug/L		106	75 - 130
Naphthalene	20.1	18.6		ug/L		93	55 - 140
n-Butylbenzene	20.1	22.0		ug/L		110	70 - 135
N-Propylbenzene	20.1	21.2		ug/L		106	70 - 130
o-Xylene	20.1	20.2		ug/L		101	80 - 120
sec-Butylbenzene	20.1	23.0		ug/L		114	70 - 125
Styrene	20.1	20.8		ug/L		104	65 - 135
tert-Butylbenzene	20.1	21.7		ug/L		108	70 - 130
Tetrachloroethene	20.1	19.8		ug/L		99	45 - 150
Toluene	20.1	22.0		ug/L		110	75 - 120
trans-1,2-Dichloroethene	20.1	22.3		ug/L		111	60 - 140
trans-1,3-Dichloropropene	20.1	19.9		ug/L		99	55 - 140
Trichloroethene	20.1	21.6		ug/L		108	70 - 125
Trichlorofluoromethane	20.0	24.9		ug/L		124	60 - 145
Vinyl chloride	20.0	20.9		ug/L		104	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*117*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*

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

Lab Sample ID: LCSD 580-153117/9
Matrix: Water
Analysis Batch: 153117

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
1,1,1,2-Tetrachloroethane	20.1	21.0		ug/L		105	80 - 130	4	30
1,1,1-Trichloroethane	20.1	22.8		ug/L		114	65 - 130	2	30
1,1,2,2-Tetrachloroethane	20.1	19.0		ug/L		95	65 - 130	5	30
1,1,2-Trichloroethane	20.1	21.4		ug/L		107	75 - 125	6	30
1,1-Dichloroethane	20.1	22.8		ug/L		113	70 - 135	3	30
1,1-Dichloroethene	20.1	22.9		ug/L		114	70 - 130	5	30
1,1-Dichloropropene	20.1	23.3		ug/L		116	75 - 130	1	30
1,2,3-Trichlorobenzene	20.1	20.2		ug/L		101	55 - 140	10	30
1,2,3-Trichloropropane	20.1	21.4		ug/L		107	75 - 125	8	30
1,2,4-Trichlorobenzene	20.1	19.8		ug/L		99	65 - 135	0	30
1,2,4-Trimethylbenzene	20.1	23.7		ug/L		118	75 - 130	3	30
1,2-Dibromo-3-Chloropropane	20.1	18.7		ug/L		93	50 - 130	7	30
1,2-Dichlorobenzene	20.1	22.0		ug/L		110	70 - 120	3	30
1,2-Dichloroethane	20.1	22.3		ug/L		111	70 - 130	1	30
1,2-Dichloropropane	20.1	21.3		ug/L		106	75 - 125	6	30
1,3,5-Trimethylbenzene	20.1	24.0		ug/L		120	75 - 130	3	30
1,3-Dichlorobenzene	20.1	22.3		ug/L		111	75 - 125	5	30
1,3-Dichloropropane	20.1	20.3		ug/L		101	75 - 125	3	30
1,4-Dichlorobenzene	20.1	21.2		ug/L		106	75 - 125	0	30
2,2-Dichloropropane	20.1	24.4		ug/L		122	70 - 135	1	30
2-Chlorotoluene	20.1	21.7		ug/L		108	75 - 125	2	30
4-Chlorotoluene	20.1	21.4		ug/L		107	75 - 130	6	30
4-Isopropyltoluene	20.1	22.3		ug/L		111	75 - 130	2	30
Benzene	20.1	21.5		ug/L		107	80 - 120	2	30
Bromobenzene	20.1	22.4		ug/L		112	75 - 125	3	30
Bromoform	20.1	18.2		ug/L		91	70 - 130	1	30
Bromomethane	20.0	23.3		ug/L		116	30 - 145	3	30
Carbon tetrachloride	20.1	24.1		ug/L		120	65 - 140	2	30
Chlorobenzene	20.1	20.0		ug/L		100	80 - 120	3	30
Chlorobromomethane	20.1	22.0		ug/L		110	65 - 130	2	30
Chlorodibromomethane	20.1	21.2		ug/L		106	60 - 135	1	30
Chloroethane	20.0	21.7		ug/L		108	60 - 135	9	30
Chloroform	20.1	21.7		ug/L		108	65 - 135	2	30
Chloromethane	20.0	22.3		ug/L		111	40 - 125	5	30
cis-1,2-Dichloroethene	20.1	22.7		ug/L		113	70 - 125	1	30
cis-1,3-Dichloropropene	20.1	20.1		ug/L		100	70 - 130	4	30
Dibromomethane	20.1	20.9		ug/L		104	75 - 125	2	30
Dichlorobromomethane	20.1	21.5		ug/L		107	75 - 120	1	30
Dichlorodifluoromethane	20.0	20.4		ug/L		102	30 - 155	3	30
Ethylbenzene	20.1	21.1		ug/L		105	75 - 125	2	30
Ethylene Dibromide	20.1	21.0		ug/L		105	80 - 120	2	30
Hexachlorobutadiene	20.1	24.6		ug/L		122	50 - 140	6	30
Isopropylbenzene	20.1	21.8		ug/L		109	75 - 125	0	30
Methyl tert-butyl ether	20.1	21.1		ug/L		105	65 - 125	1	30
Methylene Chloride	20.1	22.5		ug/L		112	55 - 140	5	30
m-Xylene & p-Xylene	20.1	21.5		ug/L		107	75 - 130	1	30
Naphthalene	20.1	18.4		ug/L		92	55 - 140	1	30
n-Butylbenzene	20.1	21.0		ug/L		105	70 - 135	5	30

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

Lab Sample ID: LCSD 580-153117/9
Matrix: Water
Analysis Batch: 153117

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
N-Propylbenzene			20.1	21.8		ug/L		109	70 - 130	3	30
o-Xylene			20.1	19.9		ug/L		99	80 - 120	1	30
sec-Butylbenzene			20.1	23.3		ug/L		116	70 - 125	1	30
Styrene			20.1	20.6		ug/L		103	65 - 135	1	30
tert-Butylbenzene			20.1	22.3		ug/L		111	70 - 130	3	30
Tetrachloroethene			20.1	21.1		ug/L		105	45 - 150	7	30
Toluene			20.1	21.4		ug/L		107	75 - 120	3	30
trans-1,2-Dichloroethene			20.1	22.2		ug/L		111	60 - 140	0	30
trans-1,3-Dichloropropene			20.1	19.6		ug/L		97	55 - 140	2	30
Trichloroethene			20.1	21.5		ug/L		107	70 - 125	0	30
Trichlorofluoromethane			20.0	26.3		ug/L		131	60 - 145	6	30
Vinyl chloride			20.0	21.2		ug/L		106	50 - 145	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*116*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*

Lab Sample ID: MB 580-153305/5
Matrix: Water
Analysis Batch: 153305

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 12:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 12:59	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 12:59	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 12:59	1

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

Lab Sample ID: MB 580-153305/5
Matrix: Water
Analysis Batch: 153305

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			02/07/14 12:59	1
Bromobenzene	ND		1.0		ug/L			02/07/14 12:59	1
Bromoform	ND		1.0		ug/L			02/07/14 12:59	1
Bromomethane	ND		5.0		ug/L			02/07/14 12:59	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 12:59	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Chloroethane	ND		5.0		ug/L			02/07/14 12:59	1
Chloroform	ND		1.0		ug/L			02/07/14 12:59	1
Chloromethane	ND		5.0		ug/L			02/07/14 12:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
Dibromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/07/14 12:59	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 12:59	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 12:59	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 12:59	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 12:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 12:59	1
Naphthalene	ND		1.0		ug/L			02/07/14 12:59	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
o-Xylene	ND		1.0		ug/L			02/07/14 12:59	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Styrene	ND		1.0		ug/L			02/07/14 12:59	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Tetrachloroethene	ND		1.0		ug/L			02/07/14 12:59	1
Toluene	ND		1.0		ug/L			02/07/14 12:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
Trichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 12:59	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 12:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 12:59*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 12:59*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*02/07/14 12:59*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/07/14 12:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/07/14 12:59*	*1*

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

Lab Sample ID: LCS 580-153305/7
Matrix: Water
Analysis Batch: 153305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	20.2		ug/L		101	80 - 130
1,1,1-Trichloroethane	20.1	20.3		ug/L		101	65 - 130
1,1,2,2-Tetrachloroethane	20.1	21.8		ug/L		109	65 - 130
1,1,2-Trichloroethane	20.1	19.2		ug/L		96	75 - 125
1,1-Dichloroethane	20.1	20.4		ug/L		102	70 - 135
1,1-Dichloroethene	20.1	20.6		ug/L		103	70 - 130
1,1-Dichloropropene	20.1	21.7		ug/L		108	75 - 130
1,2,3-Trichlorobenzene	20.1	20.5		ug/L		102	55 - 140
1,2,3-Trichloropropane	20.1	20.9		ug/L		104	75 - 125
1,2,4-Trichlorobenzene	20.1	20.0		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	20.1	20.2		ug/L		101	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	20.8		ug/L		104	50 - 130
1,2-Dichlorobenzene	20.1	19.7		ug/L		98	70 - 120
1,2-Dichloroethane	20.1	20.4		ug/L		102	70 - 130
1,2-Dichloropropane	20.1	20.3		ug/L		101	75 - 125
1,3,5-Trimethylbenzene	20.1	20.0		ug/L		100	75 - 130
1,3-Dichlorobenzene	20.1	20.6		ug/L		103	75 - 125
1,3-Dichloropropane	20.1	20.6		ug/L		103	75 - 125
1,4-Dichlorobenzene	20.1	19.5		ug/L		97	75 - 125
2,2-Dichloropropane	20.1	24.5		ug/L		122	70 - 135
2-Chlorotoluene	20.1	20.2		ug/L		101	75 - 125
4-Chlorotoluene	20.1	19.7		ug/L		98	75 - 130
4-Isopropyltoluene	20.1	20.7		ug/L		103	75 - 130
Benzene	20.1	20.9		ug/L		104	80 - 120
Bromobenzene	20.1	20.6		ug/L		103	75 - 125
Bromoform	20.1	18.5		ug/L		92	70 - 130
Bromomethane	20.1	19.6		ug/L		98	30 - 145
Carbon tetrachloride	20.1	20.8		ug/L		104	65 - 140
Chlorobenzene	20.1	20.3		ug/L		101	80 - 120
Chlorobromomethane	20.1	20.4		ug/L		102	65 - 130
Chlorodibromomethane	20.1	19.1		ug/L		95	60 - 135
Chloroethane	20.1	22.0		ug/L		110	60 - 135
Chloroform	20.1	20.3		ug/L		101	65 - 135
Chloromethane	20.1	23.8		ug/L		118	40 - 125
cis-1,2-Dichloroethene	20.1	21.7		ug/L		108	70 - 125
cis-1,3-Dichloropropene	20.1	20.2		ug/L		101	70 - 130
Dibromomethane	20.1	19.5		ug/L		97	75 - 125
Dichlorobromomethane	20.1	19.6		ug/L		98	75 - 120
Dichlorodifluoromethane	20.1	33.5	*	ug/L		167	30 - 155
Ethylbenzene	20.1	20.6		ug/L		103	75 - 125
Ethylene Dibromide	20.1	20.7		ug/L		103	80 - 120
Hexachlorobutadiene	20.1	21.5		ug/L		107	50 - 140
Isopropylbenzene	20.1	20.6		ug/L		103	75 - 125
Methyl tert-butyl ether	20.1	19.5		ug/L		97	65 - 125
Methylene Chloride	20.1	21.0		ug/L		105	55 - 140
m-Xylene & p-Xylene	20.1	20.5		ug/L		102	75 - 130
Naphthalene	20.1	20.7		ug/L		103	55 - 140
n-Butylbenzene	20.1	21.8		ug/L		109	70 - 135

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

Lab Sample ID: LCS 580-153305/7
Matrix: Water
Analysis Batch: 153305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	20.1	20.8		ug/L		104	70 - 130
o-Xylene	20.1	20.5		ug/L		102	80 - 120
sec-Butylbenzene	20.1	19.7		ug/L		98	70 - 125
Styrene	20.1	20.6		ug/L		103	65 - 135
tert-Butylbenzene	20.1	19.0		ug/L		95	70 - 130
Tetrachloroethene	20.1	16.9		ug/L		85	45 - 150
Toluene	20.1	20.6		ug/L		103	75 - 120
trans-1,2-Dichloroethene	20.1	21.6		ug/L		108	60 - 140
trans-1,3-Dichloropropene	20.1	19.6		ug/L		98	55 - 140
Trichloroethene	20.1	21.1		ug/L		105	70 - 125
Trichlorofluoromethane	20.1	24.0		ug/L		119	60 - 145
Vinyl chloride	20.1	24.4		ug/L		122	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*99*		*85 - 120*
Trifluorotoluene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 120*

Lab Sample ID: LCSD 580-153305/12
Matrix: Water
Analysis Batch: 153305

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
1,1,1,2-Tetrachloroethane	20.1	20.9		ug/L		104	80 - 130	3	30
1,1,1-Trichloroethane	20.1	20.4		ug/L		102	65 - 130	1	30
1,1,2,2-Tetrachloroethane	20.1	21.8		ug/L		109	65 - 130	0	30
1,1,2-Trichloroethane	20.1	19.2		ug/L		96	75 - 125	0	30
1,1-Dichloroethane	20.1	20.3		ug/L		101	70 - 135	1	30
1,1-Dichloroethene	20.1	20.7		ug/L		103	70 - 130	1	30
1,1-Dichloropropene	20.1	21.4		ug/L		107	75 - 130	1	30
1,2,3-Trichlorobenzene	20.1	23.4		ug/L		117	55 - 140	13	30
1,2,3-Trichloropropane	20.1	19.6		ug/L		98	75 - 125	6	30
1,2,4-Trichlorobenzene	20.1	20.9		ug/L		104	65 - 135	5	30
1,2,4-Trimethylbenzene	20.1	20.3		ug/L		101	75 - 130	0	30
1,2-Dibromo-3-Chloropropane	20.1	20.2		ug/L		101	50 - 130	3	30
1,2-Dichlorobenzene	20.1	20.4		ug/L		102	70 - 120	3	30
1,2-Dichloroethane	20.1	20.0		ug/L		99	70 - 130	2	30
1,2-Dichloropropane	20.1	21.4		ug/L		107	75 - 125	6	30
1,3,5-Trimethylbenzene	20.1	20.7		ug/L		103	75 - 130	3	30
1,3-Dichlorobenzene	20.1	20.6		ug/L		103	75 - 125	0	30
1,3-Dichloropropane	20.1	19.9		ug/L		99	75 - 125	3	30
1,4-Dichlorobenzene	20.1	20.1		ug/L		100	75 - 125	3	30
2,2-Dichloropropane	20.1	24.9		ug/L		124	70 - 135	2	30
2-Chlorotoluene	20.1	20.0		ug/L		100	75 - 125	1	30
4-Chlorotoluene	20.1	19.9		ug/L		99	75 - 130	1	30
4-Isopropyltoluene	20.1	21.4		ug/L		107	75 - 130	3	30

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

Lab Sample ID: LCSD 580-153305/12
Matrix: Water
Analysis Batch: 153305

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
Benzene	20.1	20.7		ug/L		103	80 - 120	1	30
Bromobenzene	20.1	21.0		ug/L		105	75 - 125	2	30
Bromoform	20.1	18.0		ug/L		90	70 - 130	3	30
Bromomethane	20.1	20.2		ug/L		101	30 - 145	3	30
Carbon tetrachloride	20.1	21.8		ug/L		109	65 - 140	5	30
Chlorobenzene	20.1	20.1		ug/L		100	80 - 120	1	30
Chlorobromomethane	20.1	21.8		ug/L		109	65 - 130	7	30
Chlorodibromomethane	20.1	19.7		ug/L		98	60 - 135	3	30
Chloroethane	20.1	25.8		ug/L		129	60 - 135	16	30
Chloroform	20.1	21.1		ug/L		105	65 - 135	4	30
Chloromethane	20.1	25.3	*	ug/L		126	40 - 125	6	30
cis-1,2-Dichloroethene	20.1	21.2		ug/L		106	70 - 125	2	30
cis-1,3-Dichloropropene	20.1	19.1		ug/L		95	70 - 130	5	30
Dibromomethane	20.1	18.7		ug/L		93	75 - 125	4	30
Dichlorobromomethane	20.1	19.3		ug/L		96	75 - 120	1	30
Dichlorodifluoromethane	20.1	35.9	*	ug/L		179	30 - 155	7	30
Ethylbenzene	20.1	21.0		ug/L		105	75 - 125	2	30
Ethylene Dibromide	20.1	20.9		ug/L		104	80 - 120	1	30
Hexachlorobutadiene	20.1	25.1		ug/L		125	50 - 140	16	30
Isopropylbenzene	20.1	21.1		ug/L		105	75 - 125	2	30
Methyl tert-butyl ether	20.1	19.2		ug/L		96	65 - 125	1	30
Methylene Chloride	20.1	19.0		ug/L		95	55 - 140	10	30
m-Xylene & p-Xylene	20.1	20.7		ug/L		103	75 - 130	1	30
Naphthalene	20.1	21.6		ug/L		108	55 - 140	5	30
n-Butylbenzene	20.1	21.4		ug/L		107	70 - 135	2	30
N-Propylbenzene	20.1	20.9		ug/L		104	70 - 130	0	30
o-Xylene	20.1	20.9		ug/L		104	80 - 120	2	30
sec-Butylbenzene	20.1	20.1		ug/L		100	70 - 125	2	30
Styrene	20.1	20.5		ug/L		102	65 - 135	0	30
tert-Butylbenzene	20.1	18.9		ug/L		94	70 - 130	1	30
Tetrachloroethene	20.1	14.0		ug/L		70	45 - 150	19	30
Toluene	20.1	21.3		ug/L		106	75 - 120	3	30
trans-1,2-Dichloroethene	20.1	21.4		ug/L		106	60 - 140	1	30
trans-1,3-Dichloropropene	20.1	20.1		ug/L		100	55 - 140	2	30
Trichloroethene	20.1	21.1		ug/L		105	70 - 125	0	30
Trichlorofluoromethane	20.1	24.1		ug/L		120	60 - 145	1	30
Vinyl chloride	20.1	25.4		ug/L		126	50 - 145	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*102*		*85 - 120*
Trifluorotoluene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*

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

Lab Sample ID: MB 580-153349/12
Matrix: Water
Analysis Batch: 153349

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			02/10/14 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/10/14 11:18*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/10/14 11:18*	*1*
Trifluorotoluene (Surr)	*97*		*80 - 120*		*02/10/14 11:18*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/10/14 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/10/14 11:18*	*1*

Lab Sample ID: LCS 580-153349/13
Matrix: Water
Analysis Batch: 153349

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			20.1	17.9		ug/L		89	45 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 120*

Lab Sample ID: LCSD 580-153349/14
Matrix: Water
Analysis Batch: 153349

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
Tetrachloroethene			20.1	20.1		ug/L		100	45 - 150	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*

Lab Sample ID: MB 580-153453/12
Matrix: Water
Analysis Batch: 153453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/11/14 11:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/11/14 11:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/11/14 11:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/11/14 11:42	1
1,1-Dichloroethane	ND		1.0		ug/L			02/11/14 11:42	1

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

Lab Sample ID: MB 580-153453/12
Matrix: Water
Analysis Batch: 153453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0		ug/L			02/11/14 11:42	1
1,1-Dichloropropene	ND		1.0		ug/L			02/11/14 11:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/11/14 11:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/11/14 11:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,2-Dichloroethane	ND		1.0		ug/L			02/11/14 11:42	1
1,2-Dichloropropane	ND		1.0		ug/L			02/11/14 11:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
1,3-Dichloropropane	ND		1.0		ug/L			02/11/14 11:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
2,2-Dichloropropane	ND		1.0		ug/L			02/11/14 11:42	1
2-Chlorotoluene	ND		1.0		ug/L			02/11/14 11:42	1
4-Chlorotoluene	ND		1.0		ug/L			02/11/14 11:42	1
4-Isopropyltoluene	ND		1.0		ug/L			02/11/14 11:42	1
Benzene	ND		1.0		ug/L			02/11/14 11:42	1
Bromobenzene	ND		1.0		ug/L			02/11/14 11:42	1
Bromoform	ND		1.0		ug/L			02/11/14 11:42	1
Bromomethane	ND		5.0		ug/L			02/11/14 11:42	1
Carbon tetrachloride	ND		1.0		ug/L			02/11/14 11:42	1
Chlorobenzene	ND		1.0		ug/L			02/11/14 11:42	1
Chlorobromomethane	ND		1.0		ug/L			02/11/14 11:42	1
Chlorodibromomethane	ND		1.0		ug/L			02/11/14 11:42	1
Chloroethane	ND		5.0		ug/L			02/11/14 11:42	1
Chloroform	ND		1.0		ug/L			02/11/14 11:42	1
Chloromethane	ND		5.0		ug/L			02/11/14 11:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/11/14 11:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/11/14 11:42	1
Dibromomethane	ND		1.0		ug/L			02/11/14 11:42	1
Dichlorobromomethane	ND		1.0		ug/L			02/11/14 11:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/11/14 11:42	1
Ethylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
Ethylene Dibromide	ND		1.0		ug/L			02/11/14 11:42	1
Hexachlorobutadiene	ND		1.0		ug/L			02/11/14 11:42	1
Isopropylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/11/14 11:42	1
Methylene Chloride	ND		3.0		ug/L			02/11/14 11:42	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/11/14 11:42	1
Naphthalene	ND		1.0		ug/L			02/11/14 11:42	1
n-Butylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
N-Propylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
o-Xylene	ND		1.0		ug/L			02/11/14 11:42	1
sec-Butylbenzene	ND		1.0		ug/L			02/11/14 11:42	1
Styrene	ND		1.0		ug/L			02/11/14 11:42	1
tert-Butylbenzene	ND		1.0		ug/L			02/11/14 11:42	1

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

Lab Sample ID: MB 580-153453/12
Matrix: Water
Analysis Batch: 153453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			02/11/14 11:42	1
Toluene	ND		1.0		ug/L			02/11/14 11:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/11/14 11:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/11/14 11:42	1
Trichloroethene	ND		1.0		ug/L			02/11/14 11:42	1
Trichlorofluoromethane	ND		1.0		ug/L			02/11/14 11:42	1
Vinyl chloride	ND		1.0		ug/L			02/11/14 11:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/11/14 11:42*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/11/14 11:42*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 120*		*02/11/14 11:42*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*02/11/14 11:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/11/14 11:42*	*1*

Lab Sample ID: LCS 580-153453/13
Matrix: Water
Analysis Batch: 153453

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	20.5		ug/L		102	80 - 130
1,1,1-Trichloroethane	20.1	20.9		ug/L		104	65 - 130
1,1,2,2-Tetrachloroethane	20.1	21.2		ug/L		106	65 - 130
1,1,2-Trichloroethane	20.1	20.8		ug/L		104	75 - 125
1,1-Dichloroethane	20.1	21.5		ug/L		107	70 - 135
1,1-Dichloroethene	20.1	20.9		ug/L		104	70 - 130
1,1-Dichloropropene	20.1	22.7		ug/L		113	75 - 130
1,2,3-Trichlorobenzene	20.1	21.5		ug/L		107	55 - 140
1,2,3-Trichloropropane	20.1	20.5		ug/L		102	75 - 125
1,2,4-Trichlorobenzene	20.1	19.5		ug/L		97	65 - 135
1,2,4-Trimethylbenzene	20.1	19.0		ug/L		95	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	21.5		ug/L		107	50 - 130
1,2-Dichlorobenzene	20.1	20.6		ug/L		103	70 - 120
1,2-Dichloroethane	20.1	21.1		ug/L		105	70 - 130
1,2-Dichloropropane	20.1	21.7		ug/L		108	75 - 125
1,3,5-Trimethylbenzene	20.1	19.8		ug/L		99	75 - 130
1,3-Dichlorobenzene	20.1	19.5		ug/L		97	75 - 125
1,3-Dichloropropane	20.1	21.1		ug/L		105	75 - 125
1,4-Dichlorobenzene	20.1	19.8		ug/L		99	75 - 125
2,2-Dichloropropane	20.1	25.5		ug/L		127	70 - 135
2-Chlorotoluene	20.1	20.0		ug/L		100	75 - 125
4-Chlorotoluene	20.1	20.0		ug/L		100	75 - 130
4-Isopropyltoluene	20.1	19.9		ug/L		99	75 - 130
Benzene	20.1	21.2		ug/L		106	80 - 120
Bromobenzene	20.1	20.2		ug/L		101	75 - 125
Bromoform	20.1	19.2		ug/L		95	70 - 130
Bromomethane	20.1	19.8		ug/L		98	30 - 145
Carbon tetrachloride	20.1	22.2		ug/L		111	65 - 140

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

Lab Sample ID: LCS 580-153453/13
Matrix: Water
Analysis Batch: 153453

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	20.1	20.7		ug/L		103	80 - 120
Chlorobromomethane	20.1	21.2		ug/L		106	65 - 130
Chlorodibromomethane	20.1	20.6		ug/L		103	60 - 135
Chloroethane	20.1	24.3		ug/L		121	60 - 135
Chloroform	20.1	20.9		ug/L		104	65 - 135
Chloromethane	20.1	23.8		ug/L		118	40 - 125
cis-1,2-Dichloroethene	20.1	22.2		ug/L		111	70 - 125
cis-1,3-Dichloropropene	20.1	19.7		ug/L		98	70 - 130
Dibromomethane	20.1	19.4		ug/L		97	75 - 125
Dichlorobromomethane	20.1	20.1		ug/L		100	75 - 120
Dichlorodifluoromethane	20.1	33.8	*	ug/L		168	30 - 155
Ethylbenzene	20.1	22.0		ug/L		110	75 - 125
Ethylene Dibromide	20.1	21.1		ug/L		105	80 - 120
Hexachlorobutadiene	20.1	19.4		ug/L		97	50 - 140
Isopropylbenzene	20.1	20.9		ug/L		104	75 - 125
Methyl tert-butyl ether	20.1	21.0		ug/L		105	65 - 125
Methylene Chloride	20.1	20.9		ug/L		104	55 - 140
m-Xylene & p-Xylene	20.1	20.7		ug/L		103	75 - 130
Naphthalene	20.1	21.0		ug/L		105	55 - 140
n-Butylbenzene	20.1	19.4		ug/L		97	70 - 135
N-Propylbenzene	20.1	19.8		ug/L		99	70 - 130
o-Xylene	20.1	21.1		ug/L		105	80 - 120
sec-Butylbenzene	20.1	19.3		ug/L		96	70 - 125
Styrene	20.1	21.0		ug/L		105	65 - 135
tert-Butylbenzene	20.1	18.4		ug/L		92	70 - 130
Tetrachloroethene	20.1	16.5		ug/L		82	45 - 150
Toluene	20.1	21.3		ug/L		106	75 - 120
trans-1,2-Dichloroethene	20.1	21.7		ug/L		108	60 - 140
trans-1,3-Dichloropropene	20.1	20.4		ug/L		102	55 - 140
Trichloroethene	20.1	20.9		ug/L		104	70 - 125
Trichlorofluoromethane	20.1	23.5		ug/L		117	60 - 145
Vinyl chloride	20.1	25.6		ug/L		128	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 120*

Lab Sample ID: LCSD 580-153453/14
Matrix: Water
Analysis Batch: 153453

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
1,1,1,2-Tetrachloroethane	20.1	20.1		ug/L		100	80 - 130	2	30
1,1,1-Trichloroethane	20.1	21.4		ug/L		107	65 - 130	2	30
1,1,2,2-Tetrachloroethane	20.1	22.4		ug/L		112	65 - 130	5	30

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

Lab Sample ID: LCSD 580-153453/14
Matrix: Water
Analysis Batch: 153453

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
1,1,2-Trichloroethane	20.1	19.4		ug/L		97	75 - 125	7	30
1,1-Dichloroethane	20.1	21.4		ug/L		107	70 - 135	0	30
1,1-Dichloroethene	20.1	21.2		ug/L		106	70 - 130	1	30
1,1-Dichloropropene	20.1	23.0		ug/L		115	75 - 130	1	30
1,2,3-Trichlorobenzene	20.1	22.1		ug/L		110	55 - 140	3	30
1,2,3-Trichloropropane	20.1	21.4		ug/L		107	75 - 125	4	30
1,2,4-Trichlorobenzene	20.1	20.6		ug/L		103	65 - 135	6	30
1,2,4-Trimethylbenzene	20.1	19.7		ug/L		98	75 - 130	4	30
1,2-Dibromo-3-Chloropropane	20.1	22.2		ug/L		111	50 - 130	3	30
1,2-Dichlorobenzene	20.1	21.1		ug/L		105	70 - 120	3	30
1,2-Dichloroethane	20.1	21.2		ug/L		106	70 - 130	0	30
1,2-Dichloropropane	20.1	21.2		ug/L		106	75 - 125	2	30
1,3,5-Trimethylbenzene	20.1	20.3		ug/L		101	75 - 130	2	30
1,3-Dichlorobenzene	20.1	20.6		ug/L		103	75 - 125	5	30
1,3-Dichloropropane	20.1	21.1		ug/L		105	75 - 125	0	30
1,4-Dichlorobenzene	20.1	20.3		ug/L		101	75 - 125	2	30
2,2-Dichloropropane	20.1	24.9		ug/L		124	70 - 135	2	30
2-Chlorotoluene	20.1	19.2		ug/L		96	75 - 125	4	30
4-Chlorotoluene	20.1	19.5		ug/L		97	75 - 130	3	30
4-Isopropyltoluene	20.1	20.3		ug/L		101	75 - 130	2	30
Benzene	20.1	20.5		ug/L		102	80 - 120	3	30
Bromobenzene	20.1	20.1		ug/L		100	75 - 125	0	30
Bromoform	20.1	19.6		ug/L		98	70 - 130	2	30
Bromomethane	20.1	19.1		ug/L		95	30 - 145	4	30
Carbon tetrachloride	20.1	22.0		ug/L		110	65 - 140	1	30
Chlorobenzene	20.1	20.6		ug/L		103	80 - 120	1	30
Chlorobromomethane	20.1	21.1		ug/L		105	65 - 130	1	30
Chlorodibromomethane	20.1	20.2		ug/L		101	60 - 135	2	30
Chloroethane	20.1	24.6		ug/L		122	60 - 135	1	30
Chloroform	20.1	21.3		ug/L		106	65 - 135	2	30
Chloromethane	20.1	23.8		ug/L		119	40 - 125	0	30
cis-1,2-Dichloroethene	20.1	20.3		ug/L		101	70 - 125	9	30
cis-1,3-Dichloropropene	20.1	19.7		ug/L		98	70 - 130	0	30
Dibromomethane	20.1	19.9		ug/L		99	75 - 125	3	30
Dichlorobromomethane	20.1	20.2		ug/L		101	75 - 120	1	30
Dichlorodifluoromethane	20.1	35.1	*	ug/L		175	30 - 155	4	30
Ethylbenzene	20.1	21.9		ug/L		109	75 - 125	0	30
Ethylene Dibromide	20.1	21.1		ug/L		105	80 - 120	0	30
Hexachlorobutadiene	20.1	23.1		ug/L		115	50 - 140	17	30
Isopropylbenzene	20.1	21.7		ug/L		108	75 - 125	4	30
Methyl tert-butyl ether	20.1	20.7		ug/L		103	65 - 125	1	30
Methylene Chloride	20.1	21.1		ug/L		105	55 - 140	1	30
m-Xylene & p-Xylene	20.1	21.5		ug/L		107	75 - 130	4	30
Naphthalene	20.1	24.0		ug/L		120	55 - 140	14	30
n-Butylbenzene	20.1	20.6		ug/L		103	70 - 135	6	30
N-Propylbenzene	20.1	20.3		ug/L		101	70 - 130	3	30
o-Xylene	20.1	21.3		ug/L		106	80 - 120	1	30
sec-Butylbenzene	20.1	19.8		ug/L		99	70 - 125	3	30

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

Lab Sample ID: LCSD 580-153453/14
Matrix: Water
Analysis Batch: 153453

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
Styrene			20.1	20.9		ug/L		104	65 - 135	0	30
tert-Butylbenzene			20.1	18.3		ug/L		91	70 - 130	1	30
Tetrachloroethene			20.1	18.4		ug/L		92	45 - 150	11	30
Toluene			20.1	21.4		ug/L		107	75 - 120	0	30
trans-1,2-Dichloroethene			20.1	21.5		ug/L		107	60 - 140	1	30
trans-1,3-Dichloropropene			20.1	20.0		ug/L		100	55 - 140	2	30
Trichloroethene			20.1	21.4		ug/L		107	70 - 125	2	30
Trichlorofluoromethane			20.1	23.4		ug/L		116	60 - 145	1	30
Vinyl chloride			20.1	25.8		ug/L		128	50 - 145	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Toluene-d8 (Surr)	*99*		*85 - 120*
Trifluorotoluene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-118374/20
Matrix: Water
Analysis Batch: 118374

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 18:59	1
Ethane	ND		0.50		ug/L			02/03/14 18:59	1
Ethene	ND		0.50		ug/L			02/03/14 18:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*92*		*66 - 132*		*02/03/14 18:59*	*1*

Lab Sample ID: LCS 240-118374/21
Matrix: Water
Analysis Batch: 118374

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	99.7		ug/L		86	76 - 120
Ethane			218	198		ug/L		91	80 - 120
Ethene			203	176		ug/L		87	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*86*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-153065/3
Matrix: Water
Analysis Batch: 153065

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			01/31/14 08:15	1
Sulfate	ND		1.2		mg/L			01/31/14 08:15	1

Lab Sample ID: LCS 580-153065/4
Matrix: Water
Analysis Batch: 153065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.19		mg/L		102	90 - 110
Sulfate	12.0	11.3		mg/L		95	90 - 110

Lab Sample ID: LCSD 580-153065/5
Matrix: Water
Analysis Batch: 153065

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
Chloride	9.00	9.15		mg/L		102	90 - 110	0	15
Sulfate	12.0	11.5		mg/L		96	90 - 110	1	15

Lab Sample ID: 580-42139-5 MS
Matrix: Water
Analysis Batch: 153065

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19		9.00	26.0	F1	mg/L		79	90 - 110
Sulfate	9.1		12.0	17.6	F1	mg/L		71	90 - 110

Lab Sample ID: 580-42139-5 DU
Matrix: Water
Analysis Batch: 153065

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	19		18.9		mg/L		0	10
Sulfate	9.1		9.07		mg/L		0	10

Lab Sample ID: MB 580-153072/3
Matrix: Water
Analysis Batch: 153072

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			01/31/14 08:15	1

Lab Sample ID: LCS 580-153072/4
Matrix: Water
Analysis Batch: 153072

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.78		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-153072/5
Matrix: Water
Analysis Batch: 153072

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
Nitrate as N			1.80	1.77		mg/L		98	90 - 110	1	15

Lab Sample ID: 580-42139-5 MS
Matrix: Water
Analysis Batch: 153072

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	3.1		1.80	4.49	F1	mg/L		77	90 - 110		

Lab Sample ID: 580-42139-5 DU
Matrix: Water
Analysis Batch: 153072

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate as N	3.1			3.11		mg/L				0	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-153059/1
Matrix: Water
Analysis Batch: 153059

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			02/03/14 11:24	1

Lab Sample ID: LCS 580-153059/2
Matrix: Water
Analysis Batch: 153059

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			15.0	16.0		mg/L		107	85 - 115		

Client Sample ID: Equip Blank 2

Lab Sample ID: 580-42139-1

Date Collected: 01/29/14 16:35

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 17:13	EB1	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-42139-2

Date Collected: 01/23/14 00:00

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 16:11	EB1	TAL SEA

Client Sample ID: MW-4

Lab Sample ID: 580-42139-3

Date Collected: 01/30/14 11:27

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153453	02/11/14 14:05	EB1	TAL SEA

Client Sample ID: MW-8

Lab Sample ID: 580-42139-4

Date Collected: 01/30/14 07:36

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 18:00	EB1	TAL SEA
Total/NA	Analysis	8260B	RA	1	153349	02/10/14 13:38	MMH	TAL SEA

Client Sample ID: MW-9

Lab Sample ID: 580-42139-5

Date Collected: 01/30/14 12:22

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	153305	02/07/14 16:27	EB1	TAL SEA
Total/NA	Analysis	8260B		1	153305	02/07/14 21:37	EB1	TAL SEA
Total/NA	Analysis	RSK-175		1	118374	02/03/14 20:37	BPM	TAL CAN
Total/NA	Analysis	SM 5310B		1	153059	02/04/14 13:48	IWH	TAL SEA
Total/NA	Analysis	300.0		1	153065	01/31/14 14:57	RSB	TAL SEA
Total/NA	Analysis	300.0		1	153072	01/31/14 14:57	RSB	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: MW-10

Lab Sample ID: 580-42139-6

Date Collected: 01/30/14 15:16
Matrix: Water
Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	153305	02/07/14 16:50	EB1	TAL SEA
Total/NA	Analysis	8260B		1	153305	02/07/14 22:00	EB1	TAL SEA
Total/NA	Analysis	RSK-175		1	118374	02/03/14 20:49	BPM	TAL CAN
Total/NA	Analysis	SM 5310B		1	153059	02/03/14 11:24	IWH	TAL SEA
Total/NA	Analysis	300.0		1	153065	01/31/14 15:41	RSB	TAL SEA
Total/NA	Analysis	300.0		1	153072	01/31/14 15:41	RSB	TAL SEA

Client Sample ID: MW-22

Lab Sample ID: 580-42139-7

Date Collected: 01/30/14 14:22
Matrix: Water
Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 18:55	EB1	TAL SEA
Total/NA	Analysis	8260B	DL	100	153349	02/10/14 14:25	MMH	TAL SEA

Client Sample ID: MW-25

Lab Sample ID: 580-42139-8

Date Collected: 01/30/14 08:29
Matrix: Water
Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 19:18	EB1	TAL SEA
Total/NA	Analysis	8260B	RA	1	153349	02/10/14 14:02	MMH	TAL SEA

Client Sample ID: SPW-12

Lab Sample ID: 580-42139-9

Date Collected: 01/30/14 13:24
Matrix: Water
Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 19:42	EB1	TAL SEA
Total/NA	Analysis	8260B	DL	100	153349	02/10/14 14:48	MMH	TAL SEA

Client Sample ID: SPW-13

Lab Sample ID: 580-42139-10

Date Collected: 01/30/14 09:17
Matrix: Water
Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 20:05	EB1	TAL SEA
Total/NA	Analysis	8260B	DL	10	153349	02/10/14 15:12	MMH	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Client Sample ID: SPW-13 Dup

Lab Sample ID: 580-42139-11

Date Collected: 01/30/14 09:17

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 20:28	EB1	TAL SEA
Total/NA	Analysis	8260B	DL	10	153349	02/10/14 15:35	MMH	TAL SEA

Client Sample ID: SPW-15

Lab Sample ID: 580-42139-12

Date Collected: 01/30/14 10:19

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 20:50	EB1	TAL SEA
Total/NA	Analysis	8260B	DL	10	153349	02/10/14 15:58	MMH	TAL SEA

Client Sample ID: Equip Blank 3

Lab Sample ID: 580-42139-13

Date Collected: 01/30/14 16:15

Matrix: Water

Date Received: 01/31/14 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 21:14	EB1	TAL SEA
Total/NA	Analysis	8260B	RA	1	153349	02/10/14 13:15	MMH	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	02-28-14 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42139-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-42139-1	Equip Blank 2	Water	01/29/14 16:35	01/31/14 11:40
580-42139-2	Trip Blank	Water	01/23/14 00:00	01/31/14 11:40
580-42139-3	MW-4	Water	01/30/14 11:27	01/31/14 11:40
580-42139-4	MW-8	Water	01/30/14 07:36	01/31/14 11:40
580-42139-5	MW-9	Water	01/30/14 12:22	01/31/14 11:40
580-42139-6	MW-10	Water	01/30/14 15:16	01/31/14 11:40
580-42139-7	MW-22	Water	01/30/14 14:22	01/31/14 11:40
580-42139-8	MW-25	Water	01/30/14 08:29	01/31/14 11:40
580-42139-9	SPW-12	Water	01/30/14 13:24	01/31/14 11:40
580-42139-10	SPW-13	Water	01/30/14 09:17	01/31/14 11:40
580-42139-11	SPW-13 Dup	Water	01/30/14 09:17	01/31/14 11:40
580-42139-12	SPW-15	Water	01/30/14 10:19	01/31/14 11:40
580-42139-13	Equip Blank 3	Water	01/30/14 16:15	01/31/14 11:40

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☒ Short Hold

Chain of Custody Record

2/12/2014

Hart Crowser, Inc

Client	Client Contact	Date	Chain of Custody Number
8910 SW Gemini Drive	Jill Kiernan	1-31-14	20512
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 2
	503-620-7284/503-620-6918		

City	State	Zip Code	Sampler	Lab Contact
Beaverton	OR	97008	Jason R. Miles	Kristine Allen

Project Name and Location (State)	Billing Contact
Frank Wear Yakima, WA	Jill Kiernan

Contract/Purchase Order/Quote No.: 17800-23

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs 8260B	Nitrate/Nitrite/Chloride by 300.0	TOC SM5310B	RSK-175 Ethene, Ethane, Methane	Special Instructions/ Conditions of Receipt
Equip Blank 2	1-29-14	1635		X						X			X				2 VOAs
Trip Blank	1-23-14	–		X						2			X				
MW-4	1-30-14	1127		X						3			X				
MW-8		0736		X						3			X				
MW-9		1222		X			1	1		6			X	X	X	X	
MW-10		1516		X			1	1		6			X	X	X	X	
MW-22		1422		X						3			X				
MW-25		0829		X						3			X				
SPW-12		1324		X						3			X				
SPW-13		0917		X						3			X				
SPW-13 Dup		0917		X						3			X				
SPW-15	↓	1019		X						3			X				

Page 53 of 55

580-42139 Chain of Custody

Cooler: ☐ Yes ☐ No Cooler Temp: _____

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

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

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other Standard

QC Requirements (Specify)

1. Relinquished By Sign/Print	Date	Time	1. Received By Sign/Print	Date	Time
Jason R. Miles	1-31-14	1140	Francisco Lang, Jr.	1/31/14	1140
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

2/12/2014

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: Hart Crowser, Inc

REPORT TO: Jill Kiernan
ADDRESS: 8910 sw Gemini Drive
Beaverton, OR 97008
PHONE: 503-620-7284 FAX: 503-620-6918

INVOICE TO: Hart Crowser
ATTN: Jill Kiernan
jill-kiernan@hartcrowser.com

P.O. NUMBER: 17800-23

PROJECT NAME: Frank Wear
PROJECT NUMBER: 17800-23
SAMPLED BY: Jason R. Miles

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: (10) STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: (5) STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: HCl	REQUESTED ANALYSES: VOCs 8260B	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	Equip Blank 3	1-30-14/ 1615	X	X	W	2	Yakima, WA	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Cooler/TB Dig/IR cor 0.5°C unc 0.5°C
Cooler Dsc Lg Blue/White @ Lab 1140
Wet/Packs Packing Other
Client Drop w/o Ai

RELEASED BY:	PRINT NAME: Jason R. Miles	FIRM: Hart Crowser	DATE: 1-31-14	TIME: 11-40	
RECEIVED BY:	PRINT NAME: Francisco Luna, Jr.	FIRM: TA-SEA	DATE: 1/31/14	TIME: 1140	
RELEASED BY:	PRINT NAME:	FIRM:	DATE:	TIME:	
RECEIVED BY:	PRINT NAME:	FIRM:	DATE:	TIME:	

ADDITIONAL REMARKS:

TEMP:

PAGE 2 OF 2

TAL-1000(0108)

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-42139-1

Login Number: 42139

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-42125-1
Client Project/Site: Frank Wear Yakima,WA
Revision: 1

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
3/3/2014 4:33:15 PM

Kristine Allen, Manager of Project Management
(253)922-2310
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Job ID: 580-42125-1

Laboratory: TestAmerica Seattle

Narrative

Comments
The report was revised on 03-03-14 to include chloride results.

No additional comments.

Receipt
The samples were received on 1/30/2014 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA - Method(s) 8260B
The method blank for preparation batches 153054 and 153117 contained Hexachlorobutadiene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 153305 recovered outside control limits for the following analytes: Dichlorodifluoromethane and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC VOA - Method(s) RSK-175
Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 118374.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-2
Date Collected: 01/28/14 16:21
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,1-Dichloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,1-Dichloroethene	ND		1.0		ug/L			02/03/14 21:00	1
1,1-Dichloropropene	ND		1.0		ug/L			02/03/14 21:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/03/14 21:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/03/14 21:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,2-Dichloroethane	ND		1.0		ug/L			02/03/14 21:00	1
1,2-Dichloropropane	ND		1.0		ug/L			02/03/14 21:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
1,3-Dichloropropane	ND		1.0		ug/L			02/03/14 21:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
2,2-Dichloropropane	ND		1.0		ug/L			02/03/14 21:00	1
2-Chlorotoluene	ND		1.0		ug/L			02/03/14 21:00	1
4-Chlorotoluene	ND		1.0		ug/L			02/03/14 21:00	1
4-Isopropyltoluene	ND		1.0		ug/L			02/03/14 21:00	1
Benzene	ND		1.0		ug/L			02/03/14 21:00	1
Bromobenzene	ND		1.0		ug/L			02/03/14 21:00	1
Bromoform	ND		1.0		ug/L			02/03/14 21:00	1
Bromomethane	ND		5.0		ug/L			02/03/14 21:00	1
Carbon tetrachloride	ND		1.0		ug/L			02/03/14 21:00	1
Chlorobenzene	ND		1.0		ug/L			02/03/14 21:00	1
Chlorobromomethane	ND		1.0		ug/L			02/03/14 21:00	1
Chlorodibromomethane	ND		1.0		ug/L			02/03/14 21:00	1
Chloroethane	ND		5.0		ug/L			02/03/14 21:00	1
Chloroform	**2.2**		1.0		ug/L			02/03/14 21:00	1
Chloromethane	ND		5.0		ug/L			02/03/14 21:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 21:00	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 21:00	1
Dibromomethane	ND		1.0		ug/L			02/03/14 21:00	1
Dichlorobromomethane	ND		1.0		ug/L			02/03/14 21:00	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/03/14 21:00	1
Ethylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
Ethylene Dibromide	ND		1.0		ug/L			02/03/14 21:00	1
Hexachlorobutadiene	ND		1.0		ug/L			02/03/14 21:00	1
Isopropylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/03/14 21:00	1
Methylene Chloride	ND		3.0		ug/L			02/03/14 21:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/03/14 21:00	1
Naphthalene	ND		1.0		ug/L			02/03/14 21:00	1
n-Butylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
N-Propylbenzene	ND		1.0		ug/L			02/03/14 21:00	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-2
Date Collected: 01/28/14 16:21
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/03/14 21:00	1
sec-Butylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
Styrene	ND		1.0		ug/L			02/03/14 21:00	1
tert-Butylbenzene	ND		1.0		ug/L			02/03/14 21:00	1
Tetrachloroethene	**2.5**		1.0		ug/L			02/03/14 21:00	1
Toluene	ND		1.0		ug/L			02/03/14 21:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 21:00	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 21:00	1
Trichloroethene	ND		1.0		ug/L			02/03/14 21:00	1
Trichlorofluoromethane	ND		1.0		ug/L			02/03/14 21:00	1
Vinyl chloride	ND		1.0		ug/L			02/03/14 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/03/14 21:00*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/03/14 21:00*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 120*		*02/03/14 21:00*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/03/14 21:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/03/14 21:00*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-5
Date Collected: 01/28/14 13:30
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,1-Dichloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,1-Dichloroethene	ND		1.0		ug/L			02/03/14 21:51	1
1,1-Dichloropropene	ND		1.0		ug/L			02/03/14 21:51	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/03/14 21:51	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/03/14 21:51	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,2-Dichloroethane	ND		1.0		ug/L			02/03/14 21:51	1
1,2-Dichloropropane	ND		1.0		ug/L			02/03/14 21:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
1,3-Dichloropropane	ND		1.0		ug/L			02/03/14 21:51	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
2,2-Dichloropropane	ND		1.0		ug/L			02/03/14 21:51	1
2-Chlorotoluene	ND		1.0		ug/L			02/03/14 21:51	1
4-Chlorotoluene	ND		1.0		ug/L			02/03/14 21:51	1
4-Isopropyltoluene	ND		1.0		ug/L			02/03/14 21:51	1
Benzene	ND		1.0		ug/L			02/03/14 21:51	1
Bromobenzene	ND		1.0		ug/L			02/03/14 21:51	1
Bromoform	ND		1.0		ug/L			02/03/14 21:51	1
Bromomethane	ND		5.0		ug/L			02/03/14 21:51	1
Carbon tetrachloride	ND		1.0		ug/L			02/03/14 21:51	1
Chlorobenzene	ND		1.0		ug/L			02/03/14 21:51	1
Chlorobromomethane	ND		1.0		ug/L			02/03/14 21:51	1
Chlorodibromomethane	ND		1.0		ug/L			02/03/14 21:51	1
Chloroethane	ND		5.0		ug/L			02/03/14 21:51	1
Chloroform	**1.7**		1.0		ug/L			02/03/14 21:51	1
Chloromethane	ND		5.0		ug/L			02/03/14 21:51	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 21:51	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 21:51	1
Dibromomethane	ND		1.0		ug/L			02/03/14 21:51	1
Dichlorobromomethane	ND		1.0		ug/L			02/03/14 21:51	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/03/14 21:51	1
Ethylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
Ethylene Dibromide	ND		1.0		ug/L			02/03/14 21:51	1
Hexachlorobutadiene	ND		1.0		ug/L			02/03/14 21:51	1
Isopropylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/03/14 21:51	1
Methylene Chloride	ND		3.0		ug/L			02/03/14 21:51	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/03/14 21:51	1
Naphthalene	ND		1.0		ug/L			02/03/14 21:51	1
n-Butylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
N-Propylbenzene	ND		1.0		ug/L			02/03/14 21:51	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-5
Date Collected: 01/28/14 13:30
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/03/14 21:51	1
sec-Butylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
Styrene	ND		1.0		ug/L			02/03/14 21:51	1
tert-Butylbenzene	ND		1.0		ug/L			02/03/14 21:51	1
Tetrachloroethene	**1.5**		1.0		ug/L			02/03/14 21:51	1
Toluene	ND		1.0		ug/L			02/03/14 21:51	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 21:51	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 21:51	1
Trichloroethene	ND		1.0		ug/L			02/03/14 21:51	1
Trichlorofluoromethane	ND		1.0		ug/L			02/03/14 21:51	1
Vinyl chloride	ND		1.0		ug/L			02/03/14 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/03/14 21:51*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/03/14 21:51*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 120*		*02/03/14 21:51*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*02/03/14 21:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*02/03/14 21:51*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-6
Date Collected: 01/28/14 15:28
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,1-Dichloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,1-Dichloroethene	ND		1.0		ug/L			02/03/14 22:42	1
1,1-Dichloropropene	ND		1.0		ug/L			02/03/14 22:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/03/14 22:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/03/14 22:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,2-Dichloroethane	ND		1.0		ug/L			02/03/14 22:42	1
1,2-Dichloropropane	ND		1.0		ug/L			02/03/14 22:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
1,3-Dichloropropane	ND		1.0		ug/L			02/03/14 22:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
2,2-Dichloropropane	ND		1.0		ug/L			02/03/14 22:42	1
2-Chlorotoluene	ND		1.0		ug/L			02/03/14 22:42	1
4-Chlorotoluene	ND		1.0		ug/L			02/03/14 22:42	1
4-Isopropyltoluene	ND		1.0		ug/L			02/03/14 22:42	1
Benzene	ND		1.0		ug/L			02/03/14 22:42	1
Bromobenzene	ND		1.0		ug/L			02/03/14 22:42	1
Bromoform	ND		1.0		ug/L			02/03/14 22:42	1
Bromomethane	ND		5.0		ug/L			02/03/14 22:42	1
Carbon tetrachloride	ND		1.0		ug/L			02/03/14 22:42	1
Chlorobenzene	ND		1.0		ug/L			02/03/14 22:42	1
Chlorobromomethane	ND		1.0		ug/L			02/03/14 22:42	1
Chlorodibromomethane	ND		1.0		ug/L			02/03/14 22:42	1
Chloroethane	ND		5.0		ug/L			02/03/14 22:42	1
Chloroform	**1.8**		1.0		ug/L			02/03/14 22:42	1
Chloromethane	ND		5.0		ug/L			02/03/14 22:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 22:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 22:42	1
Dibromomethane	ND		1.0		ug/L			02/03/14 22:42	1
Dichlorobromomethane	ND		1.0		ug/L			02/03/14 22:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/03/14 22:42	1
Ethylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
Ethylene Dibromide	ND		1.0		ug/L			02/03/14 22:42	1
Hexachlorobutadiene	ND		1.0		ug/L			02/03/14 22:42	1
Isopropylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/03/14 22:42	1
Methylene Chloride	ND		3.0		ug/L			02/03/14 22:42	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/03/14 22:42	1
Naphthalene	ND		1.0		ug/L			02/03/14 22:42	1
n-Butylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
N-Propylbenzene	ND		1.0		ug/L			02/03/14 22:42	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-6
Date Collected: 01/28/14 15:28
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/03/14 22:42	1
sec-Butylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
Styrene	ND		1.0		ug/L			02/03/14 22:42	1
tert-Butylbenzene	ND		1.0		ug/L			02/03/14 22:42	1
Tetrachloroethene	**1.5**		1.0		ug/L			02/03/14 22:42	1
Toluene	ND		1.0		ug/L			02/03/14 22:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 22:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 22:42	1
Trichloroethene	ND		1.0		ug/L			02/03/14 22:42	1
Trichlorofluoromethane	ND		1.0		ug/L			02/03/14 22:42	1
Vinyl chloride	ND		1.0		ug/L			02/03/14 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*02/03/14 22:42*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/03/14 22:42*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/03/14 22:42*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*02/03/14 22:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*		*02/03/14 22:42*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-7
Date Collected: 01/28/14 14:30
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,1-Dichloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,1-Dichloroethene	ND		1.0		ug/L			02/03/14 23:34	1
1,1-Dichloropropene	ND		1.0		ug/L			02/03/14 23:34	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/03/14 23:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/03/14 23:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,2-Dichloroethane	ND		1.0		ug/L			02/03/14 23:34	1
1,2-Dichloropropane	ND		1.0		ug/L			02/03/14 23:34	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
1,3-Dichloropropane	ND		1.0		ug/L			02/03/14 23:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
2,2-Dichloropropane	ND		1.0		ug/L			02/03/14 23:34	1
2-Chlorotoluene	ND		1.0		ug/L			02/03/14 23:34	1
4-Chlorotoluene	ND		1.0		ug/L			02/03/14 23:34	1
4-Isopropyltoluene	ND		1.0		ug/L			02/03/14 23:34	1
Benzene	ND		1.0		ug/L			02/03/14 23:34	1
Bromobenzene	ND		1.0		ug/L			02/03/14 23:34	1
Bromoform	ND		1.0		ug/L			02/03/14 23:34	1
Bromomethane	ND		5.0		ug/L			02/03/14 23:34	1
Carbon tetrachloride	ND		1.0		ug/L			02/03/14 23:34	1
Chlorobenzene	ND		1.0		ug/L			02/03/14 23:34	1
Chlorobromomethane	ND		1.0		ug/L			02/03/14 23:34	1
Chlorodibromomethane	ND		1.0		ug/L			02/03/14 23:34	1
Chloroethane	ND		5.0		ug/L			02/03/14 23:34	1
Chloroform	**2.1**		1.0		ug/L			02/03/14 23:34	1
Chloromethane	ND		5.0		ug/L			02/03/14 23:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 23:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 23:34	1
Dibromomethane	ND		1.0		ug/L			02/03/14 23:34	1
Dichlorobromomethane	ND		1.0		ug/L			02/03/14 23:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/03/14 23:34	1
Ethylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
Ethylene Dibromide	ND		1.0		ug/L			02/03/14 23:34	1
Hexachlorobutadiene	ND		1.0		ug/L			02/03/14 23:34	1
Isopropylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/03/14 23:34	1
Methylene Chloride	ND		3.0		ug/L			02/03/14 23:34	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/03/14 23:34	1
Naphthalene	ND		1.0		ug/L			02/03/14 23:34	1
n-Butylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
N-Propylbenzene	ND		1.0		ug/L			02/03/14 23:34	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-7
Date Collected: 01/28/14 14:30
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/03/14 23:34	1
sec-Butylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
Styrene	ND		1.0		ug/L			02/03/14 23:34	1
tert-Butylbenzene	ND		1.0		ug/L			02/03/14 23:34	1
Tetrachloroethene	**5.1**		1.0		ug/L			02/03/14 23:34	1
Toluene	ND		1.0		ug/L			02/03/14 23:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 23:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 23:34	1
Trichloroethene	ND		1.0		ug/L			02/03/14 23:34	1
Trichlorofluoromethane	ND		1.0		ug/L			02/03/14 23:34	1
Vinyl chloride	ND		1.0		ug/L			02/03/14 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/03/14 23:34*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/03/14 23:34*	*1*
Trifluorotoluene (Surr)	*111*		*80 - 120*		*02/03/14 23:34*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/03/14 23:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*02/03/14 23:34*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: Equip Blank 1
Date Collected: 01/28/14 17:10
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 15:17	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 15:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 15:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 15:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 15:17	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 15:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 15:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 15:17	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 15:17	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 15:17	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 15:17	1
Benzene	ND		1.0		ug/L			02/07/14 15:17	1
Bromobenzene	ND		1.0		ug/L			02/07/14 15:17	1
Bromoform	ND		1.0		ug/L			02/07/14 15:17	1
Bromomethane	ND		5.0		ug/L			02/07/14 15:17	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 15:17	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 15:17	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 15:17	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 15:17	1
Chloroethane	ND		5.0		ug/L			02/07/14 15:17	1
Chloroform	ND		1.0		ug/L			02/07/14 15:17	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 15:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 15:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 15:17	1
Dibromomethane	ND		1.0		ug/L			02/07/14 15:17	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 15:17	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 15:17	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 15:17	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 15:17	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 15:17	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 15:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 15:17	1
Naphthalene	ND		1.0		ug/L			02/07/14 15:17	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 15:17	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: Equip Blank 1
Date Collected: 01/28/14 17:10
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 15:17	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
Styrene	ND		1.0		ug/L			02/07/14 15:17	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 15:17	1
Tetrachloroethene	ND		1.0		ug/L			02/07/14 15:17	1
Toluene	ND		1.0		ug/L			02/07/14 15:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 15:17	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 15:17	1
Trichloroethene	ND		1.0		ug/L			02/07/14 15:17	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 15:17	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*02/07/14 15:17*	*1*
Toluene-d8 (Surr)	*101*		*85 - 120*		*02/07/14 15:17*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/07/14 15:17*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*02/07/14 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/07/14 15:17*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 16:57	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 16:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 16:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 16:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 16:57	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 16:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 16:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 16:57	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 16:57	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 16:57	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 16:57	1
Benzene	ND		1.0		ug/L			02/04/14 16:57	1
Bromobenzene	ND		1.0		ug/L			02/04/14 16:57	1
Bromoform	ND		1.0		ug/L			02/04/14 16:57	1
Bromomethane	ND		5.0		ug/L			02/04/14 16:57	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 16:57	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 16:57	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 16:57	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 16:57	1
Chloroethane	ND		5.0		ug/L			02/04/14 16:57	1
Chloroform	ND		1.0		ug/L			02/04/14 16:57	1
Chloromethane	ND		5.0		ug/L			02/04/14 16:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 16:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 16:57	1
Dibromomethane	ND		1.0		ug/L			02/04/14 16:57	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 16:57	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 16:57	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 16:57	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 16:57	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 16:57	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 16:57	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 16:57	1
Naphthalene	ND		1.0		ug/L			02/04/14 16:57	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 16:57	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: Trip Blank
Date Collected: 01/23/14 00:00
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 16:57	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
Styrene	ND		1.0		ug/L			02/04/14 16:57	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 16:57	1
Tetrachloroethene	ND		1.0		ug/L			02/04/14 16:57	1
Toluene	ND		1.0		ug/L			02/04/14 16:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 16:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 16:57	1
Trichloroethene	ND		1.0		ug/L			02/04/14 16:57	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 16:57	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*		*02/04/14 16:57*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*02/04/14 16:57*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 16:57*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*02/04/14 16:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 120*		*02/04/14 16:57*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-1
Date Collected: 01/29/14 08:21
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 17:43	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 17:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 17:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 17:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 17:43	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 17:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 17:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 17:43	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 17:43	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 17:43	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 17:43	1
Benzene	ND		1.0		ug/L			02/04/14 17:43	1
Bromobenzene	ND		1.0		ug/L			02/04/14 17:43	1
Bromoform	ND		1.0		ug/L			02/04/14 17:43	1
Bromomethane	ND		5.0		ug/L			02/04/14 17:43	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 17:43	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 17:43	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 17:43	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 17:43	1
Chloroethane	ND		5.0		ug/L			02/04/14 17:43	1
Chloroform	**3.3**		1.0		ug/L			02/04/14 17:43	1
Chloromethane	ND		5.0		ug/L			02/04/14 17:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 17:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 17:43	1
Dibromomethane	ND		1.0		ug/L			02/04/14 17:43	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 17:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 17:43	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 17:43	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 17:43	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 17:43	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 17:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 17:43	1
Naphthalene	ND		1.0		ug/L			02/04/14 17:43	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 17:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-1
Date Collected: 01/29/14 08:21
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 17:43	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
Styrene	ND		1.0		ug/L			02/04/14 17:43	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 17:43	1
Tetrachloroethene	**1.3**		1.0		ug/L			02/04/14 17:43	1
Toluene	ND		1.0		ug/L			02/04/14 17:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 17:43	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 17:43	1
Trichloroethene	ND		1.0		ug/L			02/04/14 17:43	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 17:43	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/04/14 17:43*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/04/14 17:43*	*1*
Trifluorotoluene (Surr)	*110*		*80 - 120*		*02/04/14 17:43*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/04/14 17:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*		*02/04/14 17:43*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-3
Date Collected: 01/29/14 09:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 18:29	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 18:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 18:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 18:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 18:29	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 18:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 18:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 18:29	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 18:29	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 18:29	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 18:29	1
Benzene	ND		1.0		ug/L			02/04/14 18:29	1
Bromobenzene	ND		1.0		ug/L			02/04/14 18:29	1
Bromoform	ND		1.0		ug/L			02/04/14 18:29	1
Bromomethane	ND		5.0		ug/L			02/04/14 18:29	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 18:29	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 18:29	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 18:29	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 18:29	1
Chloroethane	ND		5.0		ug/L			02/04/14 18:29	1
Chloroform	**2.2**		1.0		ug/L			02/04/14 18:29	1
Chloromethane	ND		5.0		ug/L			02/04/14 18:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 18:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 18:29	1
Dibromomethane	ND		1.0		ug/L			02/04/14 18:29	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 18:29	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 18:29	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 18:29	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 18:29	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 18:29	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 18:29	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 18:29	1
Naphthalene	ND		1.0		ug/L			02/04/14 18:29	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 18:29	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-3
Date Collected: 01/29/14 09:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 18:29	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
Styrene	ND		1.0		ug/L			02/04/14 18:29	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 18:29	1
Tetrachloroethene	**3.5**		1.0		ug/L			02/04/14 18:29	1
Toluene	ND		1.0		ug/L			02/04/14 18:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 18:29	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 18:29	1
Trichloroethene	ND		1.0		ug/L			02/04/14 18:29	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 18:29	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/04/14 18:29*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/04/14 18:29*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 120*		*02/04/14 18:29*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/04/14 18:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 120*		*02/04/14 18:29*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 18:23	1
Ethane	ND		0.50		ug/L			02/03/14 18:23	1
Ethene	ND		0.50		ug/L			02/03/14 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*90*		*66 - 132*		*02/03/14 18:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**6.2**		0.90		mg/L			01/30/14 13:45	1
Sulfate	**8.7**		1.2		mg/L			01/30/14 13:45	1
Chloride	**21**		0.90		mg/L			01/30/14 13:45	1
Total Organic Carbon	**1.3**		1.0		mg/L			02/04/14 13:48	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-16
Date Collected: 01/29/14 14:34
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 19:16	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 19:16	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 19:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 19:16	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 19:16	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 19:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 19:16	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 19:16	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 19:16	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 19:16	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 19:16	1
Benzene	ND		1.0		ug/L			02/04/14 19:16	1
Bromobenzene	ND		1.0		ug/L			02/04/14 19:16	1
Bromoform	ND		1.0		ug/L			02/04/14 19:16	1
Bromomethane	ND		5.0		ug/L			02/04/14 19:16	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 19:16	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 19:16	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 19:16	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 19:16	1
Chloroethane	ND		5.0		ug/L			02/04/14 19:16	1
Chloroform	**2.2**		1.0		ug/L			02/04/14 19:16	1
Chloromethane	ND		5.0		ug/L			02/04/14 19:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 19:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 19:16	1
Dibromomethane	ND		1.0		ug/L			02/04/14 19:16	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 19:16	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 19:16	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 19:16	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 19:16	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 19:16	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 19:16	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 19:16	1
Naphthalene	ND		1.0		ug/L			02/04/14 19:16	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 19:16	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-16
Date Collected: 01/29/14 14:34
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 19:16	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
Styrene	ND		1.0		ug/L			02/04/14 19:16	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 19:16	1
Tetrachloroethene	**84**		1.0		ug/L			02/04/14 19:16	1
Toluene	ND		1.0		ug/L			02/04/14 19:16	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 19:16	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 19:16	1
Trichloroethene	ND		1.0		ug/L			02/04/14 19:16	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 19:16	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/04/14 19:16*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/04/14 19:16*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 19:16*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/04/14 19:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 120*		*02/04/14 19:16*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-20
Date Collected: 01/29/14 11:41
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 20:03	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 20:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 20:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 20:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 20:03	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 20:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 20:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 20:03	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 20:03	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 20:03	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 20:03	1
Benzene	ND		1.0		ug/L			02/04/14 20:03	1
Bromobenzene	ND		1.0		ug/L			02/04/14 20:03	1
Bromoform	ND		1.0		ug/L			02/04/14 20:03	1
Bromomethane	ND		5.0		ug/L			02/04/14 20:03	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 20:03	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 20:03	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 20:03	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 20:03	1
Chloroethane	ND		5.0		ug/L			02/04/14 20:03	1
Chloroform	**1.7**		1.0		ug/L			02/04/14 20:03	1
Chloromethane	ND		5.0		ug/L			02/04/14 20:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 20:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 20:03	1
Dibromomethane	ND		1.0		ug/L			02/04/14 20:03	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 20:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 20:03	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 20:03	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 20:03	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 20:03	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 20:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 20:03	1
Naphthalene	ND		1.0		ug/L			02/04/14 20:03	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 20:03	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-20
Date Collected: 01/29/14 11:41
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 20:03	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
Styrene	ND		1.0		ug/L			02/04/14 20:03	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 20:03	1
Tetrachloroethene	**5.8**		1.0		ug/L			02/04/14 20:03	1
Toluene	ND		1.0		ug/L			02/04/14 20:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 20:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 20:03	1
Trichloroethene	ND		1.0		ug/L			02/04/14 20:03	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 20:03	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*02/04/14 20:03*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/04/14 20:03*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 20:03*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*02/04/14 20:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 120*		*02/04/14 20:03*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-21
Date Collected: 01/29/14 12:35
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 20:49	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 20:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 20:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 20:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 20:49	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 20:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 20:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 20:49	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 20:49	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 20:49	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 20:49	1
Benzene	ND		1.0		ug/L			02/04/14 20:49	1
Bromobenzene	ND		1.0		ug/L			02/04/14 20:49	1
Bromoform	ND		1.0		ug/L			02/04/14 20:49	1
Bromomethane	ND		5.0		ug/L			02/04/14 20:49	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 20:49	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 20:49	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 20:49	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 20:49	1
Chloroethane	ND		5.0		ug/L			02/04/14 20:49	1
Chloroform	**5.1**		1.0		ug/L			02/04/14 20:49	1
Chloromethane	ND		5.0		ug/L			02/04/14 20:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 20:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 20:49	1
Dibromomethane	ND		1.0		ug/L			02/04/14 20:49	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 20:49	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 20:49	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 20:49	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 20:49	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 20:49	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 20:49	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 20:49	1
Naphthalene	ND		1.0		ug/L			02/04/14 20:49	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 20:49	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-21
Date Collected: 01/29/14 12:35
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 20:49	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
Styrene	ND		1.0		ug/L			02/04/14 20:49	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 20:49	1
Tetrachloroethene	**5.3**		1.0		ug/L			02/04/14 20:49	1
Toluene	ND		1.0		ug/L			02/04/14 20:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 20:49	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 20:49	1
Trichloroethene	ND		1.0		ug/L			02/04/14 20:49	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 20:49	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*02/04/14 20:49*	*1*
Toluene-d8 (Surr)	*96*		*85 - 120*		*02/04/14 20:49*	*1*
Trifluorotoluene (Surr)	*110*		*80 - 120*		*02/04/14 20:49*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*02/04/14 20:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*		*02/04/14 20:49*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-23
Date Collected: 01/29/14 10:32
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 21:36	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 21:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 21:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 21:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 21:36	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 21:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 21:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 21:36	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 21:36	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 21:36	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 21:36	1
Benzene	ND		1.0		ug/L			02/04/14 21:36	1
Bromobenzene	ND		1.0		ug/L			02/04/14 21:36	1
Bromoform	ND		1.0		ug/L			02/04/14 21:36	1
Bromomethane	ND		5.0		ug/L			02/04/14 21:36	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 21:36	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 21:36	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 21:36	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 21:36	1
Chloroethane	ND		5.0		ug/L			02/04/14 21:36	1
Chloroform	**2.9**		1.0		ug/L			02/04/14 21:36	1
Chloromethane	ND		5.0		ug/L			02/04/14 21:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 21:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 21:36	1
Dibromomethane	ND		1.0		ug/L			02/04/14 21:36	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 21:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 21:36	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 21:36	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 21:36	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 21:36	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 21:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 21:36	1
Naphthalene	ND		1.0		ug/L			02/04/14 21:36	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 21:36	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-23
Date Collected: 01/29/14 10:32
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 21:36	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
Styrene	ND		1.0		ug/L			02/04/14 21:36	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 21:36	1
Tetrachloroethene	**8.9**		1.0		ug/L			02/04/14 21:36	1
Toluene	ND		1.0		ug/L			02/04/14 21:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 21:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 21:36	1
Trichloroethene	ND		1.0		ug/L			02/04/14 21:36	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 21:36	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/04/14 21:36*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/04/14 21:36*	*1*
Trifluorotoluene (Surr)	*108*		*80 - 120*		*02/04/14 21:36*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*02/04/14 21:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/04/14 21:36*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 18:47	1
Ethane	ND		0.50		ug/L			02/03/14 18:47	1
Ethene	ND		0.50		ug/L			02/03/14 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*89*		*66 - 132*		*02/03/14 18:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**8.3**		0.90		mg/L			01/30/14 13:59	1
Sulfate	**11**		1.2		mg/L			01/30/14 13:59	1
Chloride	**28**		0.90		mg/L			01/30/14 13:59	1
Total Organic Carbon	ND		1.0		mg/L			02/03/14 11:24	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-24
Date Collected: 01/29/14 13:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 22:23	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 22:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 22:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 22:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 22:23	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 22:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 22:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 22:23	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 22:23	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 22:23	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 22:23	1
Benzene	ND		1.0		ug/L			02/04/14 22:23	1
Bromobenzene	ND		1.0		ug/L			02/04/14 22:23	1
Bromoform	ND		1.0		ug/L			02/04/14 22:23	1
Bromomethane	ND		5.0		ug/L			02/04/14 22:23	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 22:23	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 22:23	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 22:23	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 22:23	1
Chloroethane	ND		5.0		ug/L			02/04/14 22:23	1
Chloroform	**4.6**		1.0		ug/L			02/04/14 22:23	1
Chloromethane	ND		5.0		ug/L			02/04/14 22:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 22:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 22:23	1
Dibromomethane	ND		1.0		ug/L			02/04/14 22:23	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 22:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 22:23	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 22:23	1
Hexachlorobutadiene	ND		1.0		ug/L			02/04/14 22:23	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 22:23	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 22:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 22:23	1
Naphthalene	ND		1.0		ug/L			02/04/14 22:23	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 22:23	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-24
Date Collected: 01/29/14 13:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/04/14 22:23	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
Styrene	ND		1.0		ug/L			02/04/14 22:23	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 22:23	1
Tetrachloroethene	**34**		1.0		ug/L			02/04/14 22:23	1
Toluene	ND		1.0		ug/L			02/04/14 22:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 22:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 22:23	1
Trichloroethene	ND		1.0		ug/L			02/04/14 22:23	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 22:23	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*02/04/14 22:23*	*1*
Toluene-d8 (Surr)	*97*		*85 - 120*		*02/04/14 22:23*	*1*
Trifluorotoluene (Surr)	*103*		*80 - 120*		*02/04/14 22:23*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/04/14 22:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 120*		*02/04/14 22:23*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-24 Dup
Date Collected: 01/29/14 13:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 15:40	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 15:40	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 15:40	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 15:40	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 15:40	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 15:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 15:40	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 15:40	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 15:40	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 15:40	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 15:40	1
Benzene	ND		1.0		ug/L			02/07/14 15:40	1
Bromobenzene	ND		1.0		ug/L			02/07/14 15:40	1
Bromoform	ND		1.0		ug/L			02/07/14 15:40	1
Bromomethane	ND		5.0		ug/L			02/07/14 15:40	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 15:40	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 15:40	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 15:40	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 15:40	1
Chloroethane	ND		5.0		ug/L			02/07/14 15:40	1
Chloroform	**3.5**		1.0		ug/L			02/07/14 15:40	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 15:40	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 15:40	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 15:40	1
Dibromomethane	ND		1.0		ug/L			02/07/14 15:40	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 15:40	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 15:40	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 15:40	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 15:40	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 15:40	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 15:40	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 15:40	1
Naphthalene	ND		1.0		ug/L			02/07/14 15:40	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 15:40	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-24 Dup
Date Collected: 01/29/14 13:37
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 15:40	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
Styrene	ND		1.0		ug/L			02/07/14 15:40	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 15:40	1
Tetrachloroethene	**31**		1.0		ug/L			02/07/14 15:40	1
Toluene	ND		1.0		ug/L			02/07/14 15:40	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 15:40	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 15:40	1
Trichloroethene	ND		1.0		ug/L			02/07/14 15:40	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 15:40	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 15:40*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 15:40*	*1*
Trifluorotoluene (Surr)	*109*		*80 - 120*		*02/07/14 15:40*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/07/14 15:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 120*		*02/07/14 15:40*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: SPW-14
Date Collected: 01/29/14 07:40
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 16:03	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 16:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 16:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 16:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 16:03	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 16:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 16:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 16:03	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 16:03	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 16:03	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 16:03	1
Benzene	ND		1.0		ug/L			02/07/14 16:03	1
Bromobenzene	ND		1.0		ug/L			02/07/14 16:03	1
Bromoform	ND		1.0		ug/L			02/07/14 16:03	1
Bromomethane	ND		5.0		ug/L			02/07/14 16:03	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 16:03	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 16:03	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 16:03	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 16:03	1
Chloroethane	ND		5.0		ug/L			02/07/14 16:03	1
Chloroform	**2.4**		1.0		ug/L			02/07/14 16:03	1
Chloromethane	ND	*	5.0		ug/L			02/07/14 16:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 16:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 16:03	1
Dibromomethane	ND		1.0		ug/L			02/07/14 16:03	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 16:03	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			02/07/14 16:03	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 16:03	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 16:03	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 16:03	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 16:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 16:03	1
Naphthalene	ND		1.0		ug/L			02/07/14 16:03	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
N-Propylbenzene	ND		1.0		ug/L			02/07/14 16:03	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: SPW-14
Date Collected: 01/29/14 07:40
Date Received: 01/30/14 10:30

Lab Sample ID: 580-42125-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			02/07/14 16:03	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
Styrene	ND		1.0		ug/L			02/07/14 16:03	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 16:03	1
Tetrachloroethene	ND		1.0		ug/L			02/07/14 16:03	1
Toluene	ND		1.0		ug/L			02/07/14 16:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 16:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 16:03	1
Trichloroethene	ND		1.0		ug/L			02/07/14 16:03	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 16:03	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*02/07/14 16:03*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 16:03*	*1*
Trifluorotoluene (Surr)	*103*		*80 - 120*		*02/07/14 16:03*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*02/07/14 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*02/07/14 16:03*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-153054/5
Matrix: Water
Analysis Batch: 153054

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,1-Dichloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,1-Dichloroethene	ND		1.0		ug/L			02/03/14 13:13	1
1,1-Dichloropropene	ND		1.0		ug/L			02/03/14 13:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/03/14 13:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/03/14 13:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,2-Dichloroethane	ND		1.0		ug/L			02/03/14 13:13	1
1,2-Dichloropropane	ND		1.0		ug/L			02/03/14 13:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
1,3-Dichloropropane	ND		1.0		ug/L			02/03/14 13:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
2,2-Dichloropropane	ND		1.0		ug/L			02/03/14 13:13	1
2-Chlorotoluene	ND		1.0		ug/L			02/03/14 13:13	1
4-Chlorotoluene	ND		1.0		ug/L			02/03/14 13:13	1
4-Isopropyltoluene	ND		1.0		ug/L			02/03/14 13:13	1
Benzene	ND		1.0		ug/L			02/03/14 13:13	1
Bromobenzene	ND		1.0		ug/L			02/03/14 13:13	1
Bromoform	ND		1.0		ug/L			02/03/14 13:13	1
Bromomethane	ND		5.0		ug/L			02/03/14 13:13	1
Carbon tetrachloride	ND		1.0		ug/L			02/03/14 13:13	1
Chlorobenzene	ND		1.0		ug/L			02/03/14 13:13	1
Chlorobromomethane	ND		1.0		ug/L			02/03/14 13:13	1
Chlorodibromomethane	ND		1.0		ug/L			02/03/14 13:13	1
Chloroethane	ND		5.0		ug/L			02/03/14 13:13	1
Chloroform	ND		1.0		ug/L			02/03/14 13:13	1
Chloromethane	ND		5.0		ug/L			02/03/14 13:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 13:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 13:13	1
Dibromomethane	ND		1.0		ug/L			02/03/14 13:13	1
Dichlorobromomethane	ND		1.0		ug/L			02/03/14 13:13	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/03/14 13:13	1
Ethylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
Ethylene Dibromide	ND		1.0		ug/L			02/03/14 13:13	1
Hexachlorobutadiene	1.58		1.0		ug/L			02/03/14 13:13	1
Isopropylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/03/14 13:13	1
Methylene Chloride	ND		3.0		ug/L			02/03/14 13:13	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/03/14 13:13	1
Naphthalene	ND		1.0		ug/L			02/03/14 13:13	1
n-Butylbenzene	ND		1.0		ug/L			02/03/14 13:13	1

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

Lab Sample ID: MB 580-153054/5
Matrix: Water
Analysis Batch: 153054

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
o-Xylene	ND		1.0		ug/L			02/03/14 13:13	1
sec-Butylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
Styrene	ND		1.0		ug/L			02/03/14 13:13	1
tert-Butylbenzene	ND		1.0		ug/L			02/03/14 13:13	1
Tetrachloroethene	ND		1.0		ug/L			02/03/14 13:13	1
Toluene	ND		1.0		ug/L			02/03/14 13:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/03/14 13:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/03/14 13:13	1
Trichloroethene	ND		1.0		ug/L			02/03/14 13:13	1
Trichlorofluoromethane	ND		1.0		ug/L			02/03/14 13:13	1
Vinyl chloride	ND		1.0		ug/L			02/03/14 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/03/14 13:13*	*1*
Toluene-d8 (Surr)	*102*		*85 - 120*		*02/03/14 13:13*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*02/03/14 13:13*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*02/03/14 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/03/14 13:13*	*1*

Lab Sample ID: LCS 580-153054/6
Matrix: Water
Analysis Batch: 153054

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	21.7		ug/L		108	80 - 130
1,1,1-Trichloroethane	20.1	22.1		ug/L		110	65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.7		ug/L		103	65 - 130
1,1,2-Trichloroethane	20.1	20.4		ug/L		102	75 - 125
1,1-Dichloroethane	20.1	21.5		ug/L		107	70 - 135
1,1-Dichloroethene	20.1	22.9		ug/L		114	70 - 130
1,1-Dichloropropene	20.1	22.9		ug/L		114	75 - 130
1,2,3-Trichlorobenzene	20.1	20.7		ug/L		103	55 - 140
1,2,3-Trichloropropane	20.1	21.0		ug/L		105	75 - 125
1,2,4-Trichlorobenzene	20.1	20.9		ug/L		104	65 - 135
1,2,4-Trimethylbenzene	20.1	23.4		ug/L		117	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	20.0		ug/L		100	50 - 130
1,2-Dichlorobenzene	20.1	21.9		ug/L		109	70 - 120
1,2-Dichloroethane	20.1	20.2		ug/L		101	70 - 130
1,2-Dichloropropane	20.1	20.5		ug/L		102	75 - 125
1,3,5-Trimethylbenzene	20.1	23.8		ug/L		119	75 - 130
1,3-Dichlorobenzene	20.1	21.7		ug/L		108	75 - 125
1,3-Dichloropropane	20.1	21.0		ug/L		104	75 - 125
1,4-Dichlorobenzene	20.1	21.1		ug/L		105	75 - 125
2,2-Dichloropropane	20.1	23.1		ug/L		115	70 - 135
2-Chlorotoluene	20.1	23.3		ug/L		116	75 - 125
4-Chlorotoluene	20.1	22.3		ug/L		111	75 - 130
4-Isopropyltoluene	20.1	22.4		ug/L		112	75 - 130

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

Lab Sample ID: LCS 580-153054/6
Matrix: Water
Analysis Batch: 153054

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.1	22.0		ug/L		110	80 - 120
Bromobenzene	20.1	22.2		ug/L		111	75 - 125
Bromoform	20.1	19.3		ug/L		96	70 - 130
Bromomethane	20.0	22.6		ug/L		113	30 - 145
Carbon tetrachloride	20.1	22.6		ug/L		113	65 - 140
Chlorobenzene	20.1	20.1		ug/L		100	80 - 120
Chlorobromomethane	20.1	21.9		ug/L		109	65 - 130
Chlorodibromomethane	20.1	21.0		ug/L		104	60 - 135
Chloroethane	20.0	18.7		ug/L		93	60 - 135
Chloroform	20.1	21.6		ug/L		108	65 - 135
Chloromethane	20.0	21.3		ug/L		106	40 - 125
cis-1,2-Dichloroethene	20.1	22.2		ug/L		111	70 - 125
cis-1,3-Dichloropropene	20.1	21.0		ug/L		105	70 - 130
Dibromomethane	20.1	20.8		ug/L		104	75 - 125
Dichlorobromomethane	20.1	21.7		ug/L		108	75 - 120
Dichlorodifluoromethane	20.0	21.0		ug/L		105	30 - 155
Ethylbenzene	20.1	21.3		ug/L		106	75 - 125
Ethylene Dibromide	20.1	21.2		ug/L		106	80 - 120
Hexachlorobutadiene	20.1	24.0		ug/L		119	50 - 140
Isopropylbenzene	20.1	21.0		ug/L		105	75 - 125
Methyl tert-butyl ether	20.1	20.4		ug/L		102	65 - 125
Methylene Chloride	20.1	21.4		ug/L		107	55 - 140
m-Xylene & p-Xylene	20.1	21.2		ug/L		105	75 - 130
Naphthalene	20.1	19.8		ug/L		99	55 - 140
n-Butylbenzene	20.1	21.8		ug/L		109	70 - 135
N-Propylbenzene	20.1	22.4		ug/L		112	70 - 130
o-Xylene	20.1	20.1		ug/L		100	80 - 120
sec-Butylbenzene	20.1	23.6		ug/L		118	70 - 125
Styrene	20.1	21.2		ug/L		106	65 - 135
tert-Butylbenzene	20.1	22.3		ug/L		111	70 - 130
Tetrachloroethene	20.1	20.9		ug/L		104	45 - 150
Toluene	20.1	21.6		ug/L		108	75 - 120
trans-1,2-Dichloroethene	20.1	22.1		ug/L		110	60 - 140
trans-1,3-Dichloropropene	20.1	20.2		ug/L		101	55 - 140
Trichloroethene	20.1	21.6		ug/L		108	70 - 125
Trichlorofluoromethane	20.0	24.1		ug/L		120	60 - 145
Vinyl chloride	20.0	21.4		ug/L		107	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*99*		*85 - 120*
Trifluorotoluene (Surr)	*118*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*

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

Lab Sample ID: LCSD 580-153054/7
Matrix: Water
Analysis Batch: 153054

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
1,1,1,2-Tetrachloroethane	20.1	22.0		ug/L		110	80 - 130	1	30
1,1,1-Trichloroethane	20.1	21.9		ug/L		109	65 - 130	1	30
1,1,2,2-Tetrachloroethane	20.1	19.5		ug/L		97	65 - 130	6	30
1,1,2-Trichloroethane	20.1	20.5		ug/L		102	75 - 125	1	30
1,1-Dichloroethane	20.1	22.2		ug/L		111	70 - 135	3	30
1,1-Dichloroethene	20.1	22.3		ug/L		111	70 - 130	3	30
1,1-Dichloropropene	20.1	21.9		ug/L		109	75 - 130	4	30
1,2,3-Trichlorobenzene	20.1	20.4		ug/L		102	55 - 140	1	30
1,2,3-Trichloropropane	20.1	21.8		ug/L		109	75 - 125	4	30
1,2,4-Trichlorobenzene	20.1	21.6		ug/L		108	65 - 135	4	30
1,2,4-Trimethylbenzene	20.1	23.9		ug/L		119	75 - 130	2	30
1,2-Dibromo-3-Chloropropane	20.1	20.5		ug/L		102	50 - 130	2	30
1,2-Dichlorobenzene	20.1	21.8		ug/L		109	70 - 120	1	30
1,2-Dichloroethane	20.1	20.8		ug/L		104	70 - 130	3	30
1,2-Dichloropropane	20.1	22.7		ug/L		113	75 - 125	10	30
1,3,5-Trimethylbenzene	20.1	24.1		ug/L		120	75 - 130	1	30
1,3-Dichlorobenzene	20.1	22.1		ug/L		110	75 - 125	2	30
1,3-Dichloropropane	20.1	21.3		ug/L		106	75 - 125	2	30
1,4-Dichlorobenzene	20.1	21.5		ug/L		107	75 - 125	2	30
2,2-Dichloropropane	20.1	22.2		ug/L		111	70 - 135	4	30
2-Chlorotoluene	20.1	22.9		ug/L		114	75 - 125	2	30
4-Chlorotoluene	20.1	22.6		ug/L		113	75 - 130	1	30
4-Isopropyltoluene	20.1	22.7		ug/L		113	75 - 130	1	30
Benzene	20.1	21.3		ug/L		106	80 - 120	3	30
Bromobenzene	20.1	23.1		ug/L		115	75 - 125	4	30
Bromoform	20.1	19.6		ug/L		98	70 - 130	1	30
Bromomethane	20.0	21.9		ug/L		109	30 - 145	3	30
Carbon tetrachloride	20.1	22.9		ug/L		114	65 - 140	1	30
Chlorobenzene	20.1	21.1		ug/L		105	80 - 120	5	30
Chlorobromomethane	20.1	21.9		ug/L		109	65 - 130	0	30
Chlorodibromomethane	20.1	21.6		ug/L		108	60 - 135	3	30
Chloroethane	20.0	20.7		ug/L		103	60 - 135	10	30
Chloroform	20.1	21.2		ug/L		106	65 - 135	2	30
Chloromethane	20.0	22.1		ug/L		110	40 - 125	3	30
cis-1,2-Dichloroethene	20.1	21.7		ug/L		108	70 - 125	2	30
cis-1,3-Dichloropropene	20.1	21.9		ug/L		109	70 - 130	4	30
Dibromomethane	20.1	21.0		ug/L		105	75 - 125	1	30
Dichlorobromomethane	20.1	21.4		ug/L		106	75 - 120	2	30
Dichlorodifluoromethane	20.0	20.5		ug/L		102	30 - 155	3	30
Ethylbenzene	20.1	21.1		ug/L		105	75 - 125	1	30
Ethylene Dibromide	20.1	21.4		ug/L		107	80 - 120	1	30
Hexachlorobutadiene	20.1	23.9		ug/L		119	50 - 140	0	30
Isopropylbenzene	20.1	22.1		ug/L		110	75 - 125	5	30
Methyl tert-butyl ether	20.1	20.9		ug/L		104	65 - 125	2	30
Methylene Chloride	20.1	21.2		ug/L		106	55 - 140	1	30
m-Xylene & p-Xylene	20.1	21.9		ug/L		109	75 - 130	4	30
Naphthalene	20.1	20.0		ug/L		100	55 - 140	1	30
n-Butylbenzene	20.1	23.6		ug/L		118	70 - 135	8	30

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

Lab Sample ID: LCSD 580-153054/7
Matrix: Water
Analysis Batch: 153054

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
N-Propylbenzene			20.1	22.3		ug/L		111	70 - 130	0	30
o-Xylene			20.1	20.6		ug/L		103	80 - 120	3	30
sec-Butylbenzene			20.1	23.8		ug/L		119	70 - 125	1	30
Styrene			20.1	21.3		ug/L		106	65 - 135	1	30
tert-Butylbenzene			20.1	22.2		ug/L		111	70 - 130	1	30
Tetrachloroethene			20.1	23.6		ug/L		118	45 - 150	12	30
Toluene			20.1	22.0		ug/L		110	75 - 120	2	30
trans-1,2-Dichloroethene			20.1	22.2		ug/L		111	60 - 140	1	30
trans-1,3-Dichloropropene			20.1	21.4		ug/L		107	55 - 140	6	30
Trichloroethene			20.1	21.4		ug/L		107	70 - 125	1	30
Trichlorofluoromethane			20.0	23.7		ug/L		118	60 - 145	2	30
Vinyl chloride			20.0	23.1		ug/L		115	50 - 145	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Toluene-d8 (Surr)	*101*		*85 - 120*
Trifluorotoluene (Surr)	*116*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*

Lab Sample ID: MB 580-153117/5
Matrix: Water
Analysis Batch: 153117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
1,1-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/04/14 12:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dichloroethane	ND		1.0		ug/L			02/04/14 12:37	1
1,2-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
1,3-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
2,2-Dichloropropane	ND		1.0		ug/L			02/04/14 12:37	1
2-Chlorotoluene	ND		1.0		ug/L			02/04/14 12:37	1
4-Chlorotoluene	ND		1.0		ug/L			02/04/14 12:37	1
4-Isopropyltoluene	ND		1.0		ug/L			02/04/14 12:37	1

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

Lab Sample ID: MB 580-153117/5
Matrix: Water
Analysis Batch: 153117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			02/04/14 12:37	1
Bromobenzene	ND		1.0		ug/L			02/04/14 12:37	1
Bromoform	ND		1.0		ug/L			02/04/14 12:37	1
Bromomethane	ND		5.0		ug/L			02/04/14 12:37	1
Carbon tetrachloride	ND		1.0		ug/L			02/04/14 12:37	1
Chlorobenzene	ND		1.0		ug/L			02/04/14 12:37	1
Chlorobromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Chlorodibromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Chloroethane	ND		5.0		ug/L			02/04/14 12:37	1
Chloroform	ND		1.0		ug/L			02/04/14 12:37	1
Chloromethane	ND		5.0		ug/L			02/04/14 12:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
Dibromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Dichlorobromomethane	ND		1.0		ug/L			02/04/14 12:37	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/04/14 12:37	1
Ethylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Ethylene Dibromide	ND		1.0		ug/L			02/04/14 12:37	1
Hexachlorobutadiene	1.75		1.0		ug/L			02/04/14 12:37	1
Isopropylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/04/14 12:37	1
Methylene Chloride	ND		3.0		ug/L			02/04/14 12:37	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/04/14 12:37	1
Naphthalene	ND		1.0		ug/L			02/04/14 12:37	1
n-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
N-Propylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
o-Xylene	ND		1.0		ug/L			02/04/14 12:37	1
sec-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Styrene	ND		1.0		ug/L			02/04/14 12:37	1
tert-Butylbenzene	ND		1.0		ug/L			02/04/14 12:37	1
Tetrachloroethene	ND		1.0		ug/L			02/04/14 12:37	1
Toluene	ND		1.0		ug/L			02/04/14 12:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/04/14 12:37	1
Trichloroethene	ND		1.0		ug/L			02/04/14 12:37	1
Trichlorofluoromethane	ND		1.0		ug/L			02/04/14 12:37	1
Vinyl chloride	ND		1.0		ug/L			02/04/14 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*02/04/14 12:37*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*02/04/14 12:37*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*02/04/14 12:37*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*02/04/14 12:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/04/14 12:37*	*1*

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

Lab Sample ID: LCS 580-153117/7
Matrix: Water
Analysis Batch: 153117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	21.8		ug/L		109	80 - 130
1,1,1-Trichloroethane	20.1	23.4		ug/L		116	65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.0		ug/L		100	65 - 130
1,1,2-Trichloroethane	20.1	20.1		ug/L		100	75 - 125
1,1-Dichloroethane	20.1	22.0		ug/L		110	70 - 135
1,1-Dichloroethene	20.1	21.8		ug/L		109	70 - 130
1,1-Dichloropropene	20.1	23.1		ug/L		115	75 - 130
1,2,3-Trichlorobenzene	20.1	18.2		ug/L		91	55 - 140
1,2,3-Trichloropropane	20.1	19.7		ug/L		98	75 - 125
1,2,4-Trichlorobenzene	20.1	19.8		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	20.1	23.1		ug/L		115	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	17.4		ug/L		87	50 - 130
1,2-Dichlorobenzene	20.1	21.4		ug/L		107	70 - 120
1,2-Dichloroethane	20.1	22.6		ug/L		113	70 - 130
1,2-Dichloropropane	20.1	20.0		ug/L		100	75 - 125
1,3,5-Trimethylbenzene	20.1	23.3		ug/L		116	75 - 130
1,3-Dichlorobenzene	20.1	21.1		ug/L		105	75 - 125
1,3-Dichloropropane	20.1	19.8		ug/L		99	75 - 125
1,4-Dichlorobenzene	20.1	21.2		ug/L		106	75 - 125
2,2-Dichloropropane	20.1	24.6		ug/L		123	70 - 135
2-Chlorotoluene	20.1	22.0		ug/L		110	75 - 125
4-Chlorotoluene	20.1	22.7		ug/L		113	75 - 130
4-Isopropyltoluene	20.1	21.8		ug/L		109	75 - 130
Benzene	20.1	21.9		ug/L		109	80 - 120
Bromobenzene	20.1	21.7		ug/L		108	75 - 125
Bromoform	20.1	18.4		ug/L		92	70 - 130
Bromomethane	20.0	22.7		ug/L		113	30 - 145
Carbon tetrachloride	20.1	23.7		ug/L		118	65 - 140
Chlorobenzene	20.1	20.6		ug/L		103	80 - 120
Chlorobromomethane	20.1	21.7		ug/L		108	65 - 130
Chlorodibromomethane	20.1	20.9		ug/L		104	60 - 135
Chloroethane	20.0	19.8		ug/L		99	60 - 135
Chloroform	20.1	21.3		ug/L		106	65 - 135
Chloromethane	20.0	21.1		ug/L		105	40 - 125
cis-1,2-Dichloroethene	20.1	22.3		ug/L		111	70 - 125
cis-1,3-Dichloropropene	20.1	20.9		ug/L		104	70 - 130
Dibromomethane	20.1	21.2		ug/L		106	75 - 125
Dichlorobromomethane	20.1	21.4		ug/L		106	75 - 120
Dichlorodifluoromethane	20.0	19.8		ug/L		99	30 - 155
Ethylbenzene	20.1	21.4		ug/L		107	75 - 125
Ethylene Dibromide	20.1	20.6		ug/L		103	80 - 120
Hexachlorobutadiene	20.1	23.2		ug/L		116	50 - 140
Isopropylbenzene	20.1	21.7		ug/L		108	75 - 125
Methyl tert-butyl ether	20.1	21.0		ug/L		104	65 - 125
Methylene Chloride	20.1	21.3		ug/L		106	55 - 140
m-Xylene & p-Xylene	20.1	21.3		ug/L		106	75 - 130
Naphthalene	20.1	18.6		ug/L		93	55 - 140
n-Butylbenzene	20.1	22.0		ug/L		110	70 - 135

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

Lab Sample ID: LCS 580-153117/7
Matrix: Water
Analysis Batch: 153117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	20.1	21.2		ug/L		106	70 - 130
o-Xylene	20.1	20.2		ug/L		101	80 - 120
sec-Butylbenzene	20.1	23.0		ug/L		114	70 - 125
Styrene	20.1	20.8		ug/L		104	65 - 135
tert-Butylbenzene	20.1	21.7		ug/L		108	70 - 130
Tetrachloroethene	20.1	19.8		ug/L		99	45 - 150
Toluene	20.1	22.0		ug/L		110	75 - 120
trans-1,2-Dichloroethene	20.1	22.3		ug/L		111	60 - 140
trans-1,3-Dichloropropene	20.1	19.9		ug/L		99	55 - 140
Trichloroethene	20.1	21.6		ug/L		108	70 - 125
Trichlorofluoromethane	20.0	24.9		ug/L		124	60 - 145
Vinyl chloride	20.0	20.9		ug/L		104	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*117*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*

Lab Sample ID: LCSD 580-153117/9
Matrix: Water
Analysis Batch: 153117

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
1,1,1,2-Tetrachloroethane	20.1	21.0		ug/L		105	80 - 130	4	30
1,1,1-Trichloroethane	20.1	22.8		ug/L		114	65 - 130	2	30
1,1,2,2-Tetrachloroethane	20.1	19.0		ug/L		95	65 - 130	5	30
1,1,2-Trichloroethane	20.1	21.4		ug/L		107	75 - 125	6	30
1,1-Dichloroethane	20.1	22.8		ug/L		113	70 - 135	3	30
1,1-Dichloroethene	20.1	22.9		ug/L		114	70 - 130	5	30
1,1-Dichloropropene	20.1	23.3		ug/L		116	75 - 130	1	30
1,2,3-Trichlorobenzene	20.1	20.2		ug/L		101	55 - 140	10	30
1,2,3-Trichloropropane	20.1	21.4		ug/L		107	75 - 125	8	30
1,2,4-Trichlorobenzene	20.1	19.8		ug/L		99	65 - 135	0	30
1,2,4-Trimethylbenzene	20.1	23.7		ug/L		118	75 - 130	3	30
1,2-Dibromo-3-Chloropropane	20.1	18.7		ug/L		93	50 - 130	7	30
1,2-Dichlorobenzene	20.1	22.0		ug/L		110	70 - 120	3	30
1,2-Dichloroethane	20.1	22.3		ug/L		111	70 - 130	1	30
1,2-Dichloropropane	20.1	21.3		ug/L		106	75 - 125	6	30
1,3,5-Trimethylbenzene	20.1	24.0		ug/L		120	75 - 130	3	30
1,3-Dichlorobenzene	20.1	22.3		ug/L		111	75 - 125	5	30
1,3-Dichloropropane	20.1	20.3		ug/L		101	75 - 125	3	30
1,4-Dichlorobenzene	20.1	21.2		ug/L		106	75 - 125	0	30
2,2-Dichloropropane	20.1	24.4		ug/L		122	70 - 135	1	30
2-Chlorotoluene	20.1	21.7		ug/L		108	75 - 125	2	30
4-Chlorotoluene	20.1	21.4		ug/L		107	75 - 130	6	30
4-Isopropyltoluene	20.1	22.3		ug/L		111	75 - 130	2	30

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

Lab Sample ID: LCSD 580-153117/9
Matrix: Water
Analysis Batch: 153117

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
Benzene	20.1	21.5		ug/L		107	80 - 120	2	30
Bromobenzene	20.1	22.4		ug/L		112	75 - 125	3	30
Bromoform	20.1	18.2		ug/L		91	70 - 130	1	30
Bromomethane	20.0	23.3		ug/L		116	30 - 145	3	30
Carbon tetrachloride	20.1	24.1		ug/L		120	65 - 140	2	30
Chlorobenzene	20.1	20.0		ug/L		100	80 - 120	3	30
Chlorobromomethane	20.1	22.0		ug/L		110	65 - 130	2	30
Chlorodibromomethane	20.1	21.2		ug/L		106	60 - 135	1	30
Chloroethane	20.0	21.7		ug/L		108	60 - 135	9	30
Chloroform	20.1	21.7		ug/L		108	65 - 135	2	30
Chloromethane	20.0	22.3		ug/L		111	40 - 125	5	30
cis-1,2-Dichloroethene	20.1	22.7		ug/L		113	70 - 125	1	30
cis-1,3-Dichloropropene	20.1	20.1		ug/L		100	70 - 130	4	30
Dibromomethane	20.1	20.9		ug/L		104	75 - 125	2	30
Dichlorobromomethane	20.1	21.5		ug/L		107	75 - 120	1	30
Dichlorodifluoromethane	20.0	20.4		ug/L		102	30 - 155	3	30
Ethylbenzene	20.1	21.1		ug/L		105	75 - 125	2	30
Ethylene Dibromide	20.1	21.0		ug/L		105	80 - 120	2	30
Hexachlorobutadiene	20.1	24.6		ug/L		122	50 - 140	6	30
Isopropylbenzene	20.1	21.8		ug/L		109	75 - 125	0	30
Methyl tert-butyl ether	20.1	21.1		ug/L		105	65 - 125	1	30
Methylene Chloride	20.1	22.5		ug/L		112	55 - 140	5	30
m-Xylene & p-Xylene	20.1	21.5		ug/L		107	75 - 130	1	30
Naphthalene	20.1	18.4		ug/L		92	55 - 140	1	30
n-Butylbenzene	20.1	21.0		ug/L		105	70 - 135	5	30
N-Propylbenzene	20.1	21.8		ug/L		109	70 - 130	3	30
o-Xylene	20.1	19.9		ug/L		99	80 - 120	1	30
sec-Butylbenzene	20.1	23.3		ug/L		116	70 - 125	1	30
Styrene	20.1	20.6		ug/L		103	65 - 135	1	30
tert-Butylbenzene	20.1	22.3		ug/L		111	70 - 130	3	30
Tetrachloroethene	20.1	21.1		ug/L		105	45 - 150	7	30
Toluene	20.1	21.4		ug/L		107	75 - 120	3	30
trans-1,2-Dichloroethene	20.1	22.2		ug/L		111	60 - 140	0	30
trans-1,3-Dichloropropene	20.1	19.6		ug/L		97	55 - 140	2	30
Trichloroethene	20.1	21.5		ug/L		107	70 - 125	0	30
Trichlorofluoromethane	20.0	26.3		ug/L		131	60 - 145	6	30
Vinyl chloride	20.0	21.2		ug/L		106	50 - 145	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*116*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 120*

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

Lab Sample ID: MB 580-153305/5
Matrix: Water
Analysis Batch: 153305

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
1,1-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/07/14 12:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dichloroethane	ND		1.0		ug/L			02/07/14 12:59	1
1,2-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
1,3-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
2,2-Dichloropropane	ND		1.0		ug/L			02/07/14 12:59	1
2-Chlorotoluene	ND		1.0		ug/L			02/07/14 12:59	1
4-Chlorotoluene	ND		1.0		ug/L			02/07/14 12:59	1
4-Isopropyltoluene	ND		1.0		ug/L			02/07/14 12:59	1
Benzene	ND		1.0		ug/L			02/07/14 12:59	1
Bromobenzene	ND		1.0		ug/L			02/07/14 12:59	1
Bromoform	ND		1.0		ug/L			02/07/14 12:59	1
Bromomethane	ND		5.0		ug/L			02/07/14 12:59	1
Carbon tetrachloride	ND		1.0		ug/L			02/07/14 12:59	1
Chlorobenzene	ND		1.0		ug/L			02/07/14 12:59	1
Chlorobromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Chlorodibromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Chloroethane	ND		5.0		ug/L			02/07/14 12:59	1
Chloroform	ND		1.0		ug/L			02/07/14 12:59	1
Chloromethane	ND		5.0		ug/L			02/07/14 12:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
Dibromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Dichlorobromomethane	ND		1.0		ug/L			02/07/14 12:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			02/07/14 12:59	1
Ethylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Ethylene Dibromide	ND		1.0		ug/L			02/07/14 12:59	1
Hexachlorobutadiene	ND		1.0		ug/L			02/07/14 12:59	1
Isopropylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			02/07/14 12:59	1
Methylene Chloride	ND		3.0		ug/L			02/07/14 12:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			02/07/14 12:59	1
Naphthalene	ND		1.0		ug/L			02/07/14 12:59	1
n-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1

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

Lab Sample ID: MB 580-153305/5
Matrix: Water
Analysis Batch: 153305

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
o-Xylene	ND		1.0		ug/L			02/07/14 12:59	1
sec-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Styrene	ND		1.0		ug/L			02/07/14 12:59	1
tert-Butylbenzene	ND		1.0		ug/L			02/07/14 12:59	1
Tetrachloroethene	ND		1.0		ug/L			02/07/14 12:59	1
Toluene	ND		1.0		ug/L			02/07/14 12:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			02/07/14 12:59	1
Trichloroethene	ND		1.0		ug/L			02/07/14 12:59	1
Trichlorofluoromethane	ND		1.0		ug/L			02/07/14 12:59	1
Vinyl chloride	ND		1.0		ug/L			02/07/14 12:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*02/07/14 12:59*	*1*
Toluene-d8 (Surr)	*100*		*85 - 120*		*02/07/14 12:59*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*02/07/14 12:59*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*02/07/14 12:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*02/07/14 12:59*	*1*

Lab Sample ID: LCS 580-153305/7
Matrix: Water
Analysis Batch: 153305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.1	20.2		ug/L		101	80 - 130
1,1,1-Trichloroethane	20.1	20.3		ug/L		101	65 - 130
1,1,2,2-Tetrachloroethane	20.1	21.8		ug/L		109	65 - 130
1,1,2-Trichloroethane	20.1	19.2		ug/L		96	75 - 125
1,1-Dichloroethane	20.1	20.4		ug/L		102	70 - 135
1,1-Dichloroethene	20.1	20.6		ug/L		103	70 - 130
1,1-Dichloropropene	20.1	21.7		ug/L		108	75 - 130
1,2,3-Trichlorobenzene	20.1	20.5		ug/L		102	55 - 140
1,2,3-Trichloropropane	20.1	20.9		ug/L		104	75 - 125
1,2,4-Trichlorobenzene	20.1	20.0		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	20.1	20.2		ug/L		101	75 - 130
1,2-Dibromo-3-Chloropropane	20.1	20.8		ug/L		104	50 - 130
1,2-Dichlorobenzene	20.1	19.7		ug/L		98	70 - 120
1,2-Dichloroethane	20.1	20.4		ug/L		102	70 - 130
1,2-Dichloropropane	20.1	20.3		ug/L		101	75 - 125
1,3,5-Trimethylbenzene	20.1	20.0		ug/L		100	75 - 130
1,3-Dichlorobenzene	20.1	20.6		ug/L		103	75 - 125
1,3-Dichloropropane	20.1	20.6		ug/L		103	75 - 125
1,4-Dichlorobenzene	20.1	19.5		ug/L		97	75 - 125
2,2-Dichloropropane	20.1	24.5		ug/L		122	70 - 135
2-Chlorotoluene	20.1	20.2		ug/L		101	75 - 125
4-Chlorotoluene	20.1	19.7		ug/L		98	75 - 130
4-Isopropyltoluene	20.1	20.7		ug/L		103	75 - 130

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

Lab Sample ID: LCS 580-153305/7
Matrix: Water
Analysis Batch: 153305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.1	20.9		ug/L		104	80 - 120
Bromobenzene	20.1	20.6		ug/L		103	75 - 125
Bromoform	20.1	18.5		ug/L		92	70 - 130
Bromomethane	20.1	19.6		ug/L		98	30 - 145
Carbon tetrachloride	20.1	20.8		ug/L		104	65 - 140
Chlorobenzene	20.1	20.3		ug/L		101	80 - 120
Chlorobromomethane	20.1	20.4		ug/L		102	65 - 130
Chlorodibromomethane	20.1	19.1		ug/L		95	60 - 135
Chloroethane	20.1	22.0		ug/L		110	60 - 135
Chloroform	20.1	20.3		ug/L		101	65 - 135
Chloromethane	20.1	23.8		ug/L		118	40 - 125
cis-1,2-Dichloroethene	20.1	21.7		ug/L		108	70 - 125
cis-1,3-Dichloropropene	20.1	20.2		ug/L		101	70 - 130
Dibromomethane	20.1	19.5		ug/L		97	75 - 125
Dichlorobromomethane	20.1	19.6		ug/L		98	75 - 120
Dichlorodifluoromethane	20.1	33.5	*	ug/L		167	30 - 155
Ethylbenzene	20.1	20.6		ug/L		103	75 - 125
Ethylene Dibromide	20.1	20.7		ug/L		103	80 - 120
Hexachlorobutadiene	20.1	21.5		ug/L		107	50 - 140
Isopropylbenzene	20.1	20.6		ug/L		103	75 - 125
Methyl tert-butyl ether	20.1	19.5		ug/L		97	65 - 125
Methylene Chloride	20.1	21.0		ug/L		105	55 - 140
m-Xylene & p-Xylene	20.1	20.5		ug/L		102	75 - 130
Naphthalene	20.1	20.7		ug/L		103	55 - 140
n-Butylbenzene	20.1	21.8		ug/L		109	70 - 135
N-Propylbenzene	20.1	20.8		ug/L		104	70 - 130
o-Xylene	20.1	20.5		ug/L		102	80 - 120
sec-Butylbenzene	20.1	19.7		ug/L		98	70 - 125
Styrene	20.1	20.6		ug/L		103	65 - 135
tert-Butylbenzene	20.1	19.0		ug/L		95	70 - 130
Tetrachloroethene	20.1	16.9		ug/L		85	45 - 150
Toluene	20.1	20.6		ug/L		103	75 - 120
trans-1,2-Dichloroethene	20.1	21.6		ug/L		108	60 - 140
trans-1,3-Dichloropropene	20.1	19.6		ug/L		98	55 - 140
Trichloroethene	20.1	21.1		ug/L		105	70 - 125
Trichlorofluoromethane	20.1	24.0		ug/L		119	60 - 145
Vinyl chloride	20.1	24.4		ug/L		122	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*99*		*85 - 120*
Trifluorotoluene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 120*

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

Lab Sample ID: LCSD 580-153305/12
Matrix: Water
Analysis Batch: 153305

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
1,1,1,2-Tetrachloroethane	20.1	20.9		ug/L		104	80 - 130	3	30
1,1,1-Trichloroethane	20.1	20.4		ug/L		102	65 - 130	1	30
1,1,2,2-Tetrachloroethane	20.1	21.8		ug/L		109	65 - 130	0	30
1,1,2-Trichloroethane	20.1	19.2		ug/L		96	75 - 125	0	30
1,1-Dichloroethane	20.1	20.3		ug/L		101	70 - 135	1	30
1,1-Dichloroethene	20.1	20.7		ug/L		103	70 - 130	1	30
1,1-Dichloropropene	20.1	21.4		ug/L		107	75 - 130	1	30
1,2,3-Trichlorobenzene	20.1	23.4		ug/L		117	55 - 140	13	30
1,2,3-Trichloropropane	20.1	19.6		ug/L		98	75 - 125	6	30
1,2,4-Trichlorobenzene	20.1	20.9		ug/L		104	65 - 135	5	30
1,2,4-Trimethylbenzene	20.1	20.3		ug/L		101	75 - 130	0	30
1,2-Dibromo-3-Chloropropane	20.1	20.2		ug/L		101	50 - 130	3	30
1,2-Dichlorobenzene	20.1	20.4		ug/L		102	70 - 120	3	30
1,2-Dichloroethane	20.1	20.0		ug/L		99	70 - 130	2	30
1,2-Dichloropropane	20.1	21.4		ug/L		107	75 - 125	6	30
1,3,5-Trimethylbenzene	20.1	20.7		ug/L		103	75 - 130	3	30
1,3-Dichlorobenzene	20.1	20.6		ug/L		103	75 - 125	0	30
1,3-Dichloropropane	20.1	19.9		ug/L		99	75 - 125	3	30
1,4-Dichlorobenzene	20.1	20.1		ug/L		100	75 - 125	3	30
2,2-Dichloropropane	20.1	24.9		ug/L		124	70 - 135	2	30
2-Chlorotoluene	20.1	20.0		ug/L		100	75 - 125	1	30
4-Chlorotoluene	20.1	19.9		ug/L		99	75 - 130	1	30
4-Isopropyltoluene	20.1	21.4		ug/L		107	75 - 130	3	30
Benzene	20.1	20.7		ug/L		103	80 - 120	1	30
Bromobenzene	20.1	21.0		ug/L		105	75 - 125	2	30
Bromoform	20.1	18.0		ug/L		90	70 - 130	3	30
Bromomethane	20.1	20.2		ug/L		101	30 - 145	3	30
Carbon tetrachloride	20.1	21.8		ug/L		109	65 - 140	5	30
Chlorobenzene	20.1	20.1		ug/L		100	80 - 120	1	30
Chlorobromomethane	20.1	21.8		ug/L		109	65 - 130	7	30
Chlorodibromomethane	20.1	19.7		ug/L		98	60 - 135	3	30
Chloroethane	20.1	25.8		ug/L		129	60 - 135	16	30
Chloroform	20.1	21.1		ug/L		105	65 - 135	4	30
Chloromethane	20.1	25.3	*	ug/L		126	40 - 125	6	30
cis-1,2-Dichloroethene	20.1	21.2		ug/L		106	70 - 125	2	30
cis-1,3-Dichloropropene	20.1	19.1		ug/L		95	70 - 130	5	30
Dibromomethane	20.1	18.7		ug/L		93	75 - 125	4	30
Dichlorobromomethane	20.1	19.3		ug/L		96	75 - 120	1	30
Dichlorodifluoromethane	20.1	35.9	*	ug/L		179	30 - 155	7	30
Ethylbenzene	20.1	21.0		ug/L		105	75 - 125	2	30
Ethylene Dibromide	20.1	20.9		ug/L		104	80 - 120	1	30
Hexachlorobutadiene	20.1	25.1		ug/L		125	50 - 140	16	30
Isopropylbenzene	20.1	21.1		ug/L		105	75 - 125	2	30
Methyl tert-butyl ether	20.1	19.2		ug/L		96	65 - 125	1	30
Methylene Chloride	20.1	19.0		ug/L		95	55 - 140	10	30
m-Xylene & p-Xylene	20.1	20.7		ug/L		103	75 - 130	1	30
Naphthalene	20.1	21.6		ug/L		108	55 - 140	5	30
n-Butylbenzene	20.1	21.4		ug/L		107	70 - 135	2	30

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

Lab Sample ID: LCSD 580-153305/12
Matrix: Water
Analysis Batch: 153305

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
N-Propylbenzene			20.1	20.9		ug/L		104	70 - 130	0	30
o-Xylene			20.1	20.9		ug/L		104	80 - 120	2	30
sec-Butylbenzene			20.1	20.1		ug/L		100	70 - 125	2	30
Styrene			20.1	20.5		ug/L		102	65 - 135	0	30
tert-Butylbenzene			20.1	18.9		ug/L		94	70 - 130	1	30
Tetrachloroethene			20.1	14.0		ug/L		70	45 - 150	19	30
Toluene			20.1	21.3		ug/L		106	75 - 120	3	30
trans-1,2-Dichloroethene			20.1	21.4		ug/L		106	60 - 140	1	30
trans-1,3-Dichloropropene			20.1	20.1		ug/L		100	55 - 140	2	30
Trichloroethene			20.1	21.1		ug/L		105	70 - 125	0	30
Trichlorofluoromethane			20.1	24.1		ug/L		120	60 - 145	1	30
Vinyl chloride			20.1	25.4		ug/L		126	50 - 145	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*102*		*85 - 120*
Trifluorotoluene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-118374/4
Matrix: Water
Analysis Batch: 118374

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			02/03/14 15:44	1
Ethane	ND		0.50		ug/L			02/03/14 15:44	1
Ethene	ND		0.50		ug/L			02/03/14 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*96*		*66 - 132*		*02/03/14 15:44*	*1*

Lab Sample ID: LCS 240-118374/5
Matrix: Water
Analysis Batch: 118374

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	121		ug/L		104	76 - 120
Ethane			218	228		ug/L		105	80 - 120
Ethene			203	205		ug/L		101	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*94*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-152980/3
Matrix: Water
Analysis Batch: 152980

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			01/30/14 12:56	1

Lab Sample ID: LCS 580-152980/4
Matrix: Water
Analysis Batch: 152980

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.80	1.75		mg/L		97	90 - 110		

Lab Sample ID: LCSD 580-152980/5
Matrix: Water
Analysis Batch: 152980

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
Nitrate as N			1.80	1.75		mg/L		97	90 - 110	0	15

Lab Sample ID: 580-42125-12 MS
Matrix: Water
Analysis Batch: 152980

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	8.3		1.80	9.92	4	mg/L		91	90 - 110		

Lab Sample ID: 580-42125-12 DU
Matrix: Water
Analysis Batch: 152980

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate as N	8.3			8.29		mg/L				0.1	10

Lab Sample ID: MB 580-152981/3
Matrix: Water
Analysis Batch: 152981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.2		mg/L			01/30/14 12:56	1
Chloride	ND		0.90		mg/L			01/30/14 12:56	1

Lab Sample ID: LCS 580-152981/4
Matrix: Water
Analysis Batch: 152981

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			12.0	11.6		mg/L		96	90 - 110		
Chloride			9.00	9.05		mg/L		101	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-152981/5
Matrix: Water
Analysis Batch: 152981

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
Sulfate			12.0	11.6		mg/L		97	90 - 110	0	15
Chloride			9.00	9.07		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-42125-12 MS
Matrix: Water
Analysis Batch: 152981

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	11		12.0	21.5		mg/L		90	90 - 110
Chloride	28		9.00	36.7		mg/L		97	90 - 110

Lab Sample ID: 580-42125-12 DU
Matrix: Water
Analysis Batch: 152981

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	11		10.8		mg/L		0.2	10
Chloride	28		28.0		mg/L		0.04	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-153059/1
Matrix: Water
Analysis Batch: 153059

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			02/03/14 11:24	1

Lab Sample ID: LCS 580-153059/2
Matrix: Water
Analysis Batch: 153059

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			15.0	16.0		mg/L		107	85 - 115

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-2
Lab Sample ID: 580-42125-1
Date Collected: 01/28/14 16:21
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153054	02/03/14 21:00	EB1	TAL SEA

Client Sample ID: MW-5
Lab Sample ID: 580-42125-2
Date Collected: 01/28/14 13:30
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153054	02/03/14 21:51	EB1	TAL SEA

Client Sample ID: MW-6
Lab Sample ID: 580-42125-3
Date Collected: 01/28/14 15:28
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153054	02/03/14 22:42	EB1	TAL SEA

Client Sample ID: MW-7
Lab Sample ID: 580-42125-4
Date Collected: 01/28/14 14:30
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153054	02/03/14 23:34	EB1	TAL SEA

Client Sample ID: Equip Blank 1
Lab Sample ID: 580-42125-5
Date Collected: 01/28/14 17:10
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 15:17	EB1	TAL SEA

Client Sample ID: Trip Blank
Lab Sample ID: 580-42125-6
Date Collected: 01/23/14 00:00
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 16:57	EB1	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-1

Lab Sample ID: 580-42125-7

Date Collected: 01/29/14 08:21
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 17:43	EB1	TAL SEA

Client Sample ID: MW-3

Lab Sample ID: 580-42125-8

Date Collected: 01/29/14 09:37
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 18:29	EB1	TAL SEA
Total/NA	Analysis	RSK-175		1	118374	02/03/14 18:23	BPM	TAL CAN
Total/NA	Analysis	300.0		1	152980	01/30/14 13:45	RSB	TAL SEA
Total/NA	Analysis	300.0		1	152981	01/30/14 13:45	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	153059	02/04/14 13:48	IWH	TAL SEA

Client Sample ID: MW-16

Lab Sample ID: 580-42125-9

Date Collected: 01/29/14 14:34
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 19:16	EB1	TAL SEA

Client Sample ID: MW-20

Lab Sample ID: 580-42125-10

Date Collected: 01/29/14 11:41
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 20:03	EB1	TAL SEA

Client Sample ID: MW-21

Lab Sample ID: 580-42125-11

Date Collected: 01/29/14 12:35
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 20:49	EB1	TAL SEA

Client Sample ID: MW-23

Lab Sample ID: 580-42125-12

Date Collected: 01/29/14 10:32
Matrix: Water
Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 21:36	EB1	TAL SEA
Total/NA	Analysis	RSK-175		1	118374	02/03/14 18:47	BPM	TAL CAN

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Client Sample ID: MW-23

Lab Sample ID: 580-42125-12

Date Collected: 01/29/14 10:32

Matrix: Water

Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	152980	01/30/14 13:59	RSB	TAL SEA
Total/NA	Analysis	300.0		1	152981	01/30/14 13:59	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	153059	02/03/14 11:24	IWH	TAL SEA

Client Sample ID: MW-24

Lab Sample ID: 580-42125-13

Date Collected: 01/29/14 13:37

Matrix: Water

Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153117	02/04/14 22:23	EB1	TAL SEA

Client Sample ID: MW-24 Dup

Lab Sample ID: 580-42125-14

Date Collected: 01/29/14 13:37

Matrix: Water

Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 15:40	EB1	TAL SEA

Client Sample ID: SPW-14

Lab Sample ID: 580-42125-15

Date Collected: 01/29/14 07:40

Matrix: Water

Date Received: 01/30/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	153305	02/07/14 16:03	EB1	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14 *
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Yakima,WA

TestAmerica Job ID: 580-42125-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-42125-1	MW-2	Water	01/28/14 16:21	01/30/14 10:30
580-42125-2	MW-5	Water	01/28/14 13:30	01/30/14 10:30
580-42125-3	MW-6	Water	01/28/14 15:28	01/30/14 10:30
580-42125-4	MW-7	Water	01/28/14 14:30	01/30/14 10:30
580-42125-5	Equip Blank 1	Water	01/28/14 17:10	01/30/14 10:30
580-42125-6	Trip Blank	Water	01/23/14 00:00	01/30/14 10:30
580-42125-7	MW-1	Water	01/29/14 08:21	01/30/14 10:30
580-42125-8	MW-3	Water	01/29/14 09:37	01/30/14 10:30
580-42125-9	MW-16	Water	01/29/14 14:34	01/30/14 10:30
580-42125-10	MW-20	Water	01/29/14 11:41	01/30/14 10:30
580-42125-11	MW-21	Water	01/29/14 12:35	01/30/14 10:30
580-42125-12	MW-23	Water	01/29/14 10:32	01/30/14 10:30
580-42125-13	MW-24	Water	01/29/14 13:37	01/30/14 10:30
580-42125-14	MW-24 Dup	Water	01/29/14 13:37	01/30/14 10:30
580-42125-15	SPW-14	Water	01/29/14 07:40	01/30/14 10:30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush

☒ Short Hold

Chain of Custody Record

3/3/2014

Hart Crowser, Inc

Client	Client Contact	Date	Chain of Custody Number
8910 SW Gemini Drive	Jill Kiernan	01-29-14	20510
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 2
	503-620-7284/503-620-6918	42125	

City	State	Zip Code	Sampler	Lab Contact
Beaverton	OR	97008	Jason Miles	

Project Name and Location (State)	Billing Contact
Frank Wear Yakima, WA	Jill Kiernan

Contract/Purchase Order/Quote No.: 17800-23

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs 8260B Nitrate Sulfate Cl- by 300.0	TOC SM5310B RSK-175 ethene, ethane, methane	Special Instructions/ Conditions of Receipt
MW-2	01-28-14	1621		X						3			X		
MW-5		1330		X						3			X		
MW-6		1528		X						3			X		
MW-7		1430		X						3			X		
Equip Blank 1	↓	1710		X						2			X		
Trip Blank	1-23-14	-		X						2			X		
MW-1	1-29-14	0821		X						3			X		
MW-3		0937		X			1	1		6			X	X X X	
MW-16		1434		X						3			X		
MW-20		1141		X						3			X		
MW-21		1235		X						3			X		
MW-23	↓	1032		X			1	1		6			X	X X X	

580-42125 Chain of Custody

Page 56 of 58

Cooler: ☒ Yes ☐ No Cooler Temp: _____

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

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

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other Standard

QC Requirements (Specify)

1. Relinquished By Sign/Print	Date	Time	1. Received By Sign/Print	Date	Time
Jason R. Miles	1-29-14	15:45	Francisco Luna, Jr.	1/30/14	1030
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☒ Short Hold

Chain of Custody Record

3/3/2014

Client: Hart Crowser, Inc
Client Contact: Jill Kiernan
Date: 1-29-14
Chain of Custody Number: 20511
Address: 8910 SW Gemini Drive
Telephone Number (Area Code)/Fax Number: 503-620-7284/503-620-6918
Lab Number: 42175
Page 2 of 2
City: Beaverton
State: OR
Zip Code: 97008
Sampler: Jason Miles
Lab Contact:
Project Name and Location (State): Frank Wear Yakima, WA
Billing Contact: Jill Kiernan
Contract/Purchase Order/Quote No.: 17800-23

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs 8260B	Nitrate/Sulfate/Cl by 300.0	TOC SM5310B	RSK-175	Ethane, Ethene, Methane	Special Instructions/ Conditions of Receipt
MW-24	1-29-14	1337		X						3			X					
MW-24 Dup	1	1337		X						3			X					
SPW-14	↓	0740		X						3			X					

Cooler/TB Dig/IR cor 2.6°C unc 3.1°C
Cooler Dsc Lg Blue/White @ Lab 1030
Wet/Packs Packing Bubble
w/CS Fedex 50

Page 57 of 58

Cooler: ☒ Yes ☐ No Cooler Temp: _____
Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown
Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other Standard
QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By Sign/Print: Jason R. Miles	1-29-14	1545	1. Received By Sign/Print: Francisco Luna Jr.	1/30/14	1030
2. Relinquished By Sign/Print:			2. Received By Sign/Print:		
3. Relinquished By Sign/Print:			3. Received By Sign/Print:		

Comments:

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-42125-1

Login Number: 42125

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-43170-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
4/23/2014 11:25:35 AM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Job ID: 580-43170-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The sample was received on 4/11/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 3.4º C.

GC/MS VOA - Method(s) 8260B
The method blank for batch 157460 contained Tetrachloroethene above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No other analytical or quality issues were noted.

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

Definitions/Glossary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Client Sample ID: Ext-2
Date Collected: 04/10/14 14:43
Date Received: 04/11/14 10:00

Lab Sample ID: 580-43170-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			04/18/14 16:15	1
Chloromethane	ND		0.10		ug/L			04/18/14 16:15	1
Vinyl chloride	ND		0.020		ug/L			04/18/14 16:15	1
Bromomethane	ND		0.10		ug/L			04/18/14 16:15	1
Chloroethane	ND		0.25		ug/L			04/18/14 16:15	1
Trichlorofluoromethane	ND		0.10		ug/L			04/18/14 16:15	1
1,1-Dichloroethene	**2.0**		0.10		ug/L			04/18/14 16:15	1
Methylene Chloride	ND		0.50		ug/L			04/18/14 16:15	1
Methyl tert-butyl ether	ND		0.10		ug/L			04/18/14 16:15	1
trans-1,2-Dichloroethene	**0.13**		0.10		ug/L			04/18/14 16:15	1
1,1-Dichloroethane	ND		0.10		ug/L			04/18/14 16:15	1
2,2-Dichloropropane	ND		0.10		ug/L			04/18/14 16:15	1
cis-1,2-Dichloroethene	**5.2**		0.10		ug/L			04/18/14 16:15	1
Chlorobromomethane	ND		0.10		ug/L			04/18/14 16:15	1
Chloroform	**3.0**		0.10		ug/L			04/18/14 16:15	1
1,1,1-Trichloroethane	**20**		0.10		ug/L			04/18/14 16:15	1
Carbon tetrachloride	**0.12**		0.10		ug/L			04/18/14 16:15	1
1,1-Dichloropropene	ND		0.10		ug/L			04/18/14 16:15	1
Benzene	ND		0.10		ug/L			04/18/14 16:15	1
1,2-Dichloroethane	ND		0.10		ug/L			04/18/14 16:15	1
Trichloroethene	**33**		0.10		ug/L			04/18/14 16:15	1
1,2-Dichloropropane	ND		0.10		ug/L			04/18/14 16:15	1
Dibromomethane	ND		0.10		ug/L			04/18/14 16:15	1
Dichlorobromomethane	**0.11**		0.10		ug/L			04/18/14 16:15	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			04/18/14 16:15	1
Toluene	**0.59**		0.10		ug/L			04/18/14 16:15	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			04/18/14 16:15	1
1,1,2-Trichloroethane	ND		0.10		ug/L			04/18/14 16:15	1
1,3-Dichloropropane	ND		0.10		ug/L			04/18/14 16:15	1
Chlorodibromomethane	ND		0.10		ug/L			04/18/14 16:15	1
Ethylene Dibromide	ND		0.10		ug/L			04/18/14 16:15	1
Chlorobenzene	**0.67**		0.10		ug/L			04/18/14 16:15	1
1,1,1,2-Tetrachloroethane	**4.9**		0.10		ug/L			04/18/14 16:15	1
Ethylbenzene	ND		0.10		ug/L			04/18/14 16:15	1
m-Xylene & p-Xylene	ND		0.20		ug/L			04/18/14 16:15	1
o-Xylene	**0.17**		0.10		ug/L			04/18/14 16:15	1
Styrene	ND		0.10		ug/L			04/18/14 16:15	1
Bromoform	ND		0.10		ug/L			04/18/14 16:15	1
Isopropylbenzene	**0.27**		0.10		ug/L			04/18/14 16:15	1
Bromobenzene	ND		0.10		ug/L			04/18/14 16:15	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			04/18/14 16:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/14 16:15	1
N-Propylbenzene	**0.43**		0.10		ug/L			04/18/14 16:15	1
2-Chlorotoluene	ND		0.10		ug/L			04/18/14 16:15	1
4-Chlorotoluene	ND		0.20		ug/L			04/18/14 16:15	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			04/18/14 16:15	1
tert-Butylbenzene	ND		0.10		ug/L			04/18/14 16:15	1
1,2,4-Trimethylbenzene	**0.16**		0.10		ug/L			04/18/14 16:15	1
sec-Butylbenzene	ND		0.10		ug/L			04/18/14 16:15	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Client Sample ID: Ext-2
Date Collected: 04/10/14 14:43
Date Received: 04/11/14 10:00

Lab Sample ID: 580-43170-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			04/18/14 16:15	1
1,3-Dichlorobenzene	ND		0.20		ug/L			04/18/14 16:15	1
1,4-Dichlorobenzene	ND		0.20		ug/L			04/18/14 16:15	1
n-Butylbenzene	ND		0.10		ug/L			04/18/14 16:15	1
1,2-Dichlorobenzene	**0.92**		0.20		ug/L			04/18/14 16:15	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			04/18/14 16:15	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			04/18/14 16:15	1
Hexachlorobutadiene	ND		0.20		ug/L			04/18/14 16:15	1
Naphthalene	ND		0.40		ug/L			04/18/14 16:15	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			04/18/14 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*87*		*80 - 127*		*04/18/14 16:15*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*04/18/14 16:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*04/18/14 16:15*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*		*04/18/14 16:15*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*04/18/14 16:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**36000**	**B**	100		ug/L			04/21/14 21:24	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*04/21/14 21:24*	*1000*
Toluene-d8 (Surr)	*98*		*75 - 125*		*04/21/14 21:24*	*1000*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*		*04/21/14 21:24*	*1000*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*04/21/14 21:24*	*1000*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*04/21/14 21:24*	*1000*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.1**		1.0		mg/L			04/15/14 11:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-157291/6
Matrix: Water
Analysis Batch: 157291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			04/18/14 08:55	1
Chloromethane	ND		0.10		ug/L			04/18/14 08:55	1
Vinyl chloride	ND		0.020		ug/L			04/18/14 08:55	1
Bromomethane	ND		0.10		ug/L			04/18/14 08:55	1
Chloroethane	ND		0.25		ug/L			04/18/14 08:55	1
Trichlorofluoromethane	ND		0.10		ug/L			04/18/14 08:55	1
1,1-Dichloroethene	ND		0.10		ug/L			04/18/14 08:55	1
Methylene Chloride	ND		0.50		ug/L			04/18/14 08:55	1
Methyl tert-butyl ether	ND		0.10		ug/L			04/18/14 08:55	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			04/18/14 08:55	1
1,1-Dichloroethane	ND		0.10		ug/L			04/18/14 08:55	1
2,2-Dichloropropane	ND		0.10		ug/L			04/18/14 08:55	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			04/18/14 08:55	1
Chlorobromomethane	ND		0.10		ug/L			04/18/14 08:55	1
Chloroform	ND		0.10		ug/L			04/18/14 08:55	1
1,1,1-Trichloroethane	ND		0.10		ug/L			04/18/14 08:55	1
Carbon tetrachloride	ND		0.10		ug/L			04/18/14 08:55	1
1,1-Dichloropropene	ND		0.10		ug/L			04/18/14 08:55	1
Benzene	ND		0.10		ug/L			04/18/14 08:55	1
1,2-Dichloroethane	ND		0.10		ug/L			04/18/14 08:55	1
Trichloroethene	ND		0.10		ug/L			04/18/14 08:55	1
1,2-Dichloropropane	ND		0.10		ug/L			04/18/14 08:55	1
Dibromomethane	ND		0.10		ug/L			04/18/14 08:55	1
Dichlorobromomethane	ND		0.10		ug/L			04/18/14 08:55	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			04/18/14 08:55	1
Toluene	ND		0.10		ug/L			04/18/14 08:55	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			04/18/14 08:55	1
1,1,2-Trichloroethane	ND		0.10		ug/L			04/18/14 08:55	1
Tetrachloroethene	ND		0.10		ug/L			04/18/14 08:55	1
1,3-Dichloropropane	ND		0.10		ug/L			04/18/14 08:55	1
Chlorodibromomethane	ND		0.10		ug/L			04/18/14 08:55	1
Ethylene Dibromide	ND		0.10		ug/L			04/18/14 08:55	1
Chlorobenzene	ND		0.10		ug/L			04/18/14 08:55	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			04/18/14 08:55	1
Ethylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
m-Xylene & p-Xylene	ND		0.20		ug/L			04/18/14 08:55	1
o-Xylene	ND		0.10		ug/L			04/18/14 08:55	1
Styrene	ND		0.10		ug/L			04/18/14 08:55	1
Bromoform	ND		0.10		ug/L			04/18/14 08:55	1
Isopropylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
Bromobenzene	ND		0.10		ug/L			04/18/14 08:55	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			04/18/14 08:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/14 08:55	1
N-Propylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
2-Chlorotoluene	ND		0.10		ug/L			04/18/14 08:55	1
4-Chlorotoluene	ND		0.20		ug/L			04/18/14 08:55	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
tert-Butylbenzene	ND		0.10		ug/L			04/18/14 08:55	1

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

Lab Sample ID: MB 580-157291/6
Matrix: Water
Analysis Batch: 157291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
sec-Butylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
4-Isopropyltoluene	ND		0.20		ug/L			04/18/14 08:55	1
1,3-Dichlorobenzene	ND		0.20		ug/L			04/18/14 08:55	1
1,4-Dichlorobenzene	ND		0.20		ug/L			04/18/14 08:55	1
n-Butylbenzene	ND		0.10		ug/L			04/18/14 08:55	1
1,2-Dichlorobenzene	ND		0.20		ug/L			04/18/14 08:55	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			04/18/14 08:55	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			04/18/14 08:55	1
Hexachlorobutadiene	ND		0.20		ug/L			04/18/14 08:55	1
Naphthalene	ND		0.40		ug/L			04/18/14 08:55	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			04/18/14 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*90*		*80 - 127*		*04/18/14 08:55*	*1*
Toluene-d8 (Surr)	*91*		*75 - 125*		*04/18/14 08:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*04/18/14 08:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*04/18/14 08:55*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*04/18/14 08:55*	*1*

Lab Sample ID: LCS 580-157291/7
Matrix: Water
Analysis Batch: 157291

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.05		ug/L		121	30 - 180
Chloromethane	5.00	5.80		ug/L		116	50 - 140
Vinyl chloride	5.00	6.04		ug/L		121	65 - 140
Bromomethane	5.00	5.46		ug/L		109	70 - 135
Chloroethane	5.00	5.88		ug/L		118	75 - 140
Trichlorofluoromethane	5.00	5.91		ug/L		118	30 - 180
1,1-Dichloroethene	5.00	5.88		ug/L		118	70 - 150
Methylene Chloride	5.00	6.05		ug/L		121	60 - 145
Methyl tert-butyl ether	5.00	5.30		ug/L		106	75 - 120
trans-1,2-Dichloroethene	5.00	5.45		ug/L		109	80 - 140
1,1-Dichloroethane	5.00	5.48		ug/L		110	75 - 135
2,2-Dichloropropane	5.00	6.25		ug/L		125	60 - 150
cis-1,2-Dichloroethene	5.00	5.50		ug/L		110	80 - 130
Chlorobromomethane	5.00	6.07		ug/L		121	80 - 125
Chloroform	5.00	5.52		ug/L		110	80 - 130
1,1,1-Trichloroethane	5.00	5.62		ug/L		112	80 - 140
Carbon tetrachloride	5.00	5.88		ug/L		118	75 - 140
1,1-Dichloropropene	5.00	5.60		ug/L		112	80 - 130
Benzene	5.00	5.55		ug/L		111	80 - 120
1,2-Dichloroethane	5.00	4.96		ug/L		99	80 - 140
Trichloroethene	5.00	6.17		ug/L		123	80 - 130
1,2-Dichloropropane	5.00	5.46		ug/L		109	80 - 120
Dibromomethane	5.00	6.15		ug/L		123	80 - 130

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

Lab Sample ID: LCS 580-157291/7
Matrix: Water
Analysis Batch: 157291

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.88		ug/L		118	80 - 125
cis-1,3-Dichloropropene	5.00	4.23		ug/L		85	70 - 120
Toluene	5.00	5.04		ug/L		101	80 - 120
trans-1,3-Dichloropropene	5.00	4.61		ug/L		92	60 - 140
1,1,2-Trichloroethane	5.00	5.20		ug/L		104	80 - 130
Tetrachloroethene	5.00	5.12		ug/L		102	40 - 180
1,3-Dichloropropane	5.00	4.86		ug/L		97	80 - 130
Chlorodibromomethane	5.00	4.66		ug/L		93	70 - 120
Ethylene Dibromide	5.00	5.20		ug/L		104	70 - 130
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.54		ug/L		91	75 - 125
Ethylbenzene	5.00	5.06		ug/L		101	80 - 125
m-Xylene & p-Xylene	5.00	5.42		ug/L		108	80 - 130
o-Xylene	5.00	5.30		ug/L		106	80 - 120
Styrene	5.00	4.93		ug/L		99	75 - 130
Bromoform	5.00	4.83		ug/L		97	65 - 130
Isopropylbenzene	5.00	4.94		ug/L		99	75 - 120
Bromobenzene	5.00	4.74		ug/L		95	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.45		ug/L		89	75 - 125
1,2,3-Trichloropropane	5.00	4.91		ug/L		98	75 - 120
N-Propylbenzene	5.00	5.26		ug/L		105	80 - 120
2-Chlorotoluene	5.00	4.96		ug/L		99	75 - 130
4-Chlorotoluene	5.00	4.69		ug/L		94	75 - 130
1,3,5-Trimethylbenzene	5.00	4.50		ug/L		90	80 - 125
tert-Butylbenzene	5.00	4.55		ug/L		91	80 - 130
1,2,4-Trimethylbenzene	5.00	4.51		ug/L		90	80 - 125
sec-Butylbenzene	5.00	4.49		ug/L		90	80 - 125
4-Isopropyltoluene	5.00	4.55		ug/L		91	80 - 120
1,3-Dichlorobenzene	5.00	4.78		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.57		ug/L		91	80 - 120
n-Butylbenzene	5.00	4.56		ug/L		91	75 - 125
1,2-Dichlorobenzene	5.00	4.71		ug/L		94	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.81		ug/L		96	55 - 120
1,2,4-Trichlorobenzene	5.00	4.17		ug/L		83	60 - 125
Hexachlorobutadiene	5.00	4.35		ug/L		87	75 - 135
Naphthalene	5.00	3.51		ug/L		70	45 - 130
1,2,3-Trichlorobenzene	5.00	4.61		ug/L		92	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*89*		*80 - 127*
Toluene-d8 (Surr)	*92*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 128*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

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

Lab Sample ID: LCSD 580-157291/8
Matrix: Water
Analysis Batch: 157291

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
Dichlorodifluoromethane	5.00	6.34		ug/L		127	30 - 180	5	20
Chloromethane	5.00	6.21		ug/L		124	50 - 140	7	20
Vinyl chloride	5.00	6.36		ug/L		127	65 - 140	5	20
Bromomethane	5.00	5.91		ug/L		118	70 - 135	8	20
Chloroethane	5.00	5.63		ug/L		113	75 - 140	4	20
Trichlorofluoromethane	5.00	6.25		ug/L		125	30 - 180	6	20
1,1-Dichloroethene	5.00	5.80		ug/L		116	70 - 150	1	20
Methylene Chloride	5.00	6.30		ug/L		126	60 - 145	4	20
Methyl tert-butyl ether	5.00	5.30		ug/L		106	75 - 120	0	20
trans-1,2-Dichloroethene	5.00	5.43		ug/L		109	80 - 140	0	20
1,1-Dichloroethane	5.00	5.60		ug/L		112	75 - 135	2	20
2,2-Dichloropropane	5.00	6.43		ug/L		129	60 - 150	3	20
cis-1,2-Dichloroethene	5.00	5.66		ug/L		113	80 - 130	3	20
Chlorobromomethane	5.00	6.24		ug/L		125	80 - 125	3	20
Chloroform	5.00	5.58		ug/L		112	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.87		ug/L		117	80 - 140	4	20
Carbon tetrachloride	5.00	6.05		ug/L		121	75 - 140	3	20
1,1-Dichloropropene	5.00	5.82		ug/L		116	80 - 130	4	20
Benzene	5.00	5.58		ug/L		112	80 - 120	1	20
1,2-Dichloroethane	5.00	5.25		ug/L		105	80 - 140	6	20
Trichloroethene	5.00	5.97		ug/L		119	80 - 130	3	20
1,2-Dichloropropane	5.00	5.23		ug/L		105	80 - 120	4	20
Dibromomethane	5.00	6.12		ug/L		122	80 - 130	0	20
Dichlorobromomethane	5.00	5.80		ug/L		116	80 - 125	1	20
cis-1,3-Dichloropropene	5.00	4.23		ug/L		85	70 - 120	0	20
Toluene	5.00	4.89		ug/L		98	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	4.38		ug/L		88	60 - 140	5	20
1,1,2-Trichloroethane	5.00	4.81		ug/L		96	80 - 130	8	20
Tetrachloroethene	5.00	5.94		ug/L		119	40 - 180	15	20
1,3-Dichloropropane	5.00	4.64		ug/L		93	80 - 130	5	20
Chlorodibromomethane	5.00	4.56		ug/L		91	70 - 120	2	20
Ethylene Dibromide	5.00	4.91		ug/L		98	70 - 130	6	20
Chlorobenzene	5.00	5.07		ug/L		101	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	4.53		ug/L		91	75 - 125	0	20
Ethylbenzene	5.00	5.07		ug/L		101	80 - 125	0	20
m-Xylene & p-Xylene	5.00	5.35		ug/L		107	80 - 130	1	20
o-Xylene	5.00	5.37		ug/L		107	80 - 120	1	20
Styrene	5.00	4.90		ug/L		98	75 - 130	1	20
Bromoform	5.00	4.78		ug/L		96	65 - 130	1	20
Isopropylbenzene	5.00	5.03		ug/L		101	75 - 120	2	20
Bromobenzene	5.00	4.59		ug/L		92	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	4.42		ug/L		88	75 - 125	1	20
1,2,3-Trichloropropane	5.00	4.82		ug/L		96	75 - 120	2	20
N-Propylbenzene	5.00	5.23		ug/L		105	80 - 120	1	20
2-Chlorotoluene	5.00	5.14		ug/L		103	75 - 130	4	20
4-Chlorotoluene	5.00	5.06		ug/L		101	75 - 130	8	20
1,3,5-Trimethylbenzene	5.00	4.60		ug/L		92	80 - 125	2	20
tert-Butylbenzene	5.00	4.59		ug/L		92	80 - 130	1	20

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

Lab Sample ID: LCSD 580-157291/8
Matrix: Water
Analysis Batch: 157291

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
1,2,4-Trimethylbenzene			5.00	4.51		ug/L		90	80 - 125	0	20
sec-Butylbenzene			5.00	4.36		ug/L		87	80 - 125	3	20
4-Isopropyltoluene			5.00	4.51		ug/L		90	80 - 120	1	20
1,3-Dichlorobenzene			5.00	4.72		ug/L		94	80 - 120	1	20
1,4-Dichlorobenzene			5.00	4.62		ug/L		92	80 - 120	1	20
n-Butylbenzene			5.00	4.40		ug/L		88	75 - 125	4	20
1,2-Dichlorobenzene			5.00	4.73		ug/L		95	80 - 130	0	20
1,2-Dibromo-3-Chloropropane			5.00	5.29		ug/L		106	55 - 120	10	20
1,2,4-Trichlorobenzene			5.00	4.22		ug/L		84	60 - 125	1	20
Hexachlorobutadiene			5.00	4.43		ug/L		89	75 - 135	2	20
Naphthalene			5.00	3.70		ug/L		74	45 - 130	5	20
1,2,3-Trichlorobenzene			5.00	4.77		ug/L		95	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*90*		*80 - 127*
Toluene-d8 (Surr)	*92*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*
4-Bromofluorobenzene (Surr)	*109*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

Lab Sample ID: MB 580-157460/6
Matrix: Water
Analysis Batch: 157460

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.187		0.10		ug/L			04/21/14 17:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*91*		*80 - 127*		*04/21/14 17:43*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*04/21/14 17:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*04/21/14 17:43*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*04/21/14 17:43*	*1*
Dibromofluoromethane (Surr)	*94*		*85 - 115*		*04/21/14 17:43*	*1*

Lab Sample ID: LCS 580-157460/7
Matrix: Water
Analysis Batch: 157460

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			5.00	7.33		ug/L		147	40 - 180		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*103*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

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

Lab Sample ID: LCSD 580-157460/8
Matrix: Water
Analysis Batch: 157460

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
Tetrachloroethene			5.00	7.76		ug/L		155	40 - 180	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*101*		*80 - 127*
Toluene-d8 (Surr)	*103*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*97*		*85 - 115*

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-157119/1
Matrix: Water
Analysis Batch: 157119

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			04/15/14 11:33	1

Lab Sample ID: LCS 580-157119/2
Matrix: Water
Analysis Batch: 157119

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			15.0	15.9		mg/L		106	85 - 115		

Lab Sample ID: 580-43170-1 MS
Matrix: Water
Analysis Batch: 157119

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	1.1		15.0	10.6	F1	mg/L		64	85 - 115		

Lab Sample ID: 580-43170-1 MSD
Matrix: Water
Analysis Batch: 157119

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.1		15.0	10.7	F1	mg/L		64	85 - 115	1	20

Lab Sample ID: 580-43170-1 DU
Matrix: Water
Analysis Batch: 157119

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.1		1.04		mg/L		2	20

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Client Sample ID: Ext-2
Date Collected: 04/10/14 14:43
Date Received: 04/11/14 10:00

Lab Sample ID: 580-43170-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	157291	04/18/14 16:15	JMB	TAL SEA
Total/NA	Analysis	8260B	DL	1000	157460	04/21/14 21:24	JMB	TAL SEA
Total/NA	Analysis	SM 5310B		1	157119	04/15/14 11:33	RSB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	07-31-14 *
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43170-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-43170-1	Ext-2	Water	04/10/14 14:43	04/11/14 10:00

45110

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager: Jill Kiernan	Site Contact: Chris Martin	Date: 4/10/14	COC No:
Your Company Name here: Hart Crowser	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 8910 SW Gemini Dr.	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Beaverton, OR 97008	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx: 503 620-7234 Phone	TAT if different from Below: Standard			Lab Sampling:
(xxx) xxx-xxxx FAX	☐ 2 weeks			
Project Name: Frank Wear	☐ 1 week			Job / SDG No.:
Site: 17800-23/Task 9	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260 TOC	Sample Specific Notes:
1 Ext-2	4/10/14	1443	G	W	6	N	Y	X X	Extra containers included

580-43170 Chain of Custody

A 3.4 3.4
MED WH BLU
ICE BUBBLE
w/CS ~~FEDEX~~ RQ

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:
Extra Sample Volume included.

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

	Company	Date/Time		Company	Date/Time
Relinquished by: Chris Martin	Hart Crowser	4/10/14 1545	Received by:	TASEA	4-11-14 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-43170-1

Login Number: 43170

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	N/A	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-43574-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
5/29/2014 3:37:29 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Job ID: 580-43574-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 5/14/2014 10:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

GC/MS VOA
Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: MW-5 (580-43574-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-5 (580-43574-1), MW-6 (580-43574-2), MW-7 (580-43574-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was re-analyzed for possible carryover for Tetrachloroethene: MW-17 (580-43574-4), MW-18 (580-43574-5), MW-19 (580-43574-6). Re-analysis confirmed slight carryover in the original run, therefore the re-analysis has been reported.

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

GC VOA
Method(s) RSK-175: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 131382.

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.

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-5
Date Collected: 05/13/14 11:03
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 13:57	1
Chloromethane	ND		0.10		ug/L			05/16/14 13:57	1
Vinyl chloride	**0.052**		0.020		ug/L			05/16/14 13:57	1
Bromomethane	ND		0.10		ug/L			05/16/14 13:57	1
Chloroethane	ND		0.25		ug/L			05/16/14 13:57	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 13:57	1
1,1-Dichloroethene	**0.83**		0.10		ug/L			05/16/14 13:57	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 13:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 13:57	1
trans-1,2-Dichloroethene	**5.3**		0.10		ug/L			05/16/14 13:57	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 13:57	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 13:57	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 13:57	1
Chloroform	**2.6**		0.10		ug/L			05/16/14 13:57	1
1,1,1-Trichloroethane	**7.2**		0.10		ug/L			05/16/14 13:57	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 13:57	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 13:57	1
Benzene	ND		0.10		ug/L			05/16/14 13:57	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 13:57	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 13:57	1
Dibromomethane	ND		0.10		ug/L			05/16/14 13:57	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 13:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 13:57	1
Toluene	**0.31**		0.10		ug/L			05/16/14 13:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 13:57	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 13:57	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 13:57	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 13:57	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 13:57	1
Chlorobenzene	**0.38**		0.10		ug/L			05/16/14 13:57	1
1,1,1,2-Tetrachloroethane	**2.5**		0.10		ug/L			05/16/14 13:57	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 13:57	1
o-Xylene	ND		0.10		ug/L			05/16/14 13:57	1
Styrene	ND		0.10		ug/L			05/16/14 13:57	1
Bromoform	ND		0.10		ug/L			05/16/14 13:57	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
Bromobenzene	ND		0.10		ug/L			05/16/14 13:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 13:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 13:57	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 13:57	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 13:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 13:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 13:57	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-5
Date Collected: 05/13/14 11:03
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 13:57	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 13:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 13:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 13:57	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 13:57	1
Naphthalene	ND		0.40		ug/L			05/16/14 13:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*182*	*X*	*80 - 127*		*05/16/14 13:57*	*1*
Toluene-d8 (Surr)	*112*		*75 - 125*		*05/16/14 13:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/16/14 13:57*	*1*
4-Bromofluorobenzene (Surr)	*79*		*75 - 120*		*05/16/14 13:57*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/16/14 13:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**520**		10		ug/L			05/19/14 13:10	100
Trichloroethene	**220**		10		ug/L			05/19/14 13:10	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 13:10	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*05/19/14 13:10*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 13:10*	*100*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*		*05/19/14 13:10*	*100*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/19/14 13:10*	*100*
Dibromofluoromethane (Surr)	*94*		*85 - 115*		*05/19/14 13:10*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**17000**		100		ug/L			05/19/14 17:38	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*05/19/14 17:38*	*1000*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 17:38*	*1000*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*		*05/19/14 17:38*	*1000*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*05/19/14 17:38*	*1000*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 17:38*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-6
Date Collected: 05/13/14 12:44
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 14:22	1
Chloromethane	ND		0.10		ug/L			05/16/14 14:22	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 14:22	1
Bromomethane	ND		0.10		ug/L			05/16/14 14:22	1
Chloroethane	ND		0.25		ug/L			05/16/14 14:22	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 14:22	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 14:22	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 14:22	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 14:22	1
trans-1,2-Dichloroethene	**1.3**		0.10		ug/L			05/16/14 14:22	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 14:22	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 14:22	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 14:22	1
Chloroform	**3.2**		0.10		ug/L			05/16/14 14:22	1
1,1,1-Trichloroethane	**0.92**		0.10		ug/L			05/16/14 14:22	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 14:22	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 14:22	1
Benzene	ND		0.10		ug/L			05/16/14 14:22	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 14:22	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 14:22	1
Dibromomethane	ND		0.10		ug/L			05/16/14 14:22	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 14:22	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 14:22	1
Toluene	ND		0.10		ug/L			05/16/14 14:22	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 14:22	1
1,1,2-Trichloroethane	**0.12**		0.10		ug/L			05/16/14 14:22	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 14:22	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 14:22	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 14:22	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 14:22	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 14:22	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 14:22	1
o-Xylene	ND		0.10		ug/L			05/16/14 14:22	1
Styrene	ND		0.10		ug/L			05/16/14 14:22	1
Bromoform	ND		0.10		ug/L			05/16/14 14:22	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
Bromobenzene	ND		0.10		ug/L			05/16/14 14:22	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 14:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 14:22	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 14:22	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 14:22	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 14:22	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:22	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-6
Date Collected: 05/13/14 12:44
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:22	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 14:22	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:22	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 14:22	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 14:22	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 14:22	1
Naphthalene	ND		0.40		ug/L			05/16/14 14:22	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*112*		*80 - 127*		*05/16/14 14:22*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/16/14 14:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/16/14 14:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/16/14 14:22*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/16/14 14:22*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**140**		10		ug/L			05/19/14 13:35	100
Trichloroethene	**69**		10		ug/L			05/19/14 13:35	100
Tetrachloroethene	**1700**		10		ug/L			05/19/14 13:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*05/19/14 13:35*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 13:35*	*100*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*		*05/19/14 13:35*	*100*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 13:35*	*100*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*05/19/14 13:35*	*100*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-7
Date Collected: 05/13/14 11:50
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 14:47	1
Chloromethane	ND		0.10		ug/L			05/16/14 14:47	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 14:47	1
Bromomethane	ND		0.10		ug/L			05/16/14 14:47	1
Chloroethane	ND		0.25		ug/L			05/16/14 14:47	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 14:47	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 14:47	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 14:47	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 14:47	1
trans-1,2-Dichloroethene	**0.66**		0.10		ug/L			05/16/14 14:47	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 14:47	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 14:47	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 14:47	1
Chloroform	**1.8**		0.10		ug/L			05/16/14 14:47	1
1,1,1-Trichloroethane	**0.37**		0.10		ug/L			05/16/14 14:47	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 14:47	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 14:47	1
Benzene	ND		0.10		ug/L			05/16/14 14:47	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 14:47	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 14:47	1
Dibromomethane	ND		0.10		ug/L			05/16/14 14:47	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 14:47	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 14:47	1
Toluene	ND		0.10		ug/L			05/16/14 14:47	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 14:47	1
1,1,2-Trichloroethane	**0.13**		0.10		ug/L			05/16/14 14:47	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 14:47	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 14:47	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 14:47	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 14:47	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 14:47	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 14:47	1
o-Xylene	ND		0.10		ug/L			05/16/14 14:47	1
Styrene	ND		0.10		ug/L			05/16/14 14:47	1
Bromoform	ND		0.10		ug/L			05/16/14 14:47	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
Bromobenzene	ND		0.10		ug/L			05/16/14 14:47	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 14:47	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 14:47	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 14:47	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 14:47	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 14:47	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:47	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-7
Date Collected: 05/13/14 11:50
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:47	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 14:47	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 14:47	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 14:47	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 14:47	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 14:47	1
Naphthalene	ND		0.40		ug/L			05/16/14 14:47	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*111*		*80 - 127*		*05/16/14 14:47*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/16/14 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/16/14 14:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*05/16/14 14:47*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 14:47*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**86**		1.0		ug/L			05/19/14 18:50	10
Trichloroethene	**31**		1.0		ug/L			05/19/14 18:50	10
Tetrachloroethene	**590**		1.0		ug/L			05/19/14 18:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*05/19/14 18:50*	*10*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 18:50*	*10*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*		*05/19/14 18:50*	*10*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 18:50*	*10*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 18:50*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-17
Date Collected: 05/13/14 10:10
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 15:12	1
Chloromethane	ND		0.10		ug/L			05/16/14 15:12	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 15:12	1
Bromomethane	ND		0.10		ug/L			05/16/14 15:12	1
Chloroethane	ND		0.25		ug/L			05/16/14 15:12	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 15:12	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 15:12	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 15:12	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 15:12	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 15:12	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 15:12	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 15:12	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 15:12	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 15:12	1
Chloroform	**0.47**		0.10		ug/L			05/16/14 15:12	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 15:12	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 15:12	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 15:12	1
Benzene	ND		0.10		ug/L			05/16/14 15:12	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 15:12	1
Trichloroethene	ND		0.10		ug/L			05/16/14 15:12	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 15:12	1
Dibromomethane	ND		0.10		ug/L			05/16/14 15:12	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 15:12	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 15:12	1
Toluene	ND		0.10		ug/L			05/16/14 15:12	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 15:12	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 15:12	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 15:12	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 15:12	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 15:12	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 15:12	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 15:12	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 15:12	1
o-Xylene	ND		0.10		ug/L			05/16/14 15:12	1
Styrene	ND		0.10		ug/L			05/16/14 15:12	1
Bromoform	ND		0.10		ug/L			05/16/14 15:12	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
Bromobenzene	ND		0.10		ug/L			05/16/14 15:12	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 15:12	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 15:12	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 15:12	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 15:12	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 15:12	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-17
Date Collected: 05/13/14 10:10
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 15:12	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:12	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:12	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 15:12	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:12	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 15:12	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 15:12	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 15:12	1
Naphthalene	ND		0.40		ug/L			05/16/14 15:12	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*110*		*80 - 127*		*05/16/14 15:12*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/16/14 15:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/16/14 15:12*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/16/14 15:12*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/16/14 15:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.19**		0.10		ug/L			05/19/14 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*05/19/14 11:32*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 11:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 128*		*05/19/14 11:32*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/19/14 11:32*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 11:32*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-18
Date Collected: 05/13/14 08:24
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 15:37	1
Chloromethane	ND		0.10		ug/L			05/16/14 15:37	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 15:37	1
Bromomethane	ND		0.10		ug/L			05/16/14 15:37	1
Chloroethane	ND		0.25		ug/L			05/16/14 15:37	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 15:37	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 15:37	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 15:37	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 15:37	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 15:37	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 15:37	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 15:37	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 15:37	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 15:37	1
Chloroform	**0.19**		0.10		ug/L			05/16/14 15:37	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 15:37	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 15:37	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 15:37	1
Benzene	ND		0.10		ug/L			05/16/14 15:37	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 15:37	1
Trichloroethene	ND		0.10		ug/L			05/16/14 15:37	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 15:37	1
Dibromomethane	ND		0.10		ug/L			05/16/14 15:37	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 15:37	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 15:37	1
Toluene	ND		0.10		ug/L			05/16/14 15:37	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 15:37	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 15:37	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 15:37	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 15:37	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 15:37	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 15:37	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 15:37	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 15:37	1
o-Xylene	ND		0.10		ug/L			05/16/14 15:37	1
Styrene	ND		0.10		ug/L			05/16/14 15:37	1
Bromoform	ND		0.10		ug/L			05/16/14 15:37	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
Bromobenzene	ND		0.10		ug/L			05/16/14 15:37	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 15:37	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 15:37	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 15:37	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 15:37	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 15:37	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-18
Date Collected: 05/13/14 08:24
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 15:37	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:37	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:37	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 15:37	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 15:37	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 15:37	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 15:37	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 15:37	1
Naphthalene	ND		0.40		ug/L			05/16/14 15:37	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*113*		*80 - 127*		*05/16/14 15:37*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/16/14 15:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/16/14 15:37*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/16/14 15:37*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/16/14 15:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.56**		0.10		ug/L			05/19/14 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*05/19/14 11:56*	*1*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 11:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*		*05/19/14 11:56*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*05/19/14 11:56*	*1*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*05/19/14 11:56*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/20/14 22:44	1
Ethane	ND		0.50		ug/L			05/20/14 22:44	1
Ethene	ND		0.50		ug/L			05/20/14 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*88*		*66 - 132*		*05/20/14 22:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.9**		0.90		mg/L			05/15/14 17:24	1
Nitrate as N	**2.5**		0.90		mg/L			05/14/14 15:44	1
Sulfate	**9.0**		1.2		mg/L			05/15/14 17:24	1
Total Organic Carbon	ND		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-19
Date Collected: 05/13/14 09:12
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 16:02	1
Chloromethane	ND		0.10		ug/L			05/16/14 16:02	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 16:02	1
Bromomethane	ND		0.10		ug/L			05/16/14 16:02	1
Chloroethane	ND		0.25		ug/L			05/16/14 16:02	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 16:02	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 16:02	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 16:02	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 16:02	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 16:02	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 16:02	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:02	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 16:02	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 16:02	1
Chloroform	**0.14**		0.10		ug/L			05/16/14 16:02	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 16:02	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 16:02	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 16:02	1
Benzene	ND		0.10		ug/L			05/16/14 16:02	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 16:02	1
Trichloroethene	ND		0.10		ug/L			05/16/14 16:02	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:02	1
Dibromomethane	ND		0.10		ug/L			05/16/14 16:02	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 16:02	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:02	1
Toluene	ND		0.10		ug/L			05/16/14 16:02	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:02	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 16:02	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 16:02	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 16:02	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 16:02	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 16:02	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 16:02	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 16:02	1
o-Xylene	ND		0.10		ug/L			05/16/14 16:02	1
Styrene	ND		0.10		ug/L			05/16/14 16:02	1
Bromoform	ND		0.10		ug/L			05/16/14 16:02	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
Bromobenzene	ND		0.10		ug/L			05/16/14 16:02	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 16:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 16:02	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 16:02	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 16:02	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 16:02	1

Client Sample ID: MW-19
Date Collected: 05/13/14 09:12
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 16:02	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:02	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:02	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 16:02	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:02	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 16:02	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 16:02	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 16:02	1
Naphthalene	ND		0.40		ug/L			05/16/14 16:02	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/16/14 16:02*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/16/14 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/16/14 16:02*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*05/16/14 16:02*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/16/14 16:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.12**		0.10		ug/L			05/19/14 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/19/14 12:21*	*1*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*		*05/19/14 12:21*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/19/14 12:21*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 12:21*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: TB #353
Date Collected: 05/13/14 00:00
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 13:32	1
Chloromethane	ND		0.10		ug/L			05/16/14 13:32	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 13:32	1
Bromomethane	ND		0.10		ug/L			05/16/14 13:32	1
Chloroethane	ND		0.25		ug/L			05/16/14 13:32	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 13:32	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 13:32	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 13:32	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 13:32	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 13:32	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 13:32	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 13:32	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 13:32	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 13:32	1
Chloroform	ND		0.10		ug/L			05/16/14 13:32	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 13:32	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 13:32	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 13:32	1
Benzene	ND		0.10		ug/L			05/16/14 13:32	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 13:32	1
Trichloroethene	ND		0.10		ug/L			05/16/14 13:32	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 13:32	1
Dibromomethane	ND		0.10		ug/L			05/16/14 13:32	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 13:32	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 13:32	1
Toluene	ND		0.10		ug/L			05/16/14 13:32	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 13:32	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 13:32	1
Tetrachloroethene	ND		0.10		ug/L			05/16/14 13:32	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 13:32	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 13:32	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 13:32	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 13:32	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 13:32	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 13:32	1
o-Xylene	ND		0.10		ug/L			05/16/14 13:32	1
Styrene	ND		0.10		ug/L			05/16/14 13:32	1
Bromoform	ND		0.10		ug/L			05/16/14 13:32	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
Bromobenzene	ND		0.10		ug/L			05/16/14 13:32	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 13:32	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 13:32	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 13:32	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 13:32	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 13:32	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: TB #353
Date Collected: 05/13/14 00:00
Date Received: 05/14/14 10:05

Lab Sample ID: 580-43574-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 13:32	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 13:32	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 13:32	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 13:32	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 13:32	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 13:32	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 13:32	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 13:32	1
Naphthalene	ND		0.40		ug/L			05/16/14 13:32	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*113*		*80 - 127*		*05/16/14 13:32*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/16/14 13:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/16/14 13:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/16/14 13:32*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 13:32*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-159171/6
Matrix: Water
Analysis Batch: 159171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 10:40	1
Chloromethane	ND		0.10		ug/L			05/16/14 10:40	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 10:40	1
Bromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Chloroethane	ND		0.25		ug/L			05/16/14 10:40	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 10:40	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 10:40	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Chloroform	ND		0.10		ug/L			05/16/14 10:40	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
Benzene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Trichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
Dibromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 10:40	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
Toluene	ND		0.10		ug/L			05/16/14 10:40	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Tetrachloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 10:40	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 10:40	1
o-Xylene	ND		0.10		ug/L			05/16/14 10:40	1
Styrene	ND		0.10		ug/L			05/16/14 10:40	1
Bromoform	ND		0.10		ug/L			05/16/14 10:40	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
Bromobenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 10:40	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 10:40	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 10:40	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 10:40	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1

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

Lab Sample ID: MB 580-159171/6
Matrix: Water
Analysis Batch: 159171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 10:40	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 10:40	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 10:40	1
Naphthalene	ND		0.40		ug/L			05/16/14 10:40	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/16/14 10:40*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*05/16/14 10:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*05/16/14 10:40*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*05/16/14 10:40*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/16/14 10:40*	*1*

Lab Sample ID: LCS 580-159171/7
Matrix: Water
Analysis Batch: 159171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.04		ug/L		121	30 - 180
Chloromethane	5.00	5.11		ug/L		102	50 - 140
Vinyl chloride	5.00	5.21		ug/L		104	65 - 140
Bromomethane	5.00	4.47		ug/L		89	70 - 135
Chloroethane	5.00	4.97		ug/L		99	75 - 140
Trichlorofluoromethane	5.00	3.65		ug/L		73	30 - 180
1,1-Dichloroethene	5.00	3.62		ug/L		72	70 - 150
Methylene Chloride	5.00	5.36		ug/L		107	60 - 145
Methyl tert-butyl ether	5.00	4.98		ug/L		100	75 - 120
trans-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 140
1,1-Dichloroethane	5.00	5.18		ug/L		104	75 - 135
2,2-Dichloropropane	5.00	5.08		ug/L		102	60 - 150
cis-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 130
Chlorobromomethane	5.00	4.98		ug/L		100	80 - 125
Chloroform	5.00	5.24		ug/L		105	80 - 130
1,1,1-Trichloroethane	5.00	4.91		ug/L		98	80 - 140
Carbon tetrachloride	5.00	5.40		ug/L		108	75 - 140
1,1-Dichloropropene	5.00	5.48		ug/L		110	80 - 130
Benzene	5.00	5.12		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	4.94		ug/L		99	80 - 140
Trichloroethene	5.00	5.32		ug/L		106	80 - 130
1,2-Dichloropropane	5.00	5.15		ug/L		103	80 - 120
Dibromomethane	5.00	5.04		ug/L		101	80 - 130

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

Lab Sample ID: LCS 580-159171/7
Matrix: Water
Analysis Batch: 159171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.13		ug/L		103	80 - 125
cis-1,3-Dichloropropene	5.00	4.94		ug/L		99	70 - 120
Toluene	5.00	5.21		ug/L		104	80 - 120
trans-1,3-Dichloropropene	5.00	4.97		ug/L		99	60 - 140
1,1,2-Trichloroethane	5.00	5.12		ug/L		102	80 - 130
Tetrachloroethene	5.00	5.75		ug/L		115	40 - 180
1,3-Dichloropropane	5.00	5.04		ug/L		101	80 - 130
Chlorodibromomethane	5.00	4.76		ug/L		95	70 - 120
Ethylene Dibromide	5.00	5.14		ug/L		103	70 - 130
Chlorobenzene	5.00	5.15		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.16		ug/L		103	75 - 125
Ethylbenzene	5.00	5.37		ug/L		107	80 - 125
m-Xylene & p-Xylene	5.00	5.33		ug/L		107	80 - 130
o-Xylene	5.00	5.22		ug/L		104	80 - 120
Styrene	5.00	5.49		ug/L		110	75 - 130
Bromoform	5.00	4.45		ug/L		89	65 - 130
Isopropylbenzene	5.00	5.46		ug/L		109	75 - 120
Bromobenzene	5.00	5.16		ug/L		103	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	5.01		ug/L		100	75 - 120
N-Propylbenzene	5.00	5.45		ug/L		109	80 - 120
2-Chlorotoluene	5.00	5.11		ug/L		102	75 - 130
4-Chlorotoluene	5.00	5.14		ug/L		103	75 - 130
1,3,5-Trimethylbenzene	5.00	5.38		ug/L		108	80 - 125
tert-Butylbenzene	5.00	5.54		ug/L		111	80 - 130
1,2,4-Trimethylbenzene	5.00	5.33		ug/L		107	80 - 125
sec-Butylbenzene	5.00	5.43		ug/L		109	80 - 125
4-Isopropyltoluene	5.00	5.47		ug/L		109	80 - 120
1,3-Dichlorobenzene	5.00	5.19		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	5.11		ug/L		102	80 - 120
n-Butylbenzene	5.00	5.39		ug/L		108	75 - 125
1,2-Dichlorobenzene	5.00	5.08		ug/L		102	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.74		ug/L		95	55 - 120
1,2,4-Trichlorobenzene	5.00	5.19		ug/L		104	60 - 125
Hexachlorobutadiene	5.00	5.80		ug/L		116	75 - 135
Naphthalene	5.00	5.08		ug/L		102	45 - 130
1,2,3-Trichlorobenzene	5.00	5.18		ug/L		104	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*109*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*

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

Lab Sample ID: LCSD 580-159171/10
Matrix: Water
Analysis Batch: 159171

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
Dichlorodifluoromethane	5.00	6.18		ug/L		124	30 - 180	2	20
Chloromethane	5.00	4.91		ug/L		98	50 - 140	4	20
Vinyl chloride	5.00	5.34		ug/L		107	65 - 140	2	20
Bromomethane	5.00	5.11		ug/L		102	70 - 135	13	20
Chloroethane	5.00	4.64		ug/L		93	75 - 140	7	20
Trichlorofluoromethane	5.00	3.70		ug/L		74	30 - 180	1	20
1,1-Dichloroethene	5.00	3.87		ug/L		77	70 - 150	7	20
Methylene Chloride	5.00	5.56		ug/L		111	60 - 145	4	20
Methyl tert-butyl ether	5.00	5.29		ug/L		106	75 - 120	6	20
trans-1,2-Dichloroethene	5.00	5.24		ug/L		105	80 - 140	5	20
1,1-Dichloroethane	5.00	5.37		ug/L		107	75 - 135	4	20
2,2-Dichloropropane	5.00	5.45		ug/L		109	60 - 150	7	20
cis-1,2-Dichloroethene	5.00	5.33		ug/L		107	80 - 130	4	20
Chlorobromomethane	5.00	5.27		ug/L		105	80 - 125	6	20
Chloroform	5.00	5.41		ug/L		108	80 - 130	3	20
1,1,1-Trichloroethane	5.00	5.10		ug/L		102	80 - 140	4	20
Carbon tetrachloride	5.00	5.69		ug/L		114	75 - 140	5	20
1,1-Dichloropropene	5.00	5.69		ug/L		114	80 - 130	4	20
Benzene	5.00	5.26		ug/L		105	80 - 120	3	20
1,2-Dichloroethane	5.00	5.22		ug/L		104	80 - 140	5	20
Trichloroethene	5.00	5.46		ug/L		109	80 - 130	3	20
1,2-Dichloropropane	5.00	5.42		ug/L		108	80 - 120	5	20
Dibromomethane	5.00	5.29		ug/L		106	80 - 130	5	20
Dichlorobromomethane	5.00	5.26		ug/L		105	80 - 125	3	20
cis-1,3-Dichloropropene	5.00	5.31		ug/L		106	70 - 120	7	20
Toluene	5.00	5.50		ug/L		110	80 - 120	5	20
trans-1,3-Dichloropropene	5.00	5.37		ug/L		107	60 - 140	8	20
1,1,2-Trichloroethane	5.00	5.40		ug/L		108	80 - 130	5	20
Tetrachloroethene	5.00	5.43		ug/L		109	40 - 180	6	20
1,3-Dichloropropane	5.00	5.42		ug/L		108	80 - 130	7	20
Chlorodibromomethane	5.00	5.09		ug/L		102	70 - 120	7	20
Ethylene Dibromide	5.00	5.50		ug/L		110	70 - 130	7	20
Chlorobenzene	5.00	5.48		ug/L		110	80 - 120	6	20
1,1,1,2-Tetrachloroethane	5.00	5.42		ug/L		108	75 - 125	5	20
Ethylbenzene	5.00	5.72		ug/L		114	80 - 125	6	20
m-Xylene & p-Xylene	5.00	5.69		ug/L		114	80 - 130	7	20
o-Xylene	5.00	5.56		ug/L		111	80 - 120	6	20
Styrene	5.00	5.81		ug/L		116	75 - 130	6	20
Bromoform	5.00	4.76		ug/L		95	65 - 130	7	20
Isopropylbenzene	5.00	5.90		ug/L		118	75 - 120	8	20
Bromobenzene	5.00	5.30		ug/L		106	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	5.30		ug/L		106	75 - 125	8	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	3	20
N-Propylbenzene	5.00	5.78		ug/L		116	80 - 120	6	20
2-Chlorotoluene	5.00	5.48		ug/L		110	75 - 130	7	20
4-Chlorotoluene	5.00	5.42		ug/L		108	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.71		ug/L		114	80 - 125	6	20
tert-Butylbenzene	5.00	5.99		ug/L		120	80 - 130	8	20

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

Lab Sample ID: LCSD 580-159171/10
Matrix: Water
Analysis Batch: 159171

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
1,2,4-Trimethylbenzene			5.00	5.71		ug/L		114	80 - 125	7	20
sec-Butylbenzene			5.00	5.83		ug/L		117	80 - 125	7	20
4-Isopropyltoluene			5.00	5.86		ug/L		117	80 - 120	7	20
1,3-Dichlorobenzene			5.00	5.48		ug/L		110	80 - 120	6	20
1,4-Dichlorobenzene			5.00	5.42		ug/L		108	80 - 120	6	20
n-Butylbenzene			5.00	5.87		ug/L		117	75 - 125	8	20
1,2-Dichlorobenzene			5.00	5.46		ug/L		109	80 - 130	7	20
1,2-Dibromo-3-Chloropropane			5.00	5.10		ug/L		102	55 - 120	7	20
1,2,4-Trichlorobenzene			5.00	5.73		ug/L		115	60 - 125	10	20
Hexachlorobutadiene			5.00	6.29		ug/L		126	75 - 135	8	20
Naphthalene			5.00	5.62		ug/L		112	45 - 130	10	20
1,2,3-Trichlorobenzene			5.00	5.81		ug/L		116	60 - 125	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*110*		*80 - 127*
Toluene-d8 (Surr)	*96*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: MB 580-159276/6
Matrix: Water
Analysis Batch: 159276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 09:29	1
Chloromethane	ND		0.10		ug/L			05/19/14 09:29	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 09:29	1
Bromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Chloroethane	ND		0.25		ug/L			05/19/14 09:29	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 09:29	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 09:29	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Chloroform	ND		0.10		ug/L			05/19/14 09:29	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
Benzene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Trichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
Dibromomethane	ND		0.10		ug/L			05/19/14 09:29	1

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

Lab Sample ID: MB 580-159276/6
Matrix: Water
Analysis Batch: 159276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 09:29	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
Toluene	ND		0.10		ug/L			05/19/14 09:29	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Tetrachloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 09:29	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 09:29	1
o-Xylene	ND		0.10		ug/L			05/19/14 09:29	1
Styrene	ND		0.10		ug/L			05/19/14 09:29	1
Bromoform	ND		0.10		ug/L			05/19/14 09:29	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
Bromobenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 09:29	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 09:29	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 09:29	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 09:29	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 09:29	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 09:29	1
Naphthalene	ND		0.40		ug/L			05/19/14 09:29	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 09:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*96*		*80 - 127*		*05/19/14 09:29*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 09:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 128*		*05/19/14 09:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/19/14 09:29*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 09:29*	*1*

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

Lab Sample ID: LCS 580-159276/7
Matrix: Water
Analysis Batch: 159276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.67		ug/L		93	30 - 180
Chloromethane	5.00	5.23		ug/L		105	50 - 140
Vinyl chloride	5.00	5.38		ug/L		107	65 - 140
Bromomethane	5.00	4.66		ug/L		93	70 - 135
Chloroethane	5.00	4.63		ug/L		93	75 - 140
Trichlorofluoromethane	5.00	5.13		ug/L		103	30 - 180
1,1-Dichloroethene	5.00	4.82		ug/L		96	70 - 150
Methylene Chloride	5.00	4.96		ug/L		99	60 - 145
Methyl tert-butyl ether	5.00	4.82		ug/L		96	75 - 120
trans-1,2-Dichloroethene	5.00	4.84		ug/L		97	80 - 140
1,1-Dichloroethane	5.00	4.90		ug/L		98	75 - 135
2,2-Dichloropropane	5.00	5.60		ug/L		112	60 - 150
cis-1,2-Dichloroethene	5.00	5.00		ug/L		100	80 - 130
Chlorobromomethane	5.00	5.64		ug/L		113	80 - 125
Chloroform	5.00	4.85		ug/L		97	80 - 130
1,1,1-Trichloroethane	5.00	5.17		ug/L		103	80 - 140
Carbon tetrachloride	5.00	5.09		ug/L		102	75 - 140
1,1-Dichloropropene	5.00	4.89		ug/L		98	80 - 130
Benzene	5.00	5.04		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	4.40		ug/L		88	80 - 140
Trichloroethene	5.00	5.48		ug/L		110	80 - 130
1,2-Dichloropropane	5.00	4.99		ug/L		100	80 - 120
Dibromomethane	5.00	5.50		ug/L		110	80 - 130
Dichlorobromomethane	5.00	5.27		ug/L		105	80 - 125
cis-1,3-Dichloropropene	5.00	4.31		ug/L		86	70 - 120
Toluene	5.00	4.90		ug/L		98	80 - 120
trans-1,3-Dichloropropene	5.00	4.60		ug/L		92	60 - 140
1,1,2-Trichloroethane	5.00	4.93		ug/L		99	80 - 130
Tetrachloroethene	5.00	5.26		ug/L		105	40 - 180
1,3-Dichloropropane	5.00	5.04		ug/L		101	80 - 130
Chlorodibromomethane	5.00	4.56		ug/L		91	70 - 120
Ethylene Dibromide	5.00	5.29		ug/L		106	70 - 130
Chlorobenzene	5.00	4.96		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.34		ug/L		87	75 - 125
Ethylbenzene	5.00	4.82		ug/L		96	80 - 125
m-Xylene & p-Xylene	5.00	5.11		ug/L		102	80 - 130
o-Xylene	5.00	5.06		ug/L		101	80 - 120
Styrene	5.00	4.76		ug/L		95	75 - 130
Bromoform	5.00	4.98		ug/L		100	65 - 130
Isopropylbenzene	5.00	4.77		ug/L		95	75 - 120
Bromobenzene	5.00	4.80		ug/L		96	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	75 - 125
1,2,3-Trichloropropane	5.00	4.95		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.26		ug/L		105	80 - 120
2-Chlorotoluene	5.00	5.07		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.01		ug/L		100	75 - 130
1,3,5-Trimethylbenzene	5.00	4.44		ug/L		89	80 - 125
tert-Butylbenzene	5.00	4.65		ug/L		93	80 - 130

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

Lab Sample ID: LCS 580-159276/7
Matrix: Water
Analysis Batch: 159276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	5.00	4.49		ug/L		90	80 - 125
sec-Butylbenzene	5.00	4.58		ug/L		92	80 - 125
4-Isopropyltoluene	5.00	4.70		ug/L		94	80 - 120
1,3-Dichlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.61		ug/L		92	80 - 120
n-Butylbenzene	5.00	4.84		ug/L		97	75 - 125
1,2-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	5.66		ug/L		113	55 - 120
1,2,4-Trichlorobenzene	5.00	4.50		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	4.23		ug/L		85	75 - 135
Naphthalene	5.00	4.44		ug/L		89	45 - 130
1,2,3-Trichlorobenzene	5.00	5.40		ug/L		108	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: LCSD 580-159276/8
Matrix: Water
Analysis Batch: 159276

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
Dichlorodifluoromethane	5.00	4.99		ug/L		100	30 - 180	7	20
Chloromethane	5.00	5.41		ug/L		108	50 - 140	3	20
Vinyl chloride	5.00	5.57		ug/L		111	65 - 140	4	20
Bromomethane	5.00	4.82		ug/L		96	70 - 135	3	20
Chloroethane	5.00	4.72		ug/L		94	75 - 140	2	20
Trichlorofluoromethane	5.00	5.59		ug/L		112	30 - 180	9	20
1,1-Dichloroethene	5.00	5.36		ug/L		107	70 - 150	11	20
Methylene Chloride	5.00	5.40		ug/L		108	60 - 145	8	20
Methyl tert-butyl ether	5.00	5.22		ug/L		104	75 - 120	8	20
trans-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 140	5	20
1,1-Dichloroethane	5.00	5.23		ug/L		105	75 - 135	6	20
2,2-Dichloropropane	5.00	6.03		ug/L		121	60 - 150	7	20
cis-1,2-Dichloroethene	5.00	5.32		ug/L		106	80 - 130	6	20
Chlorobromomethane	5.00	5.74		ug/L		115	80 - 125	2	20
Chloroform	5.00	5.20		ug/L		104	80 - 130	7	20
1,1,1-Trichloroethane	5.00	5.38		ug/L		108	80 - 140	4	20
Carbon tetrachloride	5.00	5.44		ug/L		109	75 - 140	6	20
1,1-Dichloropropene	5.00	5.30		ug/L		106	80 - 130	8	20
Benzene	5.00	5.53		ug/L		111	80 - 120	9	20
1,2-Dichloroethane	5.00	4.75		ug/L		95	80 - 140	8	20
Trichloroethene	5.00	5.79		ug/L		116	80 - 130	6	20
1,2-Dichloropropane	5.00	5.22		ug/L		104	80 - 120	4	20
Dibromomethane	5.00	6.42		ug/L		128	80 - 130	15	20

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

Lab Sample ID: LCSD 580-159276/8
Matrix: Water
Analysis Batch: 159276

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
Dichlorobromomethane	5.00	5.64		ug/L		113	80 - 125	7	20
cis-1,3-Dichloropropene	5.00	4.63		ug/L		93	70 - 120	7	20
Toluene	5.00	5.15		ug/L		103	80 - 120	5	20
trans-1,3-Dichloropropene	5.00	4.86		ug/L		97	60 - 140	5	20
1,1,2-Trichloroethane	5.00	5.42		ug/L		108	80 - 130	9	20
Tetrachloroethene	5.00	5.16		ug/L		103	40 - 180	2	20
1,3-Dichloropropane	5.00	5.26		ug/L		105	80 - 130	4	20
Chlorodibromomethane	5.00	4.84		ug/L		97	70 - 120	6	20
Ethylene Dibromide	5.00	5.69		ug/L		114	70 - 130	7	20
Chlorobenzene	5.00	5.18		ug/L		104	80 - 120	4	20
1,1,1,2-Tetrachloroethane	5.00	4.73		ug/L		95	75 - 125	9	20
Ethylbenzene	5.00	5.14		ug/L		103	80 - 125	6	20
m-Xylene & p-Xylene	5.00	5.59		ug/L		112	80 - 130	9	20
o-Xylene	5.00	5.36		ug/L		107	80 - 120	6	20
Styrene	5.00	5.01		ug/L		100	75 - 130	5	20
Bromoform	5.00	5.15		ug/L		103	65 - 130	3	20
Isopropylbenzene	5.00	5.02		ug/L		100	75 - 120	5	20
Bromobenzene	5.00	5.38		ug/L		108	80 - 130	11	20
1,1,2,2-Tetrachloroethane	5.00	5.08		ug/L		102	75 - 125	9	20
1,2,3-Trichloropropane	5.00	5.27		ug/L		105	75 - 120	6	20
N-Propylbenzene	5.00	5.54		ug/L		111	80 - 120	5	20
2-Chlorotoluene	5.00	5.26		ug/L		105	75 - 130	4	20
4-Chlorotoluene	5.00	5.27		ug/L		105	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	4.65		ug/L		93	80 - 125	5	20
tert-Butylbenzene	5.00	5.05		ug/L		101	80 - 130	8	20
1,2,4-Trimethylbenzene	5.00	4.63		ug/L		93	80 - 125	3	20
sec-Butylbenzene	5.00	4.89		ug/L		98	80 - 125	7	20
4-Isopropyltoluene	5.00	4.80		ug/L		96	80 - 120	2	20
1,3-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 120	4	20
1,4-Dichlorobenzene	5.00	4.98		ug/L		100	80 - 120	8	20
n-Butylbenzene	5.00	5.08		ug/L		102	75 - 125	5	20
1,2-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 130	7	20
1,2-Dibromo-3-Chloropropane	5.00	5.90		ug/L		118	55 - 120	4	20
1,2,4-Trichlorobenzene	5.00	4.96		ug/L		99	60 - 125	10	20
Hexachlorobutadiene	5.00	4.77		ug/L		95	75 - 135	12	20
Naphthalene	5.00	4.86		ug/L		97	45 - 130	9	20
1,2,3-Trichlorobenzene	5.00	5.87		ug/L		117	60 - 125	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*106*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-131382/23
Matrix: Water
Analysis Batch: 131382

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/20/14 20:29	1
Ethane	ND		0.50		ug/L			05/20/14 20:29	1
Ethene	ND		0.50		ug/L			05/20/14 20:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*91*		*66 - 132*		*05/20/14 20:29*	*1*

Lab Sample ID: LCS 240-131382/24
Matrix: Water
Analysis Batch: 131382

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	116	116		ug/L		100	76 - 120
Ethane	218	230		ug/L		106	80 - 120
Ethene	203	205		ug/L		101	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*90*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-159094/1
Matrix: Water
Analysis Batch: 159094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			05/14/14 14:57	1

Lab Sample ID: LCS 580-159094/2
Matrix: Water
Analysis Batch: 159094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.73		mg/L		96	90 - 110

Lab Sample ID: LCSD 580-159094/3
Matrix: Water
Analysis Batch: 159094

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
Nitrate as N	1.80	1.77		mg/L		98	90 - 110	2	15

Lab Sample ID: 580-43574-5 MS
Matrix: Water
Analysis Batch: 159094

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.5		1.80	4.44		mg/L		109	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-43574-5 DU
Matrix: Water
Analysis Batch: 159094

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	2.5		2.44		mg/L		1	10

Lab Sample ID: MB 580-159170/3
Matrix: Water
Analysis Batch: 159170

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			05/15/14 12:39	1
Sulfate	ND		1.2		mg/L			05/15/14 12:39	1

Lab Sample ID: LCS 580-159170/4
Matrix: Water
Analysis Batch: 159170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	8.86		mg/L		98	90 - 110
Sulfate	12.0	12.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-159170/5
Matrix: Water
Analysis Batch: 159170

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
Chloride	9.00	8.74		mg/L		97	90 - 110	1	15
Sulfate	12.0	12.3		mg/L		102	90 - 110	0	15

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-159823/1
Matrix: Water
Analysis Batch: 159823

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			05/27/14 20:52	1

Lab Sample ID: LCS 580-159823/2
Matrix: Water
Analysis Batch: 159823

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	15.0	13.5		mg/L		90	85 - 115

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-5

Lab Sample ID: 580-43574-1

Date Collected: 05/13/14 11:03

Matrix: Water

Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 13:10		TAL SEA
Total/NA	Analysis	8260B	DL2	1000	159276	05/19/14 17:38		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 13:57		TAL SEA

Client Sample ID: MW-6

Lab Sample ID: 580-43574-2

Date Collected: 05/13/14 12:44

Matrix: Water

Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 13:35		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 14:22		TAL SEA

Client Sample ID: MW-7

Lab Sample ID: 580-43574-3

Date Collected: 05/13/14 11:50

Matrix: Water

Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	159276	05/19/14 18:50		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 14:47		TAL SEA

Client Sample ID: MW-17

Lab Sample ID: 580-43574-4

Date Collected: 05/13/14 10:10

Matrix: Water

Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159276	05/19/14 11:32		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 15:12		TAL SEA

Client Sample ID: MW-18

Lab Sample ID: 580-43574-5

Date Collected: 05/13/14 08:24

Matrix: Water

Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159276	05/19/14 11:56		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 15:37		TAL SEA
Total/NA	Analysis	RSK-175		1	131382	05/20/14 22:44	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159094	05/14/14 15:44	RSB	TAL SEA
Total/NA	Analysis	300.0		1	159170	05/15/14 17:24	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Client Sample ID: MW-19

Lab Sample ID: 580-43574-6

Date Collected: 05/13/14 09:12
Matrix: Water
Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159276	05/19/14 12:21		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 16:02		TAL SEA

Client Sample ID: TB #353

Lab Sample ID: 580-43574-7

Date Collected: 05/13/14 00:00
Matrix: Water
Date Received: 05/14/14 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	159171	05/16/14 13:32		TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14 *
Georgia	State Program	4	N/A	06-30-14 *
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-14 *
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14 *
New Jersey	NELAP	2	OH001	06-30-14 *
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-43574-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-43574-1	MW-5	Water	05/13/14 11:03	05/14/14 10:05
580-43574-2	MW-6	Water	05/13/14 12:44	05/14/14 10:05
580-43574-3	MW-7	Water	05/13/14 11:50	05/14/14 10:05
580-43574-4	MW-17	Water	05/13/14 10:10	05/14/14 10:05
580-43574-5	MW-18	Water	05/13/14 08:24	05/14/14 10:05
580-43574-6	MW-19	Water	05/13/14 09:12	05/14/14 10:05
580-43574-7	TB #353	Water	05/13/14 00:00	05/14/14 10:05

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

43574

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

5/29/2014

Client Contact	Project Manager: Jill Kiernan	Site Contact: Jason Miles	Date: 5/13/14	COC No:
Your Company Name here: Hart Crowser	Tel/Fax: 503-620-7284 / 620-6918	Lab Contact: Kris Allen	Carrier: Fedex	1 of 1 COCs
Address: 3910 SW Gemini Drive	**Analysis Turnaround Time**			**For Lab Use Only:**
City/State/Zip: Beaverton OR / 97008	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: (503)620-7284	TAT if different from Below			Lab Sampling:
(xxx) xxx-xxxx FAX: 503-620-6918	☒ 2 weeks			Job / SDG No.:
Project Name: Frank Wear	☐ 1 week			
Site: Yakima WA	☐ 2 days			Sampler:
PO# 17800-23/Task 9	☐ 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)	VOCs 8260B	NWTPH-Gx/DX (300.0)	TOC SM5310 B	RSK-175 Ethane/Ethene/Methane	Sample Specific Notes:
-1 MW-5	5-13-14	1103	G	W	3	N		X				
-2 MW-6		1244	G	W	3			X				
-3 MW-7		1150	G	W	3			X				
-4 MW-17		1010	G	W	3			X				
-5 MW-18		0824	G	W	8			XX	XX	XX		
-6 MW-19	↓	0912	G	W	3			X				
-7 TB# 353	3-27-14	-	G	W	1	↓		X				

580-43574 Chain of Custody

Preservation Used: 1=Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 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:

Fed Ex
Lg Blu/whi wet bubble
IR= 4.9 / 4.3 w/o

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]	Hart Crowser	5-13-14 1400	Tom [signature]	TA-Sea	5/14/14 1005
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-43574-1

Login Number: 43574

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	False	no
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-43593-1
Client Project/Site: Yakima/Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
5/30/2014 3:43:50 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Job ID: 580-43593-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-43593-1

Comments
No additional comments.

Receipt
The samples were received on 5/15/2014 1:58 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 159275 contained Tetrachloroethene above the reporting limit (RL). Tetrachloroethene was not reported from this batch except for the trip blank. The samples from this batch were re-analyzed for Tetrachloroethene. Most of them needed dilution.

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for analysis batch 159432 recovered outside control limits for the following analytes: Chloroethane and Bromomethane. The individual recoveries of both the LCS and LCSD met the acceptance criteria.

Method(s) 8260B: The following sample was re-analyzed due to possible carryover of Trichloroethene, Tetrachloroethene and cis-1,2-Dichloroethene: MW-3 (580-43593-3), MW-23 (580-43593-17), MW-25 (580-43593-20), . Re-analysis confirmed slight carryover in the original run, therefore the re-analysis was reported.

Method(s) 8260B: The following sample was re-analyzed due to possible carryover of Trichloroethene and cis-1,2-Dichloroethene: MW-16 (580-43593-13), MW-21 (580-43593-15). Re-analysis confirmed slight carryover in the original run, therefore the re-analysis was reported.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside the upper control limit: MW-1 (580-43593-1), MW-2 (580-43593-2), MW-9 (580-43593-6), SPW-12 (580-43593-8), SPW-14 (580-43593-11), SPW-15 (580-43593-12). This sample did contain analyte more than RL ; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The following sample was initially analyzed at a dilution: EXT-2 (580-43593-21). The dilution was only needed for several compounds. It was then re-analyzed not at a dilution.

Method(s) 8260B: The equipment blanks (580-43593-22 and 580-43593-23) were re-analyzed to confirm detections of Tetrachloroethene in the initial run.

Method(s) 8260B: The Trip Blank contained Tetrachloroethene above the reporting limit (RL) due to instrument contamination from very hot samples in same job (previous run). Only one trip blank was provided so the results were reported. Also, surrogate recovery was outside of the lower control limit for the trip blank.

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.

General Chemistry
Method(s) 300.0: The following sample required reanalysis at a dilution: MW-23 (580-43593-17). Re-analysis was performed outside of the analytical holding time due to less than 50% of the hold time remaining upon receipt.

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

Definitions/Glossary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
*	RPD of the LCS and LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
F1	MS and/or MSD Recovery exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-1
Date Collected: 05/13/14 14:39
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 16:26	1
Chloromethane	ND		0.10		ug/L			05/16/14 16:26	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 16:26	1
Bromomethane	ND		0.10		ug/L			05/16/14 16:26	1
Chloroethane	ND		0.25		ug/L			05/16/14 16:26	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 16:26	1
1,1-Dichloroethene	**0.35**		0.10		ug/L			05/16/14 16:26	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 16:26	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 16:26	1
trans-1,2-Dichloroethene	**11**		0.10		ug/L			05/16/14 16:26	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 16:26	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:26	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 16:26	1
Chloroform	**2.5**		0.10		ug/L			05/16/14 16:26	1
1,1,1-Trichloroethane	**7.2**		0.10		ug/L			05/16/14 16:26	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 16:26	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 16:26	1
Benzene	ND		0.10		ug/L			05/16/14 16:26	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 16:26	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:26	1
Dibromomethane	ND		0.10		ug/L			05/16/14 16:26	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 16:26	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:26	1
Toluene	**0.28**		0.10		ug/L			05/16/14 16:26	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:26	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 16:26	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 16:26	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 16:26	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 16:26	1
Chlorobenzene	**0.39**		0.10		ug/L			05/16/14 16:26	1
1,1,1,2-Tetrachloroethane	**2.4**		0.10		ug/L			05/16/14 16:26	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 16:26	1
o-Xylene	ND		0.10		ug/L			05/16/14 16:26	1
Styrene	ND		0.10		ug/L			05/16/14 16:26	1
Bromoform	ND		0.10		ug/L			05/16/14 16:26	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
Bromobenzene	ND		0.10		ug/L			05/16/14 16:26	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 16:26	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 16:26	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 16:26	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 16:26	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 16:26	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:26	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-1
Date Collected: 05/13/14 14:39
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:26	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 16:26	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 16:26	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 16:26	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 16:26	1
Naphthalene	ND		0.40		ug/L			05/16/14 16:26	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*192*	*X*	*80 - 127*		*05/16/14 16:26*	*1*
Toluene-d8 (Surr)	*112*		*75 - 125*		*05/16/14 16:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/16/14 16:26*	*1*
4-Bromofluorobenzene (Surr)	*78*		*75 - 120*		*05/16/14 16:26*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/16/14 16:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1000**		10		ug/L			05/19/14 13:59	100
Trichloroethene	**370**		10		ug/L			05/19/14 13:59	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 13:59	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*05/19/14 13:59*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 13:59*	*100*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*		*05/19/14 13:59*	*100*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*05/19/14 13:59*	*100*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*05/19/14 13:59*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**14000**		100		ug/L			05/19/14 18:26	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*05/19/14 18:26*	*1000*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 18:26*	*1000*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*05/19/14 18:26*	*1000*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 18:26*	*1000*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*05/19/14 18:26*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-2
Date Collected: 05/13/14 16:09
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 16:51	1
Chloromethane	ND		0.10		ug/L			05/16/14 16:51	1
Vinyl chloride	**0.12**		0.020		ug/L			05/16/14 16:51	1
Bromomethane	ND		0.10		ug/L			05/16/14 16:51	1
Chloroethane	ND		0.25		ug/L			05/16/14 16:51	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 16:51	1
1,1-Dichloroethene	**1.0**		0.10		ug/L			05/16/14 16:51	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 16:51	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 16:51	1
trans-1,2-Dichloroethene	**19**		0.10		ug/L			05/16/14 16:51	1
1,1-Dichloroethane	**0.25**		0.10		ug/L			05/16/14 16:51	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:51	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 16:51	1
Chloroform	**2.2**		0.10		ug/L			05/16/14 16:51	1
1,1,1-Trichloroethane	**5.8**		0.10		ug/L			05/16/14 16:51	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 16:51	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 16:51	1
Benzene	ND		0.10		ug/L			05/16/14 16:51	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 16:51	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 16:51	1
Dibromomethane	ND		0.10		ug/L			05/16/14 16:51	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 16:51	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:51	1
Toluene	**0.18**		0.10		ug/L			05/16/14 16:51	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 16:51	1
1,1,2-Trichloroethane	**1.3**		0.10		ug/L			05/16/14 16:51	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 16:51	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 16:51	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 16:51	1
Chlorobenzene	**0.27**		0.10		ug/L			05/16/14 16:51	1
1,1,1,2-Tetrachloroethane	**0.95**		0.10		ug/L			05/16/14 16:51	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 16:51	1
o-Xylene	ND		0.10		ug/L			05/16/14 16:51	1
Styrene	ND		0.10		ug/L			05/16/14 16:51	1
Bromoform	ND		0.10		ug/L			05/16/14 16:51	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
Bromobenzene	ND		0.10		ug/L			05/16/14 16:51	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 16:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 16:51	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 16:51	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 16:51	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 16:51	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:51	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-2
Date Collected: 05/13/14 16:09
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 16:51	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 16:51	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 16:51	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 16:51	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 16:51	1
Naphthalene	ND		0.40		ug/L			05/16/14 16:51	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*137*	*X*	*80 - 127*		*05/16/14 16:51*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*05/16/14 16:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/16/14 16:51*	*1*
4-Bromofluorobenzene (Surr)	*88*		*75 - 120*		*05/16/14 16:51*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/16/14 16:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**2000**		10		ug/L			05/19/14 14:24	100
Trichloroethene	**1100**		10		ug/L			05/19/14 14:24	100
Tetrachloroethene	**7200**		10		ug/L			05/19/14 14:24	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 14:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*80 - 127*		*05/19/14 14:24*	*100*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 14:24*	*100*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 128*		*05/19/14 14:24*	*100*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/19/14 14:24*	*100*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*05/19/14 14:24*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-3
Date Collected: 05/14/14 07:37
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 17:15	1
Chloromethane	ND		0.10		ug/L			05/16/14 17:15	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 17:15	1
Bromomethane	ND		0.10		ug/L			05/16/14 17:15	1
Chloroethane	ND		0.25		ug/L			05/16/14 17:15	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 17:15	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 17:15	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 17:15	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 17:15	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 17:15	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 17:15	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 17:15	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 17:15	1
Chloroform	**1.8**		0.10		ug/L			05/16/14 17:15	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 17:15	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 17:15	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 17:15	1
Benzene	ND		0.10		ug/L			05/16/14 17:15	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 17:15	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 17:15	1
Dibromomethane	ND		0.10		ug/L			05/16/14 17:15	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 17:15	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 17:15	1
Toluene	ND		0.10		ug/L			05/16/14 17:15	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 17:15	1
1,1,2-Trichloroethane	**0.19**		0.10		ug/L			05/16/14 17:15	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 17:15	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 17:15	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 17:15	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 17:15	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 17:15	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 17:15	1
o-Xylene	ND		0.10		ug/L			05/16/14 17:15	1
Styrene	ND		0.10		ug/L			05/16/14 17:15	1
Bromoform	ND		0.10		ug/L			05/16/14 17:15	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
Bromobenzene	ND		0.10		ug/L			05/16/14 17:15	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 17:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 17:15	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 17:15	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 17:15	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 17:15	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:15	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-3
Date Collected: 05/14/14 07:37
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:15	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 17:15	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:15	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 17:15	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 17:15	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 17:15	1
Naphthalene	ND		0.40		ug/L			05/16/14 17:15	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*109*		*80 - 127*		*05/16/14 17:15*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/16/14 17:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/16/14 17:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*05/16/14 17:15*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 17:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1.8**		0.10		ug/L			05/19/14 12:45	1
Trichloroethene	**1.6**		0.10		ug/L			05/19/14 12:45	1
Tetrachloroethene	**4.2**		0.10		ug/L			05/19/14 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*05/19/14 12:45*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 12:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 128*		*05/19/14 12:45*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/19/14 12:45*	*1*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*05/19/14 12:45*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/21/14 22:44	1
Ethane	ND		0.50		ug/L			05/21/14 22:44	1
Ethene	ND		0.50		ug/L			05/21/14 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*92*		*66 - 132*		*05/21/14 22:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29**		0.90		mg/L			05/15/14 17:38	1
Nitrate as N	**5.3**		0.90		mg/L			05/15/14 17:38	1
Sulfate	**9.6**		1.2		mg/L			05/15/14 17:38	1
Total Organic Carbon	ND		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-4
Date Collected: 05/14/14 10:15
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 17:40	1
Chloromethane	ND		0.10		ug/L			05/16/14 17:40	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 17:40	1
Bromomethane	ND		0.10		ug/L			05/16/14 17:40	1
Chloroethane	ND		0.25		ug/L			05/16/14 17:40	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 17:40	1
1,1-Dichloroethene	**0.19**		0.10		ug/L			05/16/14 17:40	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 17:40	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 17:40	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 17:40	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 17:40	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 17:40	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 17:40	1
Chloroform	**2.4**		0.10		ug/L			05/16/14 17:40	1
1,1,1-Trichloroethane	**0.24**		0.10		ug/L			05/16/14 17:40	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 17:40	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 17:40	1
Benzene	ND		0.10		ug/L			05/16/14 17:40	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 17:40	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 17:40	1
Dibromomethane	ND		0.10		ug/L			05/16/14 17:40	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 17:40	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 17:40	1
Toluene	ND		0.10		ug/L			05/16/14 17:40	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 17:40	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 17:40	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 17:40	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 17:40	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 17:40	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 17:40	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 17:40	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 17:40	1
o-Xylene	ND		0.10		ug/L			05/16/14 17:40	1
Styrene	ND		0.10		ug/L			05/16/14 17:40	1
Bromoform	ND		0.10		ug/L			05/16/14 17:40	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
Bromobenzene	ND		0.10		ug/L			05/16/14 17:40	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 17:40	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 17:40	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 17:40	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 17:40	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 17:40	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:40	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-4
Date Collected: 05/14/14 10:15
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:40	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 17:40	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 17:40	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 17:40	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 17:40	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 17:40	1
Naphthalene	ND		0.40		ug/L			05/16/14 17:40	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*116*		*80 - 127*		*05/16/14 17:40*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*05/16/14 17:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/16/14 17:40*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*05/16/14 17:40*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 17:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		10		ug/L			05/19/14 14:48	100
Trichloroethene	ND		10		ug/L			05/19/14 14:48	100
Tetrachloroethene	**940**		10		ug/L			05/19/14 14:48	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*80 - 127*		*05/19/14 14:48*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 14:48*	*100*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 128*		*05/19/14 14:48*	*100*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/19/14 14:48*	*100*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 14:48*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-8
Date Collected: 05/14/14 11:55
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 18:04	1
Chloromethane	ND		0.10		ug/L			05/16/14 18:04	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 18:04	1
Bromomethane	ND		0.10		ug/L			05/16/14 18:04	1
Chloroethane	ND		0.25		ug/L			05/16/14 18:04	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 18:04	1
1,1-Dichloroethene	**0.15**		0.10		ug/L			05/16/14 18:04	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 18:04	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 18:04	1
trans-1,2-Dichloroethene	**1.2**		0.10		ug/L			05/16/14 18:04	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 18:04	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:04	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 18:04	1
Chloroform	**3.2**		0.10		ug/L			05/16/14 18:04	1
1,1,1-Trichloroethane	**0.91**		0.10		ug/L			05/16/14 18:04	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 18:04	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 18:04	1
Benzene	ND		0.10		ug/L			05/16/14 18:04	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 18:04	1
Trichloroethene	**64**		0.10		ug/L			05/16/14 18:04	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:04	1
Dibromomethane	ND		0.10		ug/L			05/16/14 18:04	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 18:04	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:04	1
Toluene	ND		0.10		ug/L			05/16/14 18:04	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:04	1
1,1,2-Trichloroethane	**0.12**		0.10		ug/L			05/16/14 18:04	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 18:04	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 18:04	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 18:04	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 18:04	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 18:04	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 18:04	1
o-Xylene	ND		0.10		ug/L			05/16/14 18:04	1
Styrene	ND		0.10		ug/L			05/16/14 18:04	1
Bromoform	ND		0.10		ug/L			05/16/14 18:04	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
Bromobenzene	ND		0.10		ug/L			05/16/14 18:04	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 18:04	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 18:04	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 18:04	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 18:04	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 18:04	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-8
Date Collected: 05/14/14 11:55
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:04	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:04	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 18:04	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:04	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 18:04	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 18:04	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 18:04	1
Naphthalene	ND		0.40		ug/L			05/16/14 18:04	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*112*		*80 - 127*		*05/16/14 18:04*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/16/14 18:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/16/14 18:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*05/16/14 18:04*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 18:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**150**		10		ug/L			05/19/14 15:12	100
Tetrachloroethene	**1800**		10		ug/L			05/19/14 15:12	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/19/14 15:12*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 15:12*	*100*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 128*		*05/19/14 15:12*	*100*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 15:12*	*100*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*05/19/14 15:12*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-9
Date Collected: 05/14/14 18:27
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 18:29	1
Chloromethane	ND		0.10		ug/L			05/16/14 18:29	1
Vinyl chloride	**0.075**		0.020		ug/L			05/16/14 18:29	1
Bromomethane	ND		0.10		ug/L			05/16/14 18:29	1
Chloroethane	ND		0.25		ug/L			05/16/14 18:29	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 18:29	1
1,1-Dichloroethene	**0.32**		0.10		ug/L			05/16/14 18:29	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 18:29	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 18:29	1
trans-1,2-Dichloroethene	**4.6**		0.10		ug/L			05/16/14 18:29	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 18:29	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:29	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 18:29	1
Chloroform	**3.4**		0.10		ug/L			05/16/14 18:29	1
1,1,1-Trichloroethane	**3.7**		0.10		ug/L			05/16/14 18:29	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 18:29	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 18:29	1
Benzene	ND		0.10		ug/L			05/16/14 18:29	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 18:29	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:29	1
Dibromomethane	ND		0.10		ug/L			05/16/14 18:29	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 18:29	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:29	1
Toluene	**0.16**		0.10		ug/L			05/16/14 18:29	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:29	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 18:29	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 18:29	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 18:29	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 18:29	1
Chlorobenzene	**0.23**		0.10		ug/L			05/16/14 18:29	1
1,1,1,2-Tetrachloroethane	**1.5**		0.10		ug/L			05/16/14 18:29	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 18:29	1
o-Xylene	ND		0.10		ug/L			05/16/14 18:29	1
Styrene	ND		0.10		ug/L			05/16/14 18:29	1
Bromoform	ND		0.10		ug/L			05/16/14 18:29	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
Bromobenzene	ND		0.10		ug/L			05/16/14 18:29	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 18:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 18:29	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 18:29	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 18:29	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 18:29	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:29	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-9
Date Collected: 05/14/14 18:27
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:29	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 18:29	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 18:29	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 18:29	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 18:29	1
Naphthalene	ND		0.40		ug/L			05/16/14 18:29	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*147*	*X*	*80 - 127*		*05/16/14 18:29*	*1*
Toluene-d8 (Surr)	*104*		*75 - 125*		*05/16/14 18:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*05/16/14 18:29*	*1*
4-Bromofluorobenzene (Surr)	*89*		*75 - 120*		*05/16/14 18:29*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/16/14 18:29*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**630**		10		ug/L			05/19/14 15:36	100
Trichloroethene	**220**		10		ug/L			05/19/14 15:36	100
Tetrachloroethene	**7500**		10		ug/L			05/19/14 15:36	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 15:36	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*05/19/14 15:36*	*100*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 15:36*	*100*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 128*		*05/19/14 15:36*	*100*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 15:36*	*100*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 15:36*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1.0**		0.50		ug/L			05/21/14 22:56	1
Ethane	ND		0.50		ug/L			05/21/14 22:56	1
Ethene	ND		0.50		ug/L			05/21/14 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*90*		*66 - 132*		*05/21/14 22:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		0.90		mg/L			05/15/14 18:22	1
Nitrate as N	**2.0**		0.90		mg/L			05/15/14 18:22	1
Sulfate	**9.0**		1.2		mg/L			05/15/14 18:22	1
Total Organic Carbon	**1.1**		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-10
Date Collected: 05/14/14 17:04
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 18:53	1
Chloromethane	ND		0.10		ug/L			05/16/14 18:53	1
Vinyl chloride	**0.18**		0.020		ug/L			05/16/14 18:53	1
Bromomethane	ND		0.10		ug/L			05/16/14 18:53	1
Chloroethane	ND		0.25		ug/L			05/16/14 18:53	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 18:53	1
1,1-Dichloroethene	**0.97**		0.10		ug/L			05/16/14 18:53	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 18:53	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 18:53	1
trans-1,2-Dichloroethene	**7.6**		0.10		ug/L			05/16/14 18:53	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 18:53	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:53	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 18:53	1
Chloroform	**3.1**		0.10		ug/L			05/16/14 18:53	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 18:53	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 18:53	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 18:53	1
Benzene	ND		0.10		ug/L			05/16/14 18:53	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 18:53	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 18:53	1
Dibromomethane	ND		0.10		ug/L			05/16/14 18:53	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 18:53	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:53	1
Toluene	ND		0.10		ug/L			05/16/14 18:53	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 18:53	1
1,1,2-Trichloroethane	**0.35**		0.10		ug/L			05/16/14 18:53	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 18:53	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 18:53	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 18:53	1
Chlorobenzene	**0.11**		0.10		ug/L			05/16/14 18:53	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 18:53	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 18:53	1
o-Xylene	ND		0.10		ug/L			05/16/14 18:53	1
Styrene	ND		0.10		ug/L			05/16/14 18:53	1
Bromoform	ND		0.10		ug/L			05/16/14 18:53	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
Bromobenzene	ND		0.10		ug/L			05/16/14 18:53	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 18:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 18:53	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 18:53	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 18:53	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 18:53	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:53	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-10
Date Collected: 05/14/14 17:04
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 18:53	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 18:53	1
1,2-Dichlorobenzene	**0.22**		0.20		ug/L			05/16/14 18:53	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 18:53	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 18:53	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 18:53	1
Naphthalene	ND		0.40		ug/L			05/16/14 18:53	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*111*		*80 - 127*		*05/16/14 18:53*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/16/14 18:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/16/14 18:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/16/14 18:53*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 18:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**900**		10		ug/L			05/19/14 16:00	100
Trichloroethene	**470**		10		ug/L			05/19/14 16:00	100
Tetrachloroethene	**1900**		10		ug/L			05/19/14 16:00	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*05/19/14 16:00*	*100*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 16:00*	*100*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 128*		*05/19/14 16:00*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/19/14 16:00*	*100*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 16:00*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2.1**		0.50		ug/L			05/21/14 23:08	1
Ethane	ND		0.50		ug/L			05/21/14 23:08	1
Ethene	ND		0.50		ug/L			05/21/14 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*91*		*66 - 132*		*05/21/14 23:08*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		0.90		mg/L			05/15/14 18:36	1
Nitrate as N	**1.3**		0.90		mg/L			05/15/14 18:36	1
Sulfate	**11**		1.2		mg/L			05/15/14 18:36	1
Total Organic Carbon	**1.1**		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-12
Date Collected: 05/14/14 14:21
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 19:18	1
Chloromethane	ND		0.10		ug/L			05/16/14 19:18	1
Vinyl chloride	**0.036**		0.020		ug/L			05/16/14 19:18	1
Bromomethane	ND		0.10		ug/L			05/16/14 19:18	1
Chloroethane	ND		0.25		ug/L			05/16/14 19:18	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 19:18	1
1,1-Dichloroethene	**0.19**		0.10		ug/L			05/16/14 19:18	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 19:18	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 19:18	1
trans-1,2-Dichloroethene	**5.1**		0.10		ug/L			05/16/14 19:18	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 19:18	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 19:18	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 19:18	1
Chloroform	**2.9**		0.10		ug/L			05/16/14 19:18	1
1,1,1-Trichloroethane	**7.2**		0.10		ug/L			05/16/14 19:18	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 19:18	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 19:18	1
Benzene	ND		0.10		ug/L			05/16/14 19:18	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 19:18	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 19:18	1
Dibromomethane	ND		0.10		ug/L			05/16/14 19:18	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 19:18	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 19:18	1
Toluene	**0.29**		0.10		ug/L			05/16/14 19:18	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 19:18	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 19:18	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 19:18	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 19:18	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 19:18	1
Chlorobenzene	**0.41**		0.10		ug/L			05/16/14 19:18	1
1,1,1,2-Tetrachloroethane	**3.0**		0.10		ug/L			05/16/14 19:18	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 19:18	1
o-Xylene	ND		0.10		ug/L			05/16/14 19:18	1
Styrene	ND		0.10		ug/L			05/16/14 19:18	1
Bromoform	ND		0.10		ug/L			05/16/14 19:18	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
Bromobenzene	ND		0.10		ug/L			05/16/14 19:18	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 19:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 19:18	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 19:18	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 19:18	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 19:18	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 19:18	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-12
Date Collected: 05/14/14 14:21
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 19:18	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 19:18	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 19:18	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 19:18	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 19:18	1
Naphthalene	ND		0.40		ug/L			05/16/14 19:18	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*183*	*X*	*80 - 127*		*05/16/14 19:18*	*1*
Toluene-d8 (Surr)	*109*		*75 - 125*		*05/16/14 19:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/16/14 19:18*	*1*
4-Bromofluorobenzene (Surr)	*78*		*75 - 120*		*05/16/14 19:18*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/16/14 19:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**520**		10		ug/L			05/19/14 16:25	100
Trichloroethene	**370**		10		ug/L			05/19/14 16:25	100
Tetrachloroethene	**17000**		100		ug/L			05/20/14 18:57	1000
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 16:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*05/19/14 16:25*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 16:25*	*100*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/20/14 18:57*	*1000*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*		*05/19/14 16:25*	*100*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/20/14 18:57*	*1000*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*05/19/14 16:25*	*100*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/20/14 18:57*	*1000*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 16:25*	*100*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/20/14 18:57*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-13
Date Collected: 05/14/14 13:45
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			05/19/14 16:49	100
Chloromethane	ND		10		ug/L			05/19/14 16:49	100
Vinyl chloride	ND		2.0		ug/L			05/19/14 16:49	100
Bromomethane	ND		10		ug/L			05/19/14 16:49	100
Chloroethane	ND		25		ug/L			05/19/14 16:49	100
Trichlorofluoromethane	ND		10		ug/L			05/19/14 16:49	100
1,1-Dichloroethene	ND		10		ug/L			05/19/14 16:49	100
Methylene Chloride	ND		50		ug/L			05/19/14 16:49	100
Methyl tert-butyl ether	ND		10		ug/L			05/19/14 16:49	100
trans-1,2-Dichloroethene	**36**		10		ug/L			05/19/14 16:49	100
1,1-Dichloroethane	ND		10		ug/L			05/19/14 16:49	100
2,2-Dichloropropane	ND		10		ug/L			05/19/14 16:49	100
cis-1,2-Dichloroethene	**3500**		10		ug/L			05/19/14 16:49	100
Chlorobromomethane	ND		10		ug/L			05/19/14 16:49	100
Chloroform	ND		10		ug/L			05/19/14 16:49	100
1,1,1-Trichloroethane	ND		10		ug/L			05/19/14 16:49	100
Carbon tetrachloride	ND		10		ug/L			05/19/14 16:49	100
1,1-Dichloropropene	ND		10		ug/L			05/19/14 16:49	100
Benzene	ND		10		ug/L			05/19/14 16:49	100
1,2-Dichloroethane	ND		10		ug/L			05/19/14 16:49	100
Trichloroethene	**2300**		10		ug/L			05/19/14 16:49	100
1,2-Dichloropropane	ND		10		ug/L			05/19/14 16:49	100
Dibromomethane	ND		10		ug/L			05/19/14 16:49	100
Dichlorobromomethane	ND		10		ug/L			05/19/14 16:49	100
cis-1,3-Dichloropropene	ND		10		ug/L			05/19/14 16:49	100
Toluene	ND		10		ug/L			05/19/14 16:49	100
trans-1,3-Dichloropropene	ND		10		ug/L			05/19/14 16:49	100
1,1,2-Trichloroethane	**50**		10		ug/L			05/19/14 16:49	100
Tetrachloroethene	**4000**		10		ug/L			05/19/14 16:49	100
1,3-Dichloropropane	ND		10		ug/L			05/19/14 16:49	100
Chlorodibromomethane	ND		10		ug/L			05/19/14 16:49	100
Ethylene Dibromide	ND		10		ug/L			05/19/14 16:49	100
Chlorobenzene	ND		10		ug/L			05/19/14 16:49	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			05/19/14 16:49	100
Ethylbenzene	ND		10		ug/L			05/19/14 16:49	100
m-Xylene & p-Xylene	ND		20		ug/L			05/19/14 16:49	100
o-Xylene	ND		10		ug/L			05/19/14 16:49	100
Styrene	ND		10		ug/L			05/19/14 16:49	100
Bromoform	ND		10		ug/L			05/19/14 16:49	100
Isopropylbenzene	ND		10		ug/L			05/19/14 16:49	100
Bromobenzene	ND		10		ug/L			05/19/14 16:49	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			05/19/14 16:49	100
1,2,3-Trichloropropane	ND		20		ug/L			05/19/14 16:49	100
N-Propylbenzene	ND		10		ug/L			05/19/14 16:49	100
2-Chlorotoluene	ND		10		ug/L			05/19/14 16:49	100
4-Chlorotoluene	ND		20		ug/L			05/19/14 16:49	100
1,3,5-Trimethylbenzene	ND		10		ug/L			05/19/14 16:49	100
tert-Butylbenzene	ND		10		ug/L			05/19/14 16:49	100
1,2,4-Trimethylbenzene	ND		10		ug/L			05/19/14 16:49	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-13
Date Collected: 05/14/14 13:45
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10		ug/L			05/19/14 16:49	100
4-Isopropyltoluene	ND		20		ug/L			05/19/14 16:49	100
1,3-Dichlorobenzene	ND		20		ug/L			05/19/14 16:49	100
1,4-Dichlorobenzene	ND		20		ug/L			05/19/14 16:49	100
n-Butylbenzene	ND		10		ug/L			05/19/14 16:49	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 16:49	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			05/19/14 16:49	100
1,2,4-Trichlorobenzene	ND		20		ug/L			05/19/14 16:49	100
Hexachlorobutadiene	ND		20		ug/L			05/19/14 16:49	100
Naphthalene	ND		40		ug/L			05/19/14 16:49	100
1,2,3-Trichlorobenzene	ND		40		ug/L			05/19/14 16:49	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*05/19/14 16:49*	*100*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/19/14 16:49*	*100*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*05/19/14 16:49*	*100*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*05/19/14 16:49*	*100*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 16:49*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-13 DUP
Date Collected: 05/14/14 13:45
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			05/19/14 17:13	100
Chloromethane	ND		10		ug/L			05/19/14 17:13	100
Vinyl chloride	ND		2.0		ug/L			05/19/14 17:13	100
Bromomethane	ND		10		ug/L			05/19/14 17:13	100
Chloroethane	ND		25		ug/L			05/19/14 17:13	100
Trichlorofluoromethane	ND		10		ug/L			05/19/14 17:13	100
1,1-Dichloroethene	ND		10		ug/L			05/19/14 17:13	100
Methylene Chloride	ND		50		ug/L			05/19/14 17:13	100
Methyl tert-butyl ether	ND		10		ug/L			05/19/14 17:13	100
trans-1,2-Dichloroethene	**36**		10		ug/L			05/19/14 17:13	100
1,1-Dichloroethane	ND		10		ug/L			05/19/14 17:13	100
2,2-Dichloropropane	ND		10		ug/L			05/19/14 17:13	100
cis-1,2-Dichloroethene	**3700**		10		ug/L			05/19/14 17:13	100
Chlorobromomethane	ND		10		ug/L			05/19/14 17:13	100
Chloroform	ND		10		ug/L			05/19/14 17:13	100
1,1,1-Trichloroethane	ND		10		ug/L			05/19/14 17:13	100
Carbon tetrachloride	ND		10		ug/L			05/19/14 17:13	100
1,1-Dichloropropene	ND		10		ug/L			05/19/14 17:13	100
Benzene	ND		10		ug/L			05/19/14 17:13	100
1,2-Dichloroethane	ND		10		ug/L			05/19/14 17:13	100
Trichloroethene	**2500**		10		ug/L			05/19/14 17:13	100
1,2-Dichloropropane	ND		10		ug/L			05/19/14 17:13	100
Dibromomethane	ND		10		ug/L			05/19/14 17:13	100
Dichlorobromomethane	ND		10		ug/L			05/19/14 17:13	100
cis-1,3-Dichloropropene	ND		10		ug/L			05/19/14 17:13	100
Toluene	ND		10		ug/L			05/19/14 17:13	100
trans-1,3-Dichloropropene	ND		10		ug/L			05/19/14 17:13	100
1,1,2-Trichloroethane	**49**		10		ug/L			05/19/14 17:13	100
Tetrachloroethene	**4200**		10		ug/L			05/19/14 17:13	100
1,3-Dichloropropane	ND		10		ug/L			05/19/14 17:13	100
Chlorodibromomethane	ND		10		ug/L			05/19/14 17:13	100
Ethylene Dibromide	ND		10		ug/L			05/19/14 17:13	100
Chlorobenzene	ND		10		ug/L			05/19/14 17:13	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			05/19/14 17:13	100
Ethylbenzene	ND		10		ug/L			05/19/14 17:13	100
m-Xylene & p-Xylene	ND		20		ug/L			05/19/14 17:13	100
o-Xylene	ND		10		ug/L			05/19/14 17:13	100
Styrene	ND		10		ug/L			05/19/14 17:13	100
Bromoform	ND		10		ug/L			05/19/14 17:13	100
Isopropylbenzene	ND		10		ug/L			05/19/14 17:13	100
Bromobenzene	ND		10		ug/L			05/19/14 17:13	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			05/19/14 17:13	100
1,2,3-Trichloropropane	ND		20		ug/L			05/19/14 17:13	100
N-Propylbenzene	ND		10		ug/L			05/19/14 17:13	100
2-Chlorotoluene	ND		10		ug/L			05/19/14 17:13	100
4-Chlorotoluene	ND		20		ug/L			05/19/14 17:13	100
1,3,5-Trimethylbenzene	ND		10		ug/L			05/19/14 17:13	100
tert-Butylbenzene	ND		10		ug/L			05/19/14 17:13	100
1,2,4-Trimethylbenzene	ND		10		ug/L			05/19/14 17:13	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-13 DUP
Date Collected: 05/14/14 13:45
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10		ug/L			05/19/14 17:13	100
4-Isopropyltoluene	ND		20		ug/L			05/19/14 17:13	100
1,3-Dichlorobenzene	ND		20		ug/L			05/19/14 17:13	100
1,4-Dichlorobenzene	ND		20		ug/L			05/19/14 17:13	100
n-Butylbenzene	ND		10		ug/L			05/19/14 17:13	100
1,2-Dichlorobenzene	ND		20		ug/L			05/19/14 17:13	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			05/19/14 17:13	100
1,2,4-Trichlorobenzene	ND		20		ug/L			05/19/14 17:13	100
Hexachlorobutadiene	ND		20		ug/L			05/19/14 17:13	100
Naphthalene	ND		40		ug/L			05/19/14 17:13	100
1,2,3-Trichlorobenzene	ND		40		ug/L			05/19/14 17:13	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*80 - 127*		*05/19/14 17:13*	*100*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 17:13*	*100*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 128*		*05/19/14 17:13*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*05/19/14 17:13*	*100*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 17:13*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-14
Date Collected: 05/13/14 15:16
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 12:34	1
Chloromethane	ND		0.10		ug/L			05/19/14 12:34	1
Vinyl chloride	**0.044**		0.020		ug/L			05/19/14 12:34	1
Bromomethane	ND		0.10		ug/L			05/19/14 12:34	1
Chloroethane	ND		0.25		ug/L			05/19/14 12:34	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 12:34	1
1,1-Dichloroethene	**0.68**		0.10		ug/L			05/19/14 12:34	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 12:34	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 12:34	1
trans-1,2-Dichloroethene	**10**		0.10		ug/L			05/19/14 12:34	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 12:34	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:34	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 12:34	1
Chloroform	**2.3**		0.10		ug/L			05/19/14 12:34	1
1,1,1-Trichloroethane	**6.3**		0.10		ug/L			05/19/14 12:34	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 12:34	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 12:34	1
Benzene	ND		0.10		ug/L			05/19/14 12:34	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 12:34	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:34	1
Dibromomethane	ND		0.10		ug/L			05/19/14 12:34	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 12:34	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:34	1
Toluene	**0.27**		0.10		ug/L			05/19/14 12:34	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:34	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 12:34	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 12:34	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 12:34	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 12:34	1
Chlorobenzene	**0.38**		0.10		ug/L			05/19/14 12:34	1
1,1,1,2-Tetrachloroethane	**2.3**		0.10		ug/L			05/19/14 12:34	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 12:34	1
o-Xylene	ND		0.10		ug/L			05/19/14 12:34	1
Styrene	ND		0.10		ug/L			05/19/14 12:34	1
Bromoform	ND		0.10		ug/L			05/19/14 12:34	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
Bromobenzene	ND		0.10		ug/L			05/19/14 12:34	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 12:34	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 12:34	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 12:34	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 12:34	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 12:34	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:34	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-14
Date Collected: 05/13/14 15:16
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:34	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 12:34	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 12:34	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 12:34	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 12:34	1
Naphthalene	ND		0.40		ug/L			05/19/14 12:34	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*173*	*X*	*80 - 127*		*05/19/14 12:34*	*1*
Toluene-d8 (Surr)	*110*		*75 - 125*		*05/19/14 12:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 12:34*	*1*
4-Bromofluorobenzene (Surr)	*78*		*75 - 120*		*05/19/14 12:34*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 12:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1100**		10		ug/L			05/20/14 19:46	100
Trichloroethene	**340**		10		ug/L			05/20/14 19:46	100
1,2-Dichlorobenzene	ND		20		ug/L			05/20/14 19:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/20/14 19:46*	*100*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/20/14 19:46*	*100*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/20/14 19:46*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*05/20/14 19:46*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**11000**		100		ug/L			05/21/14 15:55	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/21/14 15:55*	*1000*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/21/14 15:55*	*1000*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/21/14 15:55*	*1000*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*05/21/14 15:55*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-15
Date Collected: 05/14/14 12:39
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 12:59	1
Chloromethane	ND		0.10		ug/L			05/19/14 12:59	1
Vinyl chloride	**0.24**		0.020		ug/L			05/19/14 12:59	1
Bromomethane	ND		0.10		ug/L			05/19/14 12:59	1
Chloroethane	ND		0.25		ug/L			05/19/14 12:59	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 12:59	1
1,1-Dichloroethene	**2.3**		0.10		ug/L			05/19/14 12:59	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 12:59	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 12:59	1
1,1-Dichloroethane	**0.32**		0.10		ug/L			05/19/14 12:59	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:59	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 12:59	1
Chloroform	**2.5**		0.10		ug/L			05/19/14 12:59	1
1,1,1-Trichloroethane	**7.5**		0.10		ug/L			05/19/14 12:59	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 12:59	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 12:59	1
Benzene	ND		0.10		ug/L			05/19/14 12:59	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 12:59	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:59	1
Dibromomethane	ND		0.10		ug/L			05/19/14 12:59	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 12:59	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:59	1
Toluene	**0.17**		0.10		ug/L			05/19/14 12:59	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:59	1
1,1,2-Trichloroethane	**1.4**		0.10		ug/L			05/19/14 12:59	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 12:59	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 12:59	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 12:59	1
Chlorobenzene	**0.28**		0.10		ug/L			05/19/14 12:59	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 12:59	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 12:59	1
o-Xylene	ND		0.10		ug/L			05/19/14 12:59	1
Styrene	ND		0.10		ug/L			05/19/14 12:59	1
Bromoform	ND		0.10		ug/L			05/19/14 12:59	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
Bromobenzene	ND		0.10		ug/L			05/19/14 12:59	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 12:59	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 12:59	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 12:59	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 12:59	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 12:59	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:59	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:59	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: SPW-15
Date Collected: 05/14/14 12:39
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			05/19/14 12:59	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 12:59	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 12:59	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 12:59	1
Naphthalene	ND		0.40		ug/L			05/19/14 12:59	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*149*	*X*	*80 - 127*		*05/19/14 12:59*	*1*
Toluene-d8 (Surr)	*103*		*75 - 125*		*05/19/14 12:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 12:59*	*1*
4-Bromofluorobenzene (Surr)	*85*		*75 - 120*		*05/19/14 12:59*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 12:59*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**40**		10		ug/L			05/20/14 20:11	100
cis-1,2-Dichloroethene	**4200**		10		ug/L			05/20/14 20:11	100
Trichloroethene	**2900**		10		ug/L			05/20/14 20:11	100
Tetrachloroethene	**6700**		10		ug/L			05/20/14 20:11	100
1,2-Dichlorobenzene	ND		20		ug/L			05/20/14 20:11	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/20/14 20:11*	*100*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/20/14 20:11*	*100*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*05/20/14 20:11*	*100*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*05/20/14 20:11*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-16
Date Collected: 05/14/14 11:09
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 13:23	1
Chloromethane	ND		0.10		ug/L			05/19/14 13:23	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 13:23	1
Bromomethane	ND		0.10		ug/L			05/19/14 13:23	1
Chloroethane	ND		0.25		ug/L			05/19/14 13:23	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 13:23	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 13:23	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 13:23	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 13:23	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 13:23	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 13:23	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 13:23	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 13:23	1
Chloroform	**2.2**		0.10		ug/L			05/19/14 13:23	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 13:23	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 13:23	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 13:23	1
Benzene	ND		0.10		ug/L			05/19/14 13:23	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 13:23	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 13:23	1
Dibromomethane	ND		0.10		ug/L			05/19/14 13:23	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 13:23	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 13:23	1
Toluene	ND		0.10		ug/L			05/19/14 13:23	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 13:23	1
1,1,2-Trichloroethane	**0.92**		0.10		ug/L			05/19/14 13:23	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 13:23	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 13:23	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 13:23	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 13:23	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 13:23	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 13:23	1
o-Xylene	ND		0.10		ug/L			05/19/14 13:23	1
Styrene	ND		0.10		ug/L			05/19/14 13:23	1
Bromoform	ND		0.10		ug/L			05/19/14 13:23	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
Bromobenzene	ND		0.10		ug/L			05/19/14 13:23	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 13:23	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 13:23	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 13:23	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 13:23	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 13:23	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:23	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-16
Date Collected: 05/14/14 11:09
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:23	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 13:23	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:23	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 13:23	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 13:23	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 13:23	1
Naphthalene	ND		0.40		ug/L			05/19/14 13:23	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/19/14 13:23*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/19/14 13:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 13:23*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/19/14 13:23*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/19/14 13:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**73**		1.0		ug/L			05/21/14 10:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/21/14 10:56*	*10*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/21/14 10:56*	*10*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/21/14 10:56*	*10*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/21/14 10:56*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/21/14 11:21	1
Trichloroethene	**0.21**		0.10		ug/L			05/21/14 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/21/14 11:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/21/14 11:21*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/21/14 11:21*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*05/21/14 11:21*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-20
Date Collected: 05/14/14 09:24
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 13:48	1
Chloromethane	ND		0.10		ug/L			05/19/14 13:48	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 13:48	1
Bromomethane	ND		0.10		ug/L			05/19/14 13:48	1
Chloroethane	ND		0.25		ug/L			05/19/14 13:48	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 13:48	1
1,1-Dichloroethene	**0.17**		0.10		ug/L			05/19/14 13:48	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 13:48	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 13:48	1
trans-1,2-Dichloroethene	**0.91**		0.10		ug/L			05/19/14 13:48	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 13:48	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 13:48	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 13:48	1
Chloroform	**2.4**		0.10		ug/L			05/19/14 13:48	1
1,1,1-Trichloroethane	**0.47**		0.10		ug/L			05/19/14 13:48	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 13:48	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 13:48	1
Benzene	ND		0.10		ug/L			05/19/14 13:48	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 13:48	1
Trichloroethene	**49**		0.10		ug/L			05/19/14 13:48	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 13:48	1
Dibromomethane	ND		0.10		ug/L			05/19/14 13:48	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 13:48	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 13:48	1
Toluene	ND		0.10		ug/L			05/19/14 13:48	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 13:48	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 13:48	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 13:48	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 13:48	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 13:48	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 13:48	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 13:48	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 13:48	1
o-Xylene	ND		0.10		ug/L			05/19/14 13:48	1
Styrene	ND		0.10		ug/L			05/19/14 13:48	1
Bromoform	ND		0.10		ug/L			05/19/14 13:48	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
Bromobenzene	ND		0.10		ug/L			05/19/14 13:48	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 13:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 13:48	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 13:48	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 13:48	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 13:48	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-20
Date Collected: 05/14/14 09:24
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:48	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:48	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 13:48	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 13:48	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 13:48	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 13:48	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 13:48	1
Naphthalene	ND		0.40		ug/L			05/19/14 13:48	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*113*		*80 - 127*		*05/19/14 13:48*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/19/14 13:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/19/14 13:48*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/19/14 13:48*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**110**		5.0		ug/L			05/20/14 20:35	50
Tetrachloroethene	**610**		5.0		ug/L			05/20/14 20:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/20/14 20:35*	*50*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/20/14 20:35*	*50*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*05/20/14 20:35*	*50*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/20/14 20:35*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/21/14 23:20	1
Ethane	ND		0.50		ug/L			05/21/14 23:20	1
Ethene	ND		0.50		ug/L			05/21/14 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*89*		*66 - 132*		*05/21/14 23:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		0.90		mg/L			05/15/14 18:50	1
Nitrate as N	**4.1**		0.90		mg/L			05/15/14 18:50	1
Sulfate	**8.6**		1.2		mg/L			05/15/14 18:50	1
Total Organic Carbon	ND		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-21
Date Collected: 05/13/14 18:01
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 14:13	1
Chloromethane	ND		0.10		ug/L			05/19/14 14:13	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 14:13	1
Bromomethane	ND		0.10		ug/L			05/19/14 14:13	1
Chloroethane	ND		0.25		ug/L			05/19/14 14:13	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 14:13	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 14:13	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 14:13	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 14:13	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 14:13	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 14:13	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 14:13	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 14:13	1
Chloroform	**1.7**		0.10		ug/L			05/19/14 14:13	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 14:13	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 14:13	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 14:13	1
Benzene	ND		0.10		ug/L			05/19/14 14:13	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 14:13	1
Trichloroethene	**0.53**		0.10		ug/L			05/19/14 14:13	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 14:13	1
Dibromomethane	ND		0.10		ug/L			05/19/14 14:13	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 14:13	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 14:13	1
Toluene	ND		0.10		ug/L			05/19/14 14:13	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 14:13	1
1,1,2-Trichloroethane	**0.14**		0.10		ug/L			05/19/14 14:13	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 14:13	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 14:13	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 14:13	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 14:13	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 14:13	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 14:13	1
o-Xylene	ND		0.10		ug/L			05/19/14 14:13	1
Styrene	ND		0.10		ug/L			05/19/14 14:13	1
Bromoform	ND		0.10		ug/L			05/19/14 14:13	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
Bromobenzene	ND		0.10		ug/L			05/19/14 14:13	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 14:13	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 14:13	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 14:13	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 14:13	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 14:13	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-21
Date Collected: 05/13/14 18:01
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:13	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:13	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 14:13	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:13	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 14:13	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 14:13	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 14:13	1
Naphthalene	ND		0.40		ug/L			05/19/14 14:13	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*05/19/14 14:13*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/19/14 14:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/19/14 14:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/19/14 14:13*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*05/19/14 14:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.46**		0.10		ug/L			05/20/14 17:44	1
Tetrachloroethene	**7.7**		0.10		ug/L			05/20/14 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/20/14 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/20/14 17:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/20/14 17:44*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/20/14 17:44*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-22
Date Collected: 05/15/14 08:02
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 14:38	1
Chloromethane	ND		0.10		ug/L			05/19/14 14:38	1
Vinyl chloride	**0.044**		0.020		ug/L			05/19/14 14:38	1
Bromomethane	ND		0.10		ug/L			05/19/14 14:38	1
Chloroethane	ND		0.25		ug/L			05/19/14 14:38	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 14:38	1
1,1-Dichloroethene	**0.37**		0.10		ug/L			05/19/14 14:38	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 14:38	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 14:38	1
trans-1,2-Dichloroethene	**5.9**		0.10		ug/L			05/19/14 14:38	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 14:38	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 14:38	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 14:38	1
Chloroform	**2.8**		0.10		ug/L			05/19/14 14:38	1
1,1,1-Trichloroethane	**1.0**		0.10		ug/L			05/19/14 14:38	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 14:38	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 14:38	1
Benzene	ND		0.10		ug/L			05/19/14 14:38	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 14:38	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 14:38	1
Dibromomethane	ND		0.10		ug/L			05/19/14 14:38	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 14:38	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 14:38	1
Toluene	ND		0.10		ug/L			05/19/14 14:38	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 14:38	1
1,1,2-Trichloroethane	**0.16**		0.10		ug/L			05/19/14 14:38	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 14:38	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 14:38	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 14:38	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 14:38	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 14:38	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 14:38	1
o-Xylene	ND		0.10		ug/L			05/19/14 14:38	1
Styrene	ND		0.10		ug/L			05/19/14 14:38	1
Bromoform	ND		0.10		ug/L			05/19/14 14:38	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
Bromobenzene	ND		0.10		ug/L			05/19/14 14:38	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 14:38	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 14:38	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 14:38	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 14:38	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 14:38	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:38	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-22
Date Collected: 05/15/14 08:02
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:38	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 14:38	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 14:38	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 14:38	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 14:38	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 14:38	1
Naphthalene	ND		0.40		ug/L			05/19/14 14:38	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*114*		*80 - 127*		*05/19/14 14:38*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/19/14 14:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 14:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/19/14 14:38*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/19/14 14:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**680**		5.0		ug/L			05/20/14 21:00	50
Trichloroethene	**290**		5.0		ug/L			05/20/14 21:00	50
Tetrachloroethene	**1200**		5.0		ug/L			05/20/14 21:00	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*75 - 125*		*05/20/14 21:00*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*05/20/14 21:00*	*50*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*05/20/14 21:00*	*50*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/20/14 21:00*	*50*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-23
Date Collected: 05/14/14 08:27
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 15:03	1
Chloromethane	ND		0.10		ug/L			05/19/14 15:03	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 15:03	1
Bromomethane	ND		0.10		ug/L			05/19/14 15:03	1
Chloroethane	ND		0.25		ug/L			05/19/14 15:03	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 15:03	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 15:03	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 15:03	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 15:03	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 15:03	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 15:03	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:03	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 15:03	1
Chloroform	**2.4**		0.10		ug/L			05/19/14 15:03	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 15:03	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 15:03	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 15:03	1
Benzene	ND		0.10		ug/L			05/19/14 15:03	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 15:03	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:03	1
Dibromomethane	ND		0.10		ug/L			05/19/14 15:03	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 15:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:03	1
Toluene	ND		0.10		ug/L			05/19/14 15:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:03	1
1,1,2-Trichloroethane	**0.14**		0.10		ug/L			05/19/14 15:03	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 15:03	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 15:03	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 15:03	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 15:03	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:03	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 15:03	1
o-Xylene	ND		0.10		ug/L			05/19/14 15:03	1
Styrene	ND		0.10		ug/L			05/19/14 15:03	1
Bromoform	ND		0.10		ug/L			05/19/14 15:03	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
Bromobenzene	ND		0.10		ug/L			05/19/14 15:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 15:03	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 15:03	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 15:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 15:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:03	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-23
Date Collected: 05/14/14 08:27
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:03	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 15:03	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 15:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 15:03	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 15:03	1
Naphthalene	ND		0.40		ug/L			05/19/14 15:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*05/19/14 15:03*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 15:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/19/14 15:03*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/19/14 15:03*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/19/14 15:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.36**		0.10		ug/L			05/20/14 18:08	1
Trichloroethene	**0.67**		0.10		ug/L			05/20/14 18:08	1
Tetrachloroethene	**9.8**		0.10		ug/L			05/20/14 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/20/14 18:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*05/20/14 18:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/20/14 18:08*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/20/14 18:08*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/21/14 23:33	1
Ethane	ND		0.50		ug/L			05/21/14 23:33	1
Ethene	ND		0.50		ug/L			05/21/14 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*91*		*66 - 132*		*05/21/14 23:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29**		0.90		mg/L			05/15/14 19:05	1
Nitrate as N	**11**	**H**	4.5		mg/L			05/16/14 09:32	5
Sulfate	**12**		1.2		mg/L			05/15/14 19:05	1
Total Organic Carbon	ND		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-24
Date Collected: 05/13/14 17:12
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 15:28	1
Chloromethane	ND		0.10		ug/L			05/19/14 15:28	1
Vinyl chloride	**0.021**		0.020		ug/L			05/19/14 15:28	1
Bromomethane	ND		0.10		ug/L			05/19/14 15:28	1
Chloroethane	ND		0.25		ug/L			05/19/14 15:28	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 15:28	1
1,1-Dichloroethene	**0.22**		0.10		ug/L			05/19/14 15:28	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 15:28	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 15:28	1
trans-1,2-Dichloroethene	**3.7**		0.10		ug/L			05/19/14 15:28	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 15:28	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:28	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 15:28	1
Chloroform	**5.9**		0.10		ug/L			05/19/14 15:28	1
1,1,1-Trichloroethane	**0.94**		0.10		ug/L			05/19/14 15:28	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 15:28	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 15:28	1
Benzene	ND		0.10		ug/L			05/19/14 15:28	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 15:28	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:28	1
Dibromomethane	ND		0.10		ug/L			05/19/14 15:28	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 15:28	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:28	1
Toluene	ND		0.10		ug/L			05/19/14 15:28	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:28	1
1,1,2-Trichloroethane	**0.16**		0.10		ug/L			05/19/14 15:28	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 15:28	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 15:28	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 15:28	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 15:28	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:28	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 15:28	1
o-Xylene	ND		0.10		ug/L			05/19/14 15:28	1
Styrene	ND		0.10		ug/L			05/19/14 15:28	1
Bromoform	ND		0.10		ug/L			05/19/14 15:28	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
Bromobenzene	ND		0.10		ug/L			05/19/14 15:28	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 15:28	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 15:28	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 15:28	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 15:28	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:28	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-24
Date Collected: 05/13/14 17:12
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:28	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 15:28	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:28	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 15:28	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 15:28	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 15:28	1
Naphthalene	ND		0.40		ug/L			05/19/14 15:28	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*107*		*80 - 127*		*05/19/14 15:28*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 15:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 15:28*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*05/19/14 15:28*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 15:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**320**		5.0		ug/L			05/20/14 21:25	50
Trichloroethene	**140**		5.0		ug/L			05/20/14 21:25	50
Tetrachloroethene	**1000**		5.0		ug/L			05/20/14 21:25	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*75 - 125*		*05/20/14 21:25*	*50*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/20/14 21:25*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/20/14 21:25*	*50*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/20/14 21:25*	*50*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-24 DUP
Date Collected: 05/13/14 17:12
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 15:53	1
Chloromethane	ND		0.10		ug/L			05/19/14 15:53	1
Vinyl chloride	**0.024**		0.020		ug/L			05/19/14 15:53	1
Bromomethane	ND		0.10		ug/L			05/19/14 15:53	1
Chloroethane	ND		0.25		ug/L			05/19/14 15:53	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 15:53	1
1,1-Dichloroethene	**0.23**		0.10		ug/L			05/19/14 15:53	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 15:53	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 15:53	1
trans-1,2-Dichloroethene	**4.5**		0.10		ug/L			05/19/14 15:53	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 15:53	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:53	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 15:53	1
Chloroform	**6.0**		0.10		ug/L			05/19/14 15:53	1
1,1,1-Trichloroethane	**0.88**		0.10		ug/L			05/19/14 15:53	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 15:53	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 15:53	1
Benzene	ND		0.10		ug/L			05/19/14 15:53	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 15:53	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 15:53	1
Dibromomethane	ND		0.10		ug/L			05/19/14 15:53	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 15:53	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:53	1
Toluene	ND		0.10		ug/L			05/19/14 15:53	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 15:53	1
1,1,2-Trichloroethane	**0.17**		0.10		ug/L			05/19/14 15:53	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 15:53	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 15:53	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 15:53	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 15:53	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:53	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 15:53	1
o-Xylene	ND		0.10		ug/L			05/19/14 15:53	1
Styrene	ND		0.10		ug/L			05/19/14 15:53	1
Bromoform	ND		0.10		ug/L			05/19/14 15:53	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
Bromobenzene	ND		0.10		ug/L			05/19/14 15:53	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 15:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 15:53	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 15:53	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 15:53	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 15:53	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:53	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-24 DUP
Date Collected: 05/13/14 17:12
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:53	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 15:53	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 15:53	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 15:53	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 15:53	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 15:53	1
Naphthalene	ND		0.40		ug/L			05/19/14 15:53	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*107*		*80 - 127*		*05/19/14 15:53*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 15:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/19/14 15:53*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 15:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**330**		5.0		ug/L			05/21/14 10:32	50
Trichloroethene	**140**		5.0		ug/L			05/21/14 10:32	50
Tetrachloroethene	**1000**		5.0		ug/L			05/21/14 10:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*75 - 125*		*05/21/14 10:32*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/21/14 10:32*	*50*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/21/14 10:32*	*50*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*05/21/14 10:32*	*50*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-25
Date Collected: 05/14/14 15:52
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 16:18	1
Chloromethane	ND		0.10		ug/L			05/19/14 16:18	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 16:18	1
Bromomethane	ND		0.10		ug/L			05/19/14 16:18	1
Chloroethane	ND		0.25		ug/L			05/19/14 16:18	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 16:18	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 16:18	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 16:18	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 16:18	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 16:18	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 16:18	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 16:18	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 16:18	1
Chloroform	**0.11**		0.10		ug/L			05/19/14 16:18	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 16:18	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 16:18	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 16:18	1
Benzene	ND		0.10		ug/L			05/19/14 16:18	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 16:18	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 16:18	1
Dibromomethane	ND		0.10		ug/L			05/19/14 16:18	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 16:18	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 16:18	1
Toluene	ND		0.10		ug/L			05/19/14 16:18	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 16:18	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 16:18	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 16:18	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 16:18	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 16:18	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 16:18	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 16:18	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 16:18	1
o-Xylene	ND		0.10		ug/L			05/19/14 16:18	1
Styrene	ND		0.10		ug/L			05/19/14 16:18	1
Bromoform	ND		0.10		ug/L			05/19/14 16:18	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
Bromobenzene	ND		0.10		ug/L			05/19/14 16:18	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 16:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 16:18	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 16:18	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 16:18	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 16:18	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 16:18	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: MW-25
Date Collected: 05/14/14 15:52
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 16:18	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 16:18	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 16:18	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 16:18	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 16:18	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 16:18	1
Naphthalene	ND		0.40		ug/L			05/19/14 16:18	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*05/19/14 16:18*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 16:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*05/19/14 16:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/19/14 16:18*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 16:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/20/14 18:32	1
Trichloroethene	ND		0.10		ug/L			05/20/14 18:32	1
Tetrachloroethene	**2.5**		0.10		ug/L			05/20/14 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/20/14 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/20/14 18:32*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*05/20/14 18:32*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/20/14 18:32*	*1*

Client Sample ID: EXT-2
Date Collected: 05/14/14 17:47
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**290**		100		ug/L			05/20/14 19:22	1000
Trichloroethene	**130**		100		ug/L			05/20/14 19:22	1000
Tetrachloroethene	**48000**		100		ug/L			05/20/14 19:22	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*75 - 125*		*05/20/14 19:22*	*1000*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/20/14 19:22*	*1000*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/20/14 19:22*	*1000*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/20/14 19:22*	*1000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/21/14 11:46	1
Chloromethane	ND		0.10		ug/L			05/21/14 11:46	1
Vinyl chloride	ND		0.020		ug/L			05/21/14 11:46	1
Bromomethane	ND		0.10		ug/L			05/21/14 11:46	1
Chloroethane	ND		0.25		ug/L			05/21/14 11:46	1
Trichlorofluoromethane	ND		0.10		ug/L			05/21/14 11:46	1
1,1-Dichloroethene	**2.1**		0.10		ug/L			05/21/14 11:46	1
Methylene Chloride	ND		0.50		ug/L			05/21/14 11:46	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/21/14 11:46	1
trans-1,2-Dichloroethene	**3.8**		0.10		ug/L			05/21/14 11:46	1
1,1-Dichloroethane	ND		0.10		ug/L			05/21/14 11:46	1
2,2-Dichloropropane	ND		0.10		ug/L			05/21/14 11:46	1
Chlorobromomethane	ND		0.10		ug/L			05/21/14 11:46	1
Chloroform	**3.0**		0.10		ug/L			05/21/14 11:46	1
1,1,1-Trichloroethane	**27**		0.10		ug/L			05/21/14 11:46	1
Carbon tetrachloride	ND		0.10		ug/L			05/21/14 11:46	1
1,1-Dichloropropene	ND		0.10		ug/L			05/21/14 11:46	1
Benzene	ND		0.10		ug/L			05/21/14 11:46	1
1,2-Dichloroethane	ND		0.10		ug/L			05/21/14 11:46	1
1,2-Dichloropropane	ND		0.10		ug/L			05/21/14 11:46	1
Dibromomethane	ND		0.10		ug/L			05/21/14 11:46	1
Dichlorobromomethane	ND		0.10		ug/L			05/21/14 11:46	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/21/14 11:46	1
Toluene	**0.96**		0.10		ug/L			05/21/14 11:46	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/21/14 11:46	1
1,1,2-Trichloroethane	**4.8**		0.10		ug/L			05/21/14 11:46	1
1,3-Dichloropropane	ND		0.10		ug/L			05/21/14 11:46	1
Chlorodibromomethane	ND		0.10		ug/L			05/21/14 11:46	1
Ethylene Dibromide	ND		0.10		ug/L			05/21/14 11:46	1
Chlorobenzene	**1.0**		0.10		ug/L			05/21/14 11:46	1
1,1,1,2-Tetrachloroethane	**6.9**		0.10		ug/L			05/21/14 11:46	1
Ethylbenzene	**0.12**		0.10		ug/L			05/21/14 11:46	1
m-Xylene & p-Xylene	**0.32**		0.20		ug/L			05/21/14 11:46	1
o-Xylene	**0.34**		0.10		ug/L			05/21/14 11:46	1
Styrene	ND		0.10		ug/L			05/21/14 11:46	1
Bromoform	ND		0.10		ug/L			05/21/14 11:46	1
Isopropylbenzene	**0.36**		0.10		ug/L			05/21/14 11:46	1
Bromobenzene	ND		0.10		ug/L			05/21/14 11:46	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: EXT-2
Date Collected: 05/14/14 17:47
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/21/14 11:46	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/21/14 11:46	1
N-Propylbenzene	**0.69**		0.10		ug/L			05/21/14 11:46	1
2-Chlorotoluene	ND		0.10		ug/L			05/21/14 11:46	1
4-Chlorotoluene	ND		0.20		ug/L			05/21/14 11:46	1
1,3,5-Trimethylbenzene	**0.67**		0.10		ug/L			05/21/14 11:46	1
tert-Butylbenzene	ND		0.10		ug/L			05/21/14 11:46	1
1,2,4-Trimethylbenzene	**0.44**		0.10		ug/L			05/21/14 11:46	1
sec-Butylbenzene	**0.12**		0.10		ug/L			05/21/14 11:46	1
4-Isopropyltoluene	ND		0.20		ug/L			05/21/14 11:46	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/21/14 11:46	1
1,4-Dichlorobenzene	**0.29**		0.20		ug/L			05/21/14 11:46	1
n-Butylbenzene	**0.47**		0.10		ug/L			05/21/14 11:46	1
1,2-Dichlorobenzene	**1.4**		0.20		ug/L			05/21/14 11:46	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/21/14 11:46	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/21/14 11:46	1
Hexachlorobutadiene	ND		0.20		ug/L			05/21/14 11:46	1
Naphthalene	ND		0.40		ug/L			05/21/14 11:46	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/21/14 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*75 - 125*		*05/21/14 11:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/21/14 11:46*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*05/21/14 11:46*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*05/21/14 11:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			05/27/14 20:52	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: Equip Blank 1
Date Collected: 05/14/14 06:50
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 11:44	1
Chloromethane	ND		0.10		ug/L			05/19/14 11:44	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 11:44	1
Bromomethane	ND		0.10		ug/L			05/19/14 11:44	1
Chloroethane	ND		0.25		ug/L			05/19/14 11:44	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 11:44	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 11:44	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 11:44	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 11:44	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 11:44	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 11:44	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 11:44	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 11:44	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 11:44	1
Chloroform	ND		0.10		ug/L			05/19/14 11:44	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 11:44	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 11:44	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 11:44	1
Benzene	ND		0.10		ug/L			05/19/14 11:44	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 11:44	1
Trichloroethene	ND		0.10		ug/L			05/19/14 11:44	1
1,2-Dichloropropane	**0.13**		0.10		ug/L			05/19/14 11:44	1
Dibromomethane	ND		0.10		ug/L			05/19/14 11:44	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 11:44	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 11:44	1
Toluene	**0.14**		0.10		ug/L			05/19/14 11:44	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 11:44	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 11:44	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 11:44	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 11:44	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 11:44	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 11:44	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 11:44	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 11:44	1
o-Xylene	ND		0.10		ug/L			05/19/14 11:44	1
Styrene	ND		0.10		ug/L			05/19/14 11:44	1
Bromoform	ND		0.10		ug/L			05/19/14 11:44	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
Bromobenzene	ND		0.10		ug/L			05/19/14 11:44	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 11:44	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 11:44	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 11:44	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 11:44	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 11:44	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: Equip Blank 1
Date Collected: 05/14/14 06:50
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 11:44	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:44	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:44	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 11:44	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:44	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 11:44	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 11:44	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 11:44	1
Naphthalene	ND		0.40		ug/L			05/19/14 11:44	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*109*		*80 - 127*		*05/19/14 11:44*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 11:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/19/14 11:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*05/19/14 11:44*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*05/19/14 11:44*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.13**		0.10		ug/L			05/20/14 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/20/14 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/20/14 16:54*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/20/14 16:54*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*05/20/14 16:54*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: Equip Blank 2
Date Collected: 05/15/14 08:36
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-23
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 12:09	1
Chloromethane	ND		0.10		ug/L			05/19/14 12:09	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 12:09	1
Bromomethane	ND		0.10		ug/L			05/19/14 12:09	1
Chloroethane	ND		0.25		ug/L			05/19/14 12:09	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 12:09	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 12:09	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 12:09	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 12:09	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 12:09	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 12:09	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:09	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 12:09	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 12:09	1
Chloroform	ND		0.10		ug/L			05/19/14 12:09	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 12:09	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 12:09	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 12:09	1
Benzene	ND		0.10		ug/L			05/19/14 12:09	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 12:09	1
Trichloroethene	ND		0.10		ug/L			05/19/14 12:09	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 12:09	1
Dibromomethane	ND		0.10		ug/L			05/19/14 12:09	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 12:09	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:09	1
Toluene	**0.13**		0.10		ug/L			05/19/14 12:09	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 12:09	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 12:09	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 12:09	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 12:09	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 12:09	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 12:09	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 12:09	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 12:09	1
o-Xylene	ND		0.10		ug/L			05/19/14 12:09	1
Styrene	ND		0.10		ug/L			05/19/14 12:09	1
Bromoform	ND		0.10		ug/L			05/19/14 12:09	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
Bromobenzene	ND		0.10		ug/L			05/19/14 12:09	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 12:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 12:09	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 12:09	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 12:09	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 12:09	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: Equip Blank 2
Date Collected: 05/15/14 08:36
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 12:09	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:09	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:09	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 12:09	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 12:09	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 12:09	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 12:09	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 12:09	1
Naphthalene	ND		0.40		ug/L			05/19/14 12:09	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*114*		*80 - 127*		*05/19/14 12:09*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 12:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/19/14 12:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*05/19/14 12:09*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*05/19/14 12:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.10		ug/L			05/20/14 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/20/14 17:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*05/20/14 17:19*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*05/20/14 17:19*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/20/14 17:19*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: TB #353
Date Collected: 05/13/14 00:00
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-24
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 11:19	1
Chloromethane	ND		0.10		ug/L			05/19/14 11:19	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 11:19	1
Bromomethane	ND		0.10		ug/L			05/19/14 11:19	1
Chloroethane	ND		0.25		ug/L			05/19/14 11:19	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 11:19	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 11:19	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 11:19	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 11:19	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 11:19	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 11:19	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 11:19	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 11:19	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 11:19	1
Chloroform	ND		0.10		ug/L			05/19/14 11:19	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 11:19	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 11:19	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 11:19	1
Benzene	ND		0.10		ug/L			05/19/14 11:19	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 11:19	1
Trichloroethene	ND		0.10		ug/L			05/19/14 11:19	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 11:19	1
Dibromomethane	ND		0.10		ug/L			05/19/14 11:19	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 11:19	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 11:19	1
Toluene	ND		0.10		ug/L			05/19/14 11:19	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 11:19	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 11:19	1
Tetrachloroethene	**0.30**	**B**	0.10		ug/L			05/19/14 11:19	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 11:19	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 11:19	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 11:19	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 11:19	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 11:19	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 11:19	1
o-Xylene	ND		0.10		ug/L			05/19/14 11:19	1
Styrene	ND		0.10		ug/L			05/19/14 11:19	1
Bromoform	ND		0.10		ug/L			05/19/14 11:19	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
Bromobenzene	ND		0.10		ug/L			05/19/14 11:19	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 11:19	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 11:19	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 11:19	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 11:19	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 11:19	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: TB #353
Date Collected: 05/13/14 00:00
Date Received: 05/15/14 13:58

Lab Sample ID: 580-43593-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 11:19	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:19	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:19	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 11:19	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 11:19	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 11:19	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 11:19	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 11:19	1
Naphthalene	ND		0.40		ug/L			05/19/14 11:19	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*40*	*X*	*80 - 127*		*05/19/14 11:19*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*05/19/14 11:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*05/19/14 11:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/19/14 11:19*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/19/14 11:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-159171/6
Matrix: Water
Analysis Batch: 159171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/16/14 10:40	1
Chloromethane	ND		0.10		ug/L			05/16/14 10:40	1
Vinyl chloride	ND		0.020		ug/L			05/16/14 10:40	1
Bromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Chloroethane	ND		0.25		ug/L			05/16/14 10:40	1
Trichlorofluoromethane	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
Methylene Chloride	ND		0.50		ug/L			05/16/14 10:40	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/16/14 10:40	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
2,2-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
Chlorobromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Chloroform	ND		0.10		ug/L			05/16/14 10:40	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Carbon tetrachloride	ND		0.10		ug/L			05/16/14 10:40	1
1,1-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
Benzene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Trichloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
Dibromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Dichlorobromomethane	ND		0.10		ug/L			05/16/14 10:40	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
Toluene	ND		0.10		ug/L			05/16/14 10:40	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Tetrachloroethene	ND		0.10		ug/L			05/16/14 10:40	1
1,3-Dichloropropane	ND		0.10		ug/L			05/16/14 10:40	1
Chlorodibromomethane	ND		0.10		ug/L			05/16/14 10:40	1
Ethylene Dibromide	ND		0.10		ug/L			05/16/14 10:40	1
Chlorobenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 10:40	1
Ethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/16/14 10:40	1
o-Xylene	ND		0.10		ug/L			05/16/14 10:40	1
Styrene	ND		0.10		ug/L			05/16/14 10:40	1
Bromoform	ND		0.10		ug/L			05/16/14 10:40	1
Isopropylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
Bromobenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/16/14 10:40	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/16/14 10:40	1
N-Propylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
2-Chlorotoluene	ND		0.10		ug/L			05/16/14 10:40	1
4-Chlorotoluene	ND		0.20		ug/L			05/16/14 10:40	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
tert-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1

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

Lab Sample ID: MB 580-159171/6
Matrix: Water
Analysis Batch: 159171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
sec-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
4-Isopropyltoluene	ND		0.20		ug/L			05/16/14 10:40	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
n-Butylbenzene	ND		0.10		ug/L			05/16/14 10:40	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/16/14 10:40	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/16/14 10:40	1
Hexachlorobutadiene	ND		0.20		ug/L			05/16/14 10:40	1
Naphthalene	ND		0.40		ug/L			05/16/14 10:40	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/16/14 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*05/16/14 10:40*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*05/16/14 10:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*05/16/14 10:40*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*05/16/14 10:40*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/16/14 10:40*	*1*

Lab Sample ID: LCS 580-159171/7
Matrix: Water
Analysis Batch: 159171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.04		ug/L		121	30 - 180
Chloromethane	5.00	5.11		ug/L		102	50 - 140
Vinyl chloride	5.00	5.21		ug/L		104	65 - 140
Bromomethane	5.00	4.47		ug/L		89	70 - 135
Chloroethane	5.00	4.97		ug/L		99	75 - 140
Trichlorofluoromethane	5.00	3.65		ug/L		73	30 - 180
1,1-Dichloroethene	5.00	3.62		ug/L		72	70 - 150
Methylene Chloride	5.00	5.36		ug/L		107	60 - 145
Methyl tert-butyl ether	5.00	4.98		ug/L		100	75 - 120
trans-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 140
1,1-Dichloroethane	5.00	5.18		ug/L		104	75 - 135
2,2-Dichloropropane	5.00	5.08		ug/L		102	60 - 150
cis-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 130
Chlorobromomethane	5.00	4.98		ug/L		100	80 - 125
Chloroform	5.00	5.24		ug/L		105	80 - 130
1,1,1-Trichloroethane	5.00	4.91		ug/L		98	80 - 140
Carbon tetrachloride	5.00	5.40		ug/L		108	75 - 140
1,1-Dichloropropene	5.00	5.48		ug/L		110	80 - 130
Benzene	5.00	5.12		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	4.94		ug/L		99	80 - 140
Trichloroethene	5.00	5.32		ug/L		106	80 - 130
1,2-Dichloropropane	5.00	5.15		ug/L		103	80 - 120
Dibromomethane	5.00	5.04		ug/L		101	80 - 130

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

Lab Sample ID: LCS 580-159171/7
Matrix: Water
Analysis Batch: 159171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.13		ug/L		103	80 - 125
cis-1,3-Dichloropropene	5.00	4.94		ug/L		99	70 - 120
Toluene	5.00	5.21		ug/L		104	80 - 120
trans-1,3-Dichloropropene	5.00	4.97		ug/L		99	60 - 140
1,1,2-Trichloroethane	5.00	5.12		ug/L		102	80 - 130
Tetrachloroethene	5.00	5.75		ug/L		115	40 - 180
1,3-Dichloropropane	5.00	5.04		ug/L		101	80 - 130
Chlorodibromomethane	5.00	4.76		ug/L		95	70 - 120
Ethylene Dibromide	5.00	5.14		ug/L		103	70 - 130
Chlorobenzene	5.00	5.15		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.16		ug/L		103	75 - 125
Ethylbenzene	5.00	5.37		ug/L		107	80 - 125
m-Xylene & p-Xylene	5.00	5.33		ug/L		107	80 - 130
o-Xylene	5.00	5.22		ug/L		104	80 - 120
Styrene	5.00	5.49		ug/L		110	75 - 130
Bromoform	5.00	4.45		ug/L		89	65 - 130
Isopropylbenzene	5.00	5.46		ug/L		109	75 - 120
Bromobenzene	5.00	5.16		ug/L		103	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	5.01		ug/L		100	75 - 120
N-Propylbenzene	5.00	5.45		ug/L		109	80 - 120
2-Chlorotoluene	5.00	5.11		ug/L		102	75 - 130
4-Chlorotoluene	5.00	5.14		ug/L		103	75 - 130
1,3,5-Trimethylbenzene	5.00	5.38		ug/L		108	80 - 125
tert-Butylbenzene	5.00	5.54		ug/L		111	80 - 130
1,2,4-Trimethylbenzene	5.00	5.33		ug/L		107	80 - 125
sec-Butylbenzene	5.00	5.43		ug/L		109	80 - 125
4-Isopropyltoluene	5.00	5.47		ug/L		109	80 - 120
1,3-Dichlorobenzene	5.00	5.19		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	5.11		ug/L		102	80 - 120
n-Butylbenzene	5.00	5.39		ug/L		108	75 - 125
1,2-Dichlorobenzene	5.00	5.08		ug/L		102	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.74		ug/L		95	55 - 120
1,2,4-Trichlorobenzene	5.00	5.19		ug/L		104	60 - 125
Hexachlorobutadiene	5.00	5.80		ug/L		116	75 - 135
Naphthalene	5.00	5.08		ug/L		102	45 - 130
1,2,3-Trichlorobenzene	5.00	5.18		ug/L		104	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*109*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*

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

Lab Sample ID: LCSD 580-159171/10
Matrix: Water
Analysis Batch: 159171

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
Dichlorodifluoromethane	5.00	6.18		ug/L		124	30 - 180	2	20
Chloromethane	5.00	4.91		ug/L		98	50 - 140	4	20
Vinyl chloride	5.00	5.34		ug/L		107	65 - 140	2	20
Bromomethane	5.00	5.11		ug/L		102	70 - 135	13	20
Chloroethane	5.00	4.64		ug/L		93	75 - 140	7	20
Trichlorofluoromethane	5.00	3.70		ug/L		74	30 - 180	1	20
1,1-Dichloroethene	5.00	3.87		ug/L		77	70 - 150	7	20
Methylene Chloride	5.00	5.56		ug/L		111	60 - 145	4	20
Methyl tert-butyl ether	5.00	5.29		ug/L		106	75 - 120	6	20
trans-1,2-Dichloroethene	5.00	5.24		ug/L		105	80 - 140	5	20
1,1-Dichloroethane	5.00	5.37		ug/L		107	75 - 135	4	20
2,2-Dichloropropane	5.00	5.45		ug/L		109	60 - 150	7	20
cis-1,2-Dichloroethene	5.00	5.33		ug/L		107	80 - 130	4	20
Chlorobromomethane	5.00	5.27		ug/L		105	80 - 125	6	20
Chloroform	5.00	5.41		ug/L		108	80 - 130	3	20
1,1,1-Trichloroethane	5.00	5.10		ug/L		102	80 - 140	4	20
Carbon tetrachloride	5.00	5.69		ug/L		114	75 - 140	5	20
1,1-Dichloropropene	5.00	5.69		ug/L		114	80 - 130	4	20
Benzene	5.00	5.26		ug/L		105	80 - 120	3	20
1,2-Dichloroethane	5.00	5.22		ug/L		104	80 - 140	5	20
Trichloroethene	5.00	5.46		ug/L		109	80 - 130	3	20
1,2-Dichloropropane	5.00	5.42		ug/L		108	80 - 120	5	20
Dibromomethane	5.00	5.29		ug/L		106	80 - 130	5	20
Dichlorobromomethane	5.00	5.26		ug/L		105	80 - 125	3	20
cis-1,3-Dichloropropene	5.00	5.31		ug/L		106	70 - 120	7	20
Toluene	5.00	5.50		ug/L		110	80 - 120	5	20
trans-1,3-Dichloropropene	5.00	5.37		ug/L		107	60 - 140	8	20
1,1,2-Trichloroethane	5.00	5.40		ug/L		108	80 - 130	5	20
Tetrachloroethene	5.00	5.43		ug/L		109	40 - 180	6	20
1,3-Dichloropropane	5.00	5.42		ug/L		108	80 - 130	7	20
Chlorodibromomethane	5.00	5.09		ug/L		102	70 - 120	7	20
Ethylene Dibromide	5.00	5.50		ug/L		110	70 - 130	7	20
Chlorobenzene	5.00	5.48		ug/L		110	80 - 120	6	20
1,1,1,2-Tetrachloroethane	5.00	5.42		ug/L		108	75 - 125	5	20
Ethylbenzene	5.00	5.72		ug/L		114	80 - 125	6	20
m-Xylene & p-Xylene	5.00	5.69		ug/L		114	80 - 130	7	20
o-Xylene	5.00	5.56		ug/L		111	80 - 120	6	20
Styrene	5.00	5.81		ug/L		116	75 - 130	6	20
Bromoform	5.00	4.76		ug/L		95	65 - 130	7	20
Isopropylbenzene	5.00	5.90		ug/L		118	75 - 120	8	20
Bromobenzene	5.00	5.30		ug/L		106	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	5.30		ug/L		106	75 - 125	8	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	3	20
N-Propylbenzene	5.00	5.78		ug/L		116	80 - 120	6	20
2-Chlorotoluene	5.00	5.48		ug/L		110	75 - 130	7	20
4-Chlorotoluene	5.00	5.42		ug/L		108	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.71		ug/L		114	80 - 125	6	20
tert-Butylbenzene	5.00	5.99		ug/L		120	80 - 130	8	20

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

Lab Sample ID: LCSD 580-159171/10
Matrix: Water
Analysis Batch: 159171

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
1,2,4-Trimethylbenzene			5.00	5.71		ug/L		114	80 - 125	7	20
sec-Butylbenzene			5.00	5.83		ug/L		117	80 - 125	7	20
4-Isopropyltoluene			5.00	5.86		ug/L		117	80 - 120	7	20
1,3-Dichlorobenzene			5.00	5.48		ug/L		110	80 - 120	6	20
1,4-Dichlorobenzene			5.00	5.42		ug/L		108	80 - 120	6	20
n-Butylbenzene			5.00	5.87		ug/L		117	75 - 125	8	20
1,2-Dichlorobenzene			5.00	5.46		ug/L		109	80 - 130	7	20
1,2-Dibromo-3-Chloropropane			5.00	5.10		ug/L		102	55 - 120	7	20
1,2,4-Trichlorobenzene			5.00	5.73		ug/L		115	60 - 125	10	20
Hexachlorobutadiene			5.00	6.29		ug/L		126	75 - 135	8	20
Naphthalene			5.00	5.62		ug/L		112	45 - 130	10	20
1,2,3-Trichlorobenzene			5.00	5.81		ug/L		116	60 - 125	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*110*		*80 - 127*
Toluene-d8 (Surr)	*96*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: MB 580-159275/6
Matrix: Water
Analysis Batch: 159275

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 09:16	1
Chloromethane	ND		0.10		ug/L			05/19/14 09:16	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 09:16	1
Bromomethane	ND		0.10		ug/L			05/19/14 09:16	1
Chloroethane	ND		0.25		ug/L			05/19/14 09:16	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 09:16	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 09:16	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 09:16	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 09:16	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:16	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 09:16	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:16	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:16	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 09:16	1
Chloroform	ND		0.10		ug/L			05/19/14 09:16	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 09:16	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 09:16	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 09:16	1
Benzene	ND		0.10		ug/L			05/19/14 09:16	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 09:16	1
Trichloroethene	ND		0.10		ug/L			05/19/14 09:16	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:16	1
Dibromomethane	ND		0.10		ug/L			05/19/14 09:16	1

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

Lab Sample ID: MB 580-159275/6
Matrix: Water
Analysis Batch: 159275

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 09:16	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:16	1
Toluene	ND		0.10		ug/L			05/19/14 09:16	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:16	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 09:16	1
Tetrachloroethene	0.412		0.10		ug/L			05/19/14 09:16	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 09:16	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 09:16	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 09:16	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 09:16	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:16	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 09:16	1
o-Xylene	ND		0.10		ug/L			05/19/14 09:16	1
Styrene	ND		0.10		ug/L			05/19/14 09:16	1
Bromoform	ND		0.10		ug/L			05/19/14 09:16	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
Bromobenzene	ND		0.10		ug/L			05/19/14 09:16	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:16	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 09:16	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 09:16	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 09:16	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 09:16	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:16	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:16	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 09:16	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:16	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 09:16	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 09:16	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 09:16	1
Naphthalene	ND		0.40		ug/L			05/19/14 09:16	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 09:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*110*		*80 - 127*		*05/19/14 09:16*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/19/14 09:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*05/19/14 09:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*05/19/14 09:16*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/19/14 09:16*	*1*

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

Lab Sample ID: LCS 580-159275/7
Matrix: Water
Analysis Batch: 159275

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.22		ug/L		124	30 - 180
Chloromethane	5.00	5.38		ug/L		108	50 - 140
Vinyl chloride	5.00	5.49		ug/L		110	65 - 140
Bromomethane	5.00	6.33		ug/L		127	70 - 135
Chloroethane	5.00	6.00		ug/L		120	75 - 140
Trichlorofluoromethane	5.00	5.91		ug/L		118	30 - 180
1,1-Dichloroethene	5.00	5.21		ug/L		104	70 - 150
Methylene Chloride	5.00	5.46		ug/L		109	60 - 145
Methyl tert-butyl ether	5.00	5.02		ug/L		100	75 - 120
trans-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 140
1,1-Dichloroethane	5.00	5.16		ug/L		103	75 - 135
2,2-Dichloropropane	5.00	5.23		ug/L		105	60 - 150
cis-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 130
Chlorobromomethane	5.00	4.91		ug/L		98	80 - 125
Chloroform	5.00	5.18		ug/L		104	80 - 130
1,1,1-Trichloroethane	5.00	5.44		ug/L		109	80 - 140
Carbon tetrachloride	5.00	5.47		ug/L		109	75 - 140
1,1-Dichloropropene	5.00	5.43		ug/L		109	80 - 130
Benzene	5.00	5.05		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	4.95		ug/L		99	80 - 140
Trichloroethene	5.00	5.27		ug/L		105	80 - 130
1,2-Dichloropropane	5.00	5.19		ug/L		104	80 - 120
Dibromomethane	5.00	5.04		ug/L		101	80 - 130
Dichlorobromomethane	5.00	4.97		ug/L		99	80 - 125
cis-1,3-Dichloropropene	5.00	5.10		ug/L		102	70 - 120
Toluene	5.00	5.25		ug/L		105	80 - 120
trans-1,3-Dichloropropene	5.00	5.03		ug/L		101	60 - 140
1,1,2-Trichloroethane	5.00	5.02		ug/L		100	80 - 130
Tetrachloroethene	5.00	6.15		ug/L		123	40 - 180
1,3-Dichloropropane	5.00	5.09		ug/L		102	80 - 130
Chlorodibromomethane	5.00	4.79		ug/L		96	70 - 120
Ethylene Dibromide	5.00	5.07		ug/L		101	70 - 130
Chlorobenzene	5.00	5.14		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.23		ug/L		105	75 - 125
Ethylbenzene	5.00	5.39		ug/L		108	80 - 125
m-Xylene & p-Xylene	5.00	5.37		ug/L		107	80 - 130
o-Xylene	5.00	5.31		ug/L		106	80 - 120
Styrene	5.00	5.50		ug/L		110	75 - 130
Bromoform	5.00	4.51		ug/L		90	65 - 130
Isopropylbenzene	5.00	5.55		ug/L		111	75 - 120
Bromobenzene	5.00	5.13		ug/L		103	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.97		ug/L		99	75 - 125
1,2,3-Trichloropropane	5.00	4.87		ug/L		97	75 - 120
N-Propylbenzene	5.00	5.43		ug/L		109	80 - 120
2-Chlorotoluene	5.00	5.22		ug/L		104	75 - 130
4-Chlorotoluene	5.00	5.11		ug/L		102	75 - 130
1,3,5-Trimethylbenzene	5.00	5.45		ug/L		109	80 - 125
tert-Butylbenzene	5.00	5.75		ug/L		115	80 - 130

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

Lab Sample ID: LCS 580-159275/7
Matrix: Water
Analysis Batch: 159275

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	5.00	5.43		ug/L		109	80 - 125
sec-Butylbenzene	5.00	5.53		ug/L		111	80 - 125
4-Isopropyltoluene	5.00	5.54		ug/L		111	80 - 120
1,3-Dichlorobenzene	5.00	5.19		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	5.01		ug/L		100	80 - 120
n-Butylbenzene	5.00	5.33		ug/L		107	75 - 125
1,2-Dichlorobenzene	5.00	5.07		ug/L		101	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.99		ug/L		100	55 - 120
1,2,4-Trichlorobenzene	5.00	5.15		ug/L		103	60 - 125
Hexachlorobutadiene	5.00	5.51		ug/L		110	75 - 135
Naphthalene	5.00	5.21		ug/L		104	45 - 130
1,2,3-Trichlorobenzene	5.00	5.11		ug/L		102	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*112*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

Lab Sample ID: LCSD 580-159275/8
Matrix: Water
Analysis Batch: 159275

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
Dichlorodifluoromethane	5.00	6.18		ug/L		124	30 - 180	1	20
Chloromethane	5.00	5.36		ug/L		107	50 - 140	0	20
Vinyl chloride	5.00	5.52		ug/L		110	65 - 140	1	20
Bromomethane	5.00	6.04		ug/L		121	70 - 135	5	20
Chloroethane	5.00	5.99		ug/L		120	75 - 140	0	20
Trichlorofluoromethane	5.00	5.73		ug/L		115	30 - 180	3	20
1,1-Dichloroethene	5.00	4.83		ug/L		97	70 - 150	8	20
Methylene Chloride	5.00	5.79		ug/L		116	60 - 145	6	20
Methyl tert-butyl ether	5.00	5.21		ug/L		104	75 - 120	4	20
trans-1,2-Dichloroethene	5.00	4.95		ug/L		99	80 - 140	0	20
1,1-Dichloroethane	5.00	5.26		ug/L		105	75 - 135	2	20
2,2-Dichloropropane	5.00	5.14		ug/L		103	60 - 150	2	20
cis-1,2-Dichloroethene	5.00	5.15		ug/L		103	80 - 130	1	20
Chlorobromomethane	5.00	5.02		ug/L		100	80 - 125	2	20
Chloroform	5.00	5.24		ug/L		105	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.47		ug/L		109	80 - 140	1	20
Carbon tetrachloride	5.00	5.36		ug/L		107	75 - 140	2	20
1,1-Dichloropropene	5.00	5.50		ug/L		110	80 - 130	1	20
Benzene	5.00	5.05		ug/L		101	80 - 120	0	20
1,2-Dichloroethane	5.00	4.99		ug/L		100	80 - 140	1	20
Trichloroethene	5.00	5.43		ug/L		109	80 - 130	3	20
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 120	1	20
Dibromomethane	5.00	5.15		ug/L		103	80 - 130	2	20

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

Lab Sample ID: LCSD 580-159275/8
Matrix: Water
Analysis Batch: 159275

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
Dichlorobromomethane			5.00	5.10		ug/L		102	80 - 125	2	20
cis-1,3-Dichloropropene			5.00	5.16		ug/L		103	70 - 120	1	20
Toluene			5.00	5.26		ug/L		105	80 - 120	0	20
trans-1,3-Dichloropropene			5.00	5.07		ug/L		101	60 - 140	1	20
1,1,2-Trichloroethane			5.00	5.22		ug/L		104	80 - 130	4	20
Tetrachloroethene			5.00	6.90		ug/L		138	40 - 180	12	20
1,3-Dichloropropane			5.00	5.13		ug/L		103	80 - 130	1	20
Chlorodibromomethane			5.00	4.87		ug/L		97	70 - 120	2	20
Ethylene Dibromide			5.00	5.10		ug/L		102	70 - 130	1	20
Chlorobenzene			5.00	5.16		ug/L		103	80 - 120	1	20
1,1,1,2-Tetrachloroethane			5.00	5.31		ug/L		106	75 - 125	1	20
Ethylbenzene			5.00	5.39		ug/L		108	80 - 125	0	20
m-Xylene & p-Xylene			5.00	5.42		ug/L		108	80 - 130	1	20
o-Xylene			5.00	5.46		ug/L		109	80 - 120	3	20
Styrene			5.00	5.60		ug/L		112	75 - 130	2	20
Bromoform			5.00	4.51		ug/L		90	65 - 130	0	20
Isopropylbenzene			5.00	5.73		ug/L		115	75 - 120	3	20
Bromobenzene			5.00	5.21		ug/L		104	80 - 130	1	20
1,1,2,2-Tetrachloroethane			5.00	5.00		ug/L		100	75 - 125	1	20
1,2,3-Trichloropropane			5.00	4.99		ug/L		100	75 - 120	3	20
N-Propylbenzene			5.00	5.53		ug/L		111	80 - 120	2	20
2-Chlorotoluene			5.00	5.36		ug/L		107	75 - 130	3	20
4-Chlorotoluene			5.00	5.25		ug/L		105	75 - 130	3	20
1,3,5-Trimethylbenzene			5.00	5.54		ug/L		111	80 - 125	2	20
tert-Butylbenzene			5.00	5.78		ug/L		116	80 - 130	0	20
1,2,4-Trimethylbenzene			5.00	5.57		ug/L		111	80 - 125	3	20
sec-Butylbenzene			5.00	5.69		ug/L		114	80 - 125	3	20
4-Isopropyltoluene			5.00	5.70		ug/L		114	80 - 120	3	20
1,3-Dichlorobenzene			5.00	5.32		ug/L		106	80 - 120	2	20
1,4-Dichlorobenzene			5.00	5.15		ug/L		103	80 - 120	3	20
n-Butylbenzene			5.00	5.56		ug/L		111	75 - 125	4	20
1,2-Dichlorobenzene			5.00	5.24		ug/L		105	80 - 130	3	20
1,2-Dibromo-3-Chloropropane			5.00	5.18		ug/L		104	55 - 120	4	20
1,2,4-Trichlorobenzene			5.00	5.65		ug/L		113	60 - 125	9	20
Hexachlorobutadiene			5.00	5.97		ug/L		119	75 - 135	8	20
Naphthalene			5.00	5.65		ug/L		113	45 - 130	8	20
1,2,3-Trichlorobenzene			5.00	5.74		ug/L		115	60 - 125	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*113*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Dibromofluoromethane (Surr)	*101*		*85 - 115*

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

Lab Sample ID: MB 580-159276/6
Matrix: Water
Analysis Batch: 159276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/19/14 09:29	1
Chloromethane	ND		0.10		ug/L			05/19/14 09:29	1
Vinyl chloride	ND		0.020		ug/L			05/19/14 09:29	1
Bromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Chloroethane	ND		0.25		ug/L			05/19/14 09:29	1
Trichlorofluoromethane	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
Methylene Chloride	ND		0.50		ug/L			05/19/14 09:29	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/19/14 09:29	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
2,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
Chlorobromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Chloroform	ND		0.10		ug/L			05/19/14 09:29	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Carbon tetrachloride	ND		0.10		ug/L			05/19/14 09:29	1
1,1-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
Benzene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Trichloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
Dibromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Dichlorobromomethane	ND		0.10		ug/L			05/19/14 09:29	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
Toluene	ND		0.10		ug/L			05/19/14 09:29	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Tetrachloroethene	ND		0.10		ug/L			05/19/14 09:29	1
1,3-Dichloropropane	ND		0.10		ug/L			05/19/14 09:29	1
Chlorodibromomethane	ND		0.10		ug/L			05/19/14 09:29	1
Ethylene Dibromide	ND		0.10		ug/L			05/19/14 09:29	1
Chlorobenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:29	1
Ethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/19/14 09:29	1
o-Xylene	ND		0.10		ug/L			05/19/14 09:29	1
Styrene	ND		0.10		ug/L			05/19/14 09:29	1
Bromoform	ND		0.10		ug/L			05/19/14 09:29	1
Isopropylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
Bromobenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/19/14 09:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/19/14 09:29	1
N-Propylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
2-Chlorotoluene	ND		0.10		ug/L			05/19/14 09:29	1
4-Chlorotoluene	ND		0.20		ug/L			05/19/14 09:29	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
tert-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1

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

Lab Sample ID: MB 580-159276/6
Matrix: Water
Analysis Batch: 159276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
sec-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
4-Isopropyltoluene	ND		0.20		ug/L			05/19/14 09:29	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
n-Butylbenzene	ND		0.10		ug/L			05/19/14 09:29	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/19/14 09:29	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/19/14 09:29	1
Hexachlorobutadiene	ND		0.20		ug/L			05/19/14 09:29	1
Naphthalene	ND		0.40		ug/L			05/19/14 09:29	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/19/14 09:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*96*		*80 - 127*		*05/19/14 09:29*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*05/19/14 09:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 128*		*05/19/14 09:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*05/19/14 09:29*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*05/19/14 09:29*	*1*

Lab Sample ID: LCS 580-159276/7
Matrix: Water
Analysis Batch: 159276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.67		ug/L		93	30 - 180
Chloromethane	5.00	5.23		ug/L		105	50 - 140
Vinyl chloride	5.00	5.38		ug/L		107	65 - 140
Bromomethane	5.00	4.66		ug/L		93	70 - 135
Chloroethane	5.00	4.63		ug/L		93	75 - 140
Trichlorofluoromethane	5.00	5.13		ug/L		103	30 - 180
1,1-Dichloroethene	5.00	4.82		ug/L		96	70 - 150
Methylene Chloride	5.00	4.96		ug/L		99	60 - 145
Methyl tert-butyl ether	5.00	4.82		ug/L		96	75 - 120
trans-1,2-Dichloroethene	5.00	4.84		ug/L		97	80 - 140
1,1-Dichloroethane	5.00	4.90		ug/L		98	75 - 135
2,2-Dichloropropane	5.00	5.60		ug/L		112	60 - 150
cis-1,2-Dichloroethene	5.00	5.00		ug/L		100	80 - 130
Chlorobromomethane	5.00	5.64		ug/L		113	80 - 125
Chloroform	5.00	4.85		ug/L		97	80 - 130
1,1,1-Trichloroethane	5.00	5.17		ug/L		103	80 - 140
Carbon tetrachloride	5.00	5.09		ug/L		102	75 - 140
1,1-Dichloropropene	5.00	4.89		ug/L		98	80 - 130
Benzene	5.00	5.04		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	4.40		ug/L		88	80 - 140
Trichloroethene	5.00	5.48		ug/L		110	80 - 130
1,2-Dichloropropane	5.00	4.99		ug/L		100	80 - 120
Dibromomethane	5.00	5.50		ug/L		110	80 - 130

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

Lab Sample ID: LCS 580-159276/7
Matrix: Water
Analysis Batch: 159276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.27		ug/L		105	80 - 125
cis-1,3-Dichloropropene	5.00	4.31		ug/L		86	70 - 120
Toluene	5.00	4.90		ug/L		98	80 - 120
trans-1,3-Dichloropropene	5.00	4.60		ug/L		92	60 - 140
1,1,2-Trichloroethane	5.00	4.93		ug/L		99	80 - 130
Tetrachloroethene	5.00	5.26		ug/L		105	40 - 180
1,3-Dichloropropane	5.00	5.04		ug/L		101	80 - 130
Chlorodibromomethane	5.00	4.56		ug/L		91	70 - 120
Ethylene Dibromide	5.00	5.29		ug/L		106	70 - 130
Chlorobenzene	5.00	4.96		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.34		ug/L		87	75 - 125
Ethylbenzene	5.00	4.82		ug/L		96	80 - 125
m-Xylene & p-Xylene	5.00	5.11		ug/L		102	80 - 130
o-Xylene	5.00	5.06		ug/L		101	80 - 120
Styrene	5.00	4.76		ug/L		95	75 - 130
Bromoform	5.00	4.98		ug/L		100	65 - 130
Isopropylbenzene	5.00	4.77		ug/L		95	75 - 120
Bromobenzene	5.00	4.80		ug/L		96	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	75 - 125
1,2,3-Trichloropropane	5.00	4.95		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.26		ug/L		105	80 - 120
2-Chlorotoluene	5.00	5.07		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.01		ug/L		100	75 - 130
1,3,5-Trimethylbenzene	5.00	4.44		ug/L		89	80 - 125
tert-Butylbenzene	5.00	4.65		ug/L		93	80 - 130
1,2,4-Trimethylbenzene	5.00	4.49		ug/L		90	80 - 125
sec-Butylbenzene	5.00	4.58		ug/L		92	80 - 125
4-Isopropyltoluene	5.00	4.70		ug/L		94	80 - 120
1,3-Dichlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.61		ug/L		92	80 - 120
n-Butylbenzene	5.00	4.84		ug/L		97	75 - 125
1,2-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	5.66		ug/L		113	55 - 120
1,2,4-Trichlorobenzene	5.00	4.50		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	4.23		ug/L		85	75 - 135
Naphthalene	5.00	4.44		ug/L		89	45 - 130
1,2,3-Trichlorobenzene	5.00	5.40		ug/L		108	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

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

Lab Sample ID: LCSD 580-159276/8
Matrix: Water
Analysis Batch: 159276

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
Dichlorodifluoromethane	5.00	4.99		ug/L		100	30 - 180	7	20
Chloromethane	5.00	5.41		ug/L		108	50 - 140	3	20
Vinyl chloride	5.00	5.57		ug/L		111	65 - 140	4	20
Bromomethane	5.00	4.82		ug/L		96	70 - 135	3	20
Chloroethane	5.00	4.72		ug/L		94	75 - 140	2	20
Trichlorofluoromethane	5.00	5.59		ug/L		112	30 - 180	9	20
1,1-Dichloroethene	5.00	5.36		ug/L		107	70 - 150	11	20
Methylene Chloride	5.00	5.40		ug/L		108	60 - 145	8	20
Methyl tert-butyl ether	5.00	5.22		ug/L		104	75 - 120	8	20
trans-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 140	5	20
1,1-Dichloroethane	5.00	5.23		ug/L		105	75 - 135	6	20
2,2-Dichloropropane	5.00	6.03		ug/L		121	60 - 150	7	20
cis-1,2-Dichloroethene	5.00	5.32		ug/L		106	80 - 130	6	20
Chlorobromomethane	5.00	5.74		ug/L		115	80 - 125	2	20
Chloroform	5.00	5.20		ug/L		104	80 - 130	7	20
1,1,1-Trichloroethane	5.00	5.38		ug/L		108	80 - 140	4	20
Carbon tetrachloride	5.00	5.44		ug/L		109	75 - 140	6	20
1,1-Dichloropropene	5.00	5.30		ug/L		106	80 - 130	8	20
Benzene	5.00	5.53		ug/L		111	80 - 120	9	20
1,2-Dichloroethane	5.00	4.75		ug/L		95	80 - 140	8	20
Trichloroethene	5.00	5.79		ug/L		116	80 - 130	6	20
1,2-Dichloropropane	5.00	5.22		ug/L		104	80 - 120	4	20
Dibromomethane	5.00	6.42		ug/L		128	80 - 130	15	20
Dichlorobromomethane	5.00	5.64		ug/L		113	80 - 125	7	20
cis-1,3-Dichloropropene	5.00	4.63		ug/L		93	70 - 120	7	20
Toluene	5.00	5.15		ug/L		103	80 - 120	5	20
trans-1,3-Dichloropropene	5.00	4.86		ug/L		97	60 - 140	5	20
1,1,2-Trichloroethane	5.00	5.42		ug/L		108	80 - 130	9	20
Tetrachloroethene	5.00	5.16		ug/L		103	40 - 180	2	20
1,3-Dichloropropane	5.00	5.26		ug/L		105	80 - 130	4	20
Chlorodibromomethane	5.00	4.84		ug/L		97	70 - 120	6	20
Ethylene Dibromide	5.00	5.69		ug/L		114	70 - 130	7	20
Chlorobenzene	5.00	5.18		ug/L		104	80 - 120	4	20
1,1,1,2-Tetrachloroethane	5.00	4.73		ug/L		95	75 - 125	9	20
Ethylbenzene	5.00	5.14		ug/L		103	80 - 125	6	20
m-Xylene & p-Xylene	5.00	5.59		ug/L		112	80 - 130	9	20
o-Xylene	5.00	5.36		ug/L		107	80 - 120	6	20
Styrene	5.00	5.01		ug/L		100	75 - 130	5	20
Bromoform	5.00	5.15		ug/L		103	65 - 130	3	20
Isopropylbenzene	5.00	5.02		ug/L		100	75 - 120	5	20
Bromobenzene	5.00	5.38		ug/L		108	80 - 130	11	20
1,1,2,2-Tetrachloroethane	5.00	5.08		ug/L		102	75 - 125	9	20
1,2,3-Trichloropropane	5.00	5.27		ug/L		105	75 - 120	6	20
N-Propylbenzene	5.00	5.54		ug/L		111	80 - 120	5	20
2-Chlorotoluene	5.00	5.26		ug/L		105	75 - 130	4	20
4-Chlorotoluene	5.00	5.27		ug/L		105	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	4.65		ug/L		93	80 - 125	5	20
tert-Butylbenzene	5.00	5.05		ug/L		101	80 - 130	8	20

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

Lab Sample ID: LCSD 580-159276/8
Matrix: Water
Analysis Batch: 159276

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
1,2,4-Trimethylbenzene			5.00	4.63		ug/L		93	80 - 125	3	20
sec-Butylbenzene			5.00	4.89		ug/L		98	80 - 125	7	20
4-Isopropyltoluene			5.00	4.80		ug/L		96	80 - 120	2	20
1,3-Dichlorobenzene			5.00	5.06		ug/L		101	80 - 120	4	20
1,4-Dichlorobenzene			5.00	4.98		ug/L		100	80 - 120	8	20
n-Butylbenzene			5.00	5.08		ug/L		102	75 - 125	5	20
1,2-Dichlorobenzene			5.00	5.06		ug/L		101	80 - 130	7	20
1,2-Dibromo-3-Chloropropane			5.00	5.90		ug/L		118	55 - 120	4	20
1,2,4-Trichlorobenzene			5.00	4.96		ug/L		99	60 - 125	10	20
Hexachlorobutadiene			5.00	4.77		ug/L		95	75 - 135	12	20
Naphthalene			5.00	4.86		ug/L		97	45 - 130	9	20
1,2,3-Trichlorobenzene			5.00	5.87		ug/L		117	60 - 125	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*106*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: MB 580-159432/6
Matrix: Water
Analysis Batch: 159432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/20/14 14:08	1
Chloromethane	ND		0.10		ug/L			05/20/14 14:08	1
Vinyl chloride	ND		0.020		ug/L			05/20/14 14:08	1
Bromomethane	ND		0.10		ug/L			05/20/14 14:08	1
Chloroethane	ND		0.25		ug/L			05/20/14 14:08	1
Trichlorofluoromethane	ND		0.10		ug/L			05/20/14 14:08	1
1,1-Dichloroethene	ND		0.10		ug/L			05/20/14 14:08	1
Methylene Chloride	ND		0.50		ug/L			05/20/14 14:08	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/20/14 14:08	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/20/14 14:08	1
1,1-Dichloroethane	ND		0.10		ug/L			05/20/14 14:08	1
2,2-Dichloropropane	ND		0.10		ug/L			05/20/14 14:08	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/20/14 14:08	1
Chlorobromomethane	ND		0.10		ug/L			05/20/14 14:08	1
Chloroform	ND		0.10		ug/L			05/20/14 14:08	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/20/14 14:08	1
Carbon tetrachloride	ND		0.10		ug/L			05/20/14 14:08	1
1,1-Dichloropropene	ND		0.10		ug/L			05/20/14 14:08	1
Benzene	ND		0.10		ug/L			05/20/14 14:08	1
1,2-Dichloroethane	ND		0.10		ug/L			05/20/14 14:08	1
Trichloroethene	ND		0.10		ug/L			05/20/14 14:08	1
1,2-Dichloropropane	ND		0.10		ug/L			05/20/14 14:08	1
Dibromomethane	ND		0.10		ug/L			05/20/14 14:08	1

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

Lab Sample ID: MB 580-159432/6
Matrix: Water
Analysis Batch: 159432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			05/20/14 14:08	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/20/14 14:08	1
Toluene	ND		0.10		ug/L			05/20/14 14:08	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/20/14 14:08	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/20/14 14:08	1
Tetrachloroethene	ND		0.10		ug/L			05/20/14 14:08	1
1,3-Dichloropropane	ND		0.10		ug/L			05/20/14 14:08	1
Chlorodibromomethane	ND		0.10		ug/L			05/20/14 14:08	1
Ethylene Dibromide	ND		0.10		ug/L			05/20/14 14:08	1
Chlorobenzene	ND		0.10		ug/L			05/20/14 14:08	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/20/14 14:08	1
Ethylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/20/14 14:08	1
o-Xylene	ND		0.10		ug/L			05/20/14 14:08	1
Styrene	ND		0.10		ug/L			05/20/14 14:08	1
Bromoform	ND		0.10		ug/L			05/20/14 14:08	1
Isopropylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
Bromobenzene	ND		0.10		ug/L			05/20/14 14:08	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/20/14 14:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/20/14 14:08	1
N-Propylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
2-Chlorotoluene	ND		0.10		ug/L			05/20/14 14:08	1
4-Chlorotoluene	ND		0.20		ug/L			05/20/14 14:08	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
tert-Butylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
sec-Butylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
4-Isopropyltoluene	ND		0.20		ug/L			05/20/14 14:08	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/20/14 14:08	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/20/14 14:08	1
n-Butylbenzene	ND		0.10		ug/L			05/20/14 14:08	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/20/14 14:08	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/20/14 14:08	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/20/14 14:08	1
Hexachlorobutadiene	ND		0.20		ug/L			05/20/14 14:08	1
Naphthalene	ND		0.40		ug/L			05/20/14 14:08	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/20/14 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*75 - 125*		*05/20/14 14:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/20/14 14:08*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*		*05/20/14 14:08*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*05/20/14 14:08*	*1*

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

Lab Sample ID: LCS 580-159432/7
Matrix: Water
Analysis Batch: 159432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.23		ug/L		85	30 - 180
Chloromethane	5.00	4.42		ug/L		88	50 - 140
Vinyl chloride	5.00	4.52		ug/L		90	65 - 140
Bromomethane	5.00	3.68		ug/L		74	70 - 135
Chloroethane	5.00	3.86		ug/L		77	75 - 140
Trichlorofluoromethane	5.00	4.79		ug/L		96	30 - 180
1,1-Dichloroethene	5.00	5.41		ug/L		108	70 - 150
Methylene Chloride	5.00	5.61		ug/L		112	60 - 145
Methyl tert-butyl ether	5.00	5.31		ug/L		106	75 - 120
trans-1,2-Dichloroethene	5.00	5.19		ug/L		104	80 - 140
1,1-Dichloroethane	5.00	5.37		ug/L		107	75 - 135
2,2-Dichloropropane	5.00	5.81		ug/L		116	60 - 150
cis-1,2-Dichloroethene	5.00	5.10		ug/L		102	80 - 130
Chlorobromomethane	5.00	5.74		ug/L		115	80 - 125
Chloroform	5.00	5.19		ug/L		104	80 - 130
1,1,1-Trichloroethane	5.00	5.60		ug/L		112	80 - 140
Carbon tetrachloride	5.00	5.74		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.25		ug/L		105	80 - 130
Benzene	5.00	5.11		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	5.13		ug/L		103	80 - 140
Trichloroethene	5.00	5.78		ug/L		116	80 - 130
1,2-Dichloropropane	5.00	5.23		ug/L		105	80 - 120
Dibromomethane	5.00	6.28		ug/L		126	80 - 130
Dichlorobromomethane	5.00	5.89		ug/L		118	80 - 125
cis-1,3-Dichloropropene	5.00	4.50		ug/L		90	70 - 120
Toluene	5.00	4.93		ug/L		99	80 - 120
trans-1,3-Dichloropropene	5.00	4.69		ug/L		94	60 - 140
1,1,2-Trichloroethane	5.00	5.35		ug/L		107	80 - 130
Tetrachloroethene	5.00	6.53		ug/L		131	40 - 180
1,3-Dichloropropane	5.00	5.32		ug/L		106	80 - 130
Chlorodibromomethane	5.00	4.84		ug/L		97	70 - 120
Ethylene Dibromide	5.00	5.58		ug/L		112	70 - 130
Chlorobenzene	5.00	5.06		ug/L		101	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.59		ug/L		92	75 - 125
Ethylbenzene	5.00	4.95		ug/L		99	80 - 125
m-Xylene & p-Xylene	5.00	5.44		ug/L		109	80 - 130
o-Xylene	5.00	5.12		ug/L		102	80 - 120
Styrene	5.00	4.84		ug/L		97	75 - 130
Bromoform	5.00	5.02		ug/L		100	65 - 130
Isopropylbenzene	5.00	4.77		ug/L		95	75 - 120
Bromobenzene	5.00	5.13		ug/L		103	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.91		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	5.45		ug/L		109	75 - 120
N-Propylbenzene	5.00	5.50		ug/L		110	80 - 120
2-Chlorotoluene	5.00	4.96		ug/L		99	75 - 130
4-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130
1,3,5-Trimethylbenzene	5.00	4.65		ug/L		93	80 - 125
tert-Butylbenzene	5.00	4.41		ug/L		88	80 - 130

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

Lab Sample ID: LCS 580-159432/7
Matrix: Water
Analysis Batch: 159432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	5.00	4.66		ug/L		93	80 - 125
sec-Butylbenzene	5.00	4.68		ug/L		94	80 - 125
4-Isopropyltoluene	5.00	4.74		ug/L		95	80 - 120
1,3-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 120
1,4-Dichlorobenzene	5.00	4.68		ug/L		94	80 - 120
n-Butylbenzene	5.00	4.61		ug/L		92	75 - 125
1,2-Dichlorobenzene	5.00	5.00		ug/L		100	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	5.69		ug/L		114	55 - 120
1,2,4-Trichlorobenzene	5.00	4.42		ug/L		88	60 - 125
Hexachlorobutadiene	5.00	4.44		ug/L		89	75 - 135
Naphthalene	5.00	4.18		ug/L		84	45 - 130
1,2,3-Trichlorobenzene	5.00	5.16		ug/L		103	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

Lab Sample ID: LCSD 580-159432/8
Matrix: Water
Analysis Batch: 159432

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
Dichlorodifluoromethane	5.00	5.10		ug/L		102	30 - 180	19	20
Chloromethane	5.00	5.23		ug/L		105	50 - 140	17	20
Vinyl chloride	5.00	5.48		ug/L		110	65 - 140	19	20
Bromomethane	5.00	4.90	*	ug/L		98	70 - 135	28	20
Chloroethane	5.00	5.38	*	ug/L		108	75 - 140	33	20
Trichlorofluoromethane	5.00	5.73		ug/L		115	30 - 180	18	20
1,1-Dichloroethene	5.00	5.14		ug/L		103	70 - 150	5	20
Methylene Chloride	5.00	5.26		ug/L		105	60 - 145	6	20
Methyl tert-butyl ether	5.00	4.91		ug/L		98	75 - 120	8	20
trans-1,2-Dichloroethene	5.00	5.10		ug/L		102	80 - 140	2	20
1,1-Dichloroethane	5.00	5.02		ug/L		100	75 - 135	7	20
2,2-Dichloropropane	5.00	5.37		ug/L		107	60 - 150	8	20
cis-1,2-Dichloroethene	5.00	4.95		ug/L		99	80 - 130	3	20
Chlorobromomethane	5.00	5.47		ug/L		109	80 - 125	5	20
Chloroform	5.00	4.95		ug/L		99	80 - 130	5	20
1,1,1-Trichloroethane	5.00	5.16		ug/L		103	80 - 140	8	20
Carbon tetrachloride	5.00	5.46		ug/L		109	75 - 140	5	20
1,1-Dichloropropene	5.00	5.05		ug/L		101	80 - 130	4	20
Benzene	5.00	5.02		ug/L		100	80 - 120	2	20
1,2-Dichloroethane	5.00	5.15		ug/L		103	80 - 140	0	20
Trichloroethene	5.00	5.53		ug/L		111	80 - 130	4	20
1,2-Dichloropropane	5.00	4.90		ug/L		98	80 - 120	7	20
Dibromomethane	5.00	5.66		ug/L		113	80 - 130	10	20
Dichlorobromomethane	5.00	5.42		ug/L		108	80 - 125	8	20

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

Lab Sample ID: LCSD 580-159432/8
Matrix: Water
Analysis Batch: 159432

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
cis-1,3-Dichloropropene			5.00	4.20		ug/L		84	70 - 120	7	20
Toluene			5.00	4.77		ug/L		95	80 - 120	3	20
trans-1,3-Dichloropropene			5.00	4.43		ug/L		89	60 - 140	6	20
1,1,2-Trichloroethane			5.00	5.02		ug/L		100	80 - 130	6	20
Tetrachloroethene			5.00	6.76		ug/L		135	40 - 180	4	20
1,3-Dichloropropane			5.00	4.88		ug/L		98	80 - 130	9	20
Chlorodibromomethane			5.00	4.62		ug/L		92	70 - 120	5	20
Ethylene Dibromide			5.00	5.21		ug/L		104	70 - 130	7	20
Chlorobenzene			5.00	4.86		ug/L		97	80 - 120	4	20
1,1,1,2-Tetrachloroethane			5.00	4.37		ug/L		87	75 - 125	5	20
Ethylbenzene			5.00	4.80		ug/L		96	80 - 125	3	20
m-Xylene & p-Xylene			5.00	4.93		ug/L		99	80 - 130	10	20
o-Xylene			5.00	4.99		ug/L		100	80 - 120	3	20
Styrene			5.00	4.62		ug/L		92	75 - 130	5	20
Bromoform			5.00	4.72		ug/L		94	65 - 130	6	20
Isopropylbenzene			5.00	4.62		ug/L		92	75 - 120	3	20
Bromobenzene			5.00	4.45		ug/L		89	80 - 130	14	20
1,1,2,2-Tetrachloroethane			5.00	4.42		ug/L		88	75 - 125	11	20
1,2,3-Trichloropropane			5.00	4.80		ug/L		96	75 - 120	13	20
N-Propylbenzene			5.00	5.04		ug/L		101	80 - 120	9	20
2-Chlorotoluene			5.00	4.64		ug/L		93	75 - 130	7	20
4-Chlorotoluene			5.00	4.31		ug/L		86	75 - 130	17	20
1,3,5-Trimethylbenzene			5.00	4.15		ug/L		83	80 - 125	11	20
tert-Butylbenzene			5.00	4.41		ug/L		88	80 - 130	0	20
1,2,4-Trimethylbenzene			5.00	4.26		ug/L		85	80 - 125	9	20
sec-Butylbenzene			5.00	4.23		ug/L		85	80 - 125	10	20
4-Isopropyltoluene			5.00	4.24		ug/L		85	80 - 120	11	20
1,3-Dichlorobenzene			5.00	4.63		ug/L		93	80 - 120	8	20
1,4-Dichlorobenzene			5.00	4.50		ug/L		90	80 - 120	4	20
n-Butylbenzene			5.00	4.33		ug/L		87	75 - 125	6	20
1,2-Dichlorobenzene			5.00	4.62		ug/L		92	80 - 130	8	20
1,2-Dibromo-3-Chloropropane			5.00	5.72		ug/L		114	55 - 120	0	20
1,2,4-Trichlorobenzene			5.00	4.14		ug/L		83	60 - 125	7	20
Hexachlorobutadiene			5.00	4.27		ug/L		85	75 - 135	4	20
Naphthalene			5.00	3.96		ug/L		79	45 - 130	6	20
1,2,3-Trichlorobenzene			5.00	4.96		ug/L		99	60 - 125	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

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

Lab Sample ID: MB 580-159486/6
Matrix: Water
Analysis Batch: 159486

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			05/21/14 08:30	1
Chloromethane	ND		0.10		ug/L			05/21/14 08:30	1
Vinyl chloride	ND		0.020		ug/L			05/21/14 08:30	1
Bromomethane	ND		0.10		ug/L			05/21/14 08:30	1
Chloroethane	ND		0.25		ug/L			05/21/14 08:30	1
Trichlorofluoromethane	ND		0.10		ug/L			05/21/14 08:30	1
1,1-Dichloroethene	ND		0.10		ug/L			05/21/14 08:30	1
Methylene Chloride	ND		0.50		ug/L			05/21/14 08:30	1
Methyl tert-butyl ether	ND		0.10		ug/L			05/21/14 08:30	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			05/21/14 08:30	1
1,1-Dichloroethane	ND		0.10		ug/L			05/21/14 08:30	1
2,2-Dichloropropane	ND		0.10		ug/L			05/21/14 08:30	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			05/21/14 08:30	1
Chlorobromomethane	ND		0.10		ug/L			05/21/14 08:30	1
Chloroform	ND		0.10		ug/L			05/21/14 08:30	1
1,1,1-Trichloroethane	ND		0.10		ug/L			05/21/14 08:30	1
Carbon tetrachloride	ND		0.10		ug/L			05/21/14 08:30	1
1,1-Dichloropropene	ND		0.10		ug/L			05/21/14 08:30	1
Benzene	ND		0.10		ug/L			05/21/14 08:30	1
1,2-Dichloroethane	ND		0.10		ug/L			05/21/14 08:30	1
Trichloroethene	ND		0.10		ug/L			05/21/14 08:30	1
1,2-Dichloropropane	ND		0.10		ug/L			05/21/14 08:30	1
Dibromomethane	ND		0.10		ug/L			05/21/14 08:30	1
Dichlorobromomethane	ND		0.10		ug/L			05/21/14 08:30	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			05/21/14 08:30	1
Toluene	ND		0.10		ug/L			05/21/14 08:30	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			05/21/14 08:30	1
1,1,2-Trichloroethane	ND		0.10		ug/L			05/21/14 08:30	1
Tetrachloroethene	ND		0.10		ug/L			05/21/14 08:30	1
1,3-Dichloropropane	ND		0.10		ug/L			05/21/14 08:30	1
Chlorodibromomethane	ND		0.10		ug/L			05/21/14 08:30	1
Ethylene Dibromide	ND		0.10		ug/L			05/21/14 08:30	1
Chlorobenzene	ND		0.10		ug/L			05/21/14 08:30	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			05/21/14 08:30	1
Ethylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
m-Xylene & p-Xylene	ND		0.20		ug/L			05/21/14 08:30	1
o-Xylene	ND		0.10		ug/L			05/21/14 08:30	1
Styrene	ND		0.10		ug/L			05/21/14 08:30	1
Bromoform	ND		0.10		ug/L			05/21/14 08:30	1
Isopropylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
Bromobenzene	ND		0.10		ug/L			05/21/14 08:30	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			05/21/14 08:30	1
1,2,3-Trichloropropane	ND		0.20		ug/L			05/21/14 08:30	1
N-Propylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
2-Chlorotoluene	ND		0.10		ug/L			05/21/14 08:30	1
4-Chlorotoluene	ND		0.20		ug/L			05/21/14 08:30	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
tert-Butylbenzene	ND		0.10		ug/L			05/21/14 08:30	1

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

Lab Sample ID: MB 580-159486/6
Matrix: Water
Analysis Batch: 159486

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
sec-Butylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
4-Isopropyltoluene	ND		0.20		ug/L			05/21/14 08:30	1
1,3-Dichlorobenzene	ND		0.20		ug/L			05/21/14 08:30	1
1,4-Dichlorobenzene	ND		0.20		ug/L			05/21/14 08:30	1
n-Butylbenzene	ND		0.10		ug/L			05/21/14 08:30	1
1,2-Dichlorobenzene	ND		0.20		ug/L			05/21/14 08:30	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			05/21/14 08:30	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			05/21/14 08:30	1
Hexachlorobutadiene	ND		0.20		ug/L			05/21/14 08:30	1
Naphthalene	ND		0.40		ug/L			05/21/14 08:30	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			05/21/14 08:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*75 - 125*		*05/21/14 08:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*05/21/14 08:30*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*05/21/14 08:30*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*05/21/14 08:30*	*1*

Lab Sample ID: LCS 580-159486/7
Matrix: Water
Analysis Batch: 159486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.29		ug/L		106	30 - 180
Chloromethane	5.00	5.58		ug/L		112	50 - 140
Vinyl chloride	5.00	5.54		ug/L		111	65 - 140
Bromomethane	5.00	5.02		ug/L		100	70 - 135
Chloroethane	5.00	5.20		ug/L		104	75 - 140
Trichlorofluoromethane	5.00	6.23		ug/L		125	30 - 180
1,1-Dichloroethene	5.00	4.96		ug/L		99	70 - 150
Methylene Chloride	5.00	5.13		ug/L		103	60 - 145
Methyl tert-butyl ether	5.00	5.07		ug/L		101	75 - 120
trans-1,2-Dichloroethene	5.00	4.98		ug/L		100	80 - 140
1,1-Dichloroethane	5.00	5.06		ug/L		101	75 - 135
2,2-Dichloropropane	5.00	5.69		ug/L		114	60 - 150
cis-1,2-Dichloroethene	5.00	4.72		ug/L		94	80 - 130
Chlorobromomethane	5.00	5.33		ug/L		107	80 - 125
Chloroform	5.00	4.96		ug/L		99	80 - 130
1,1,1-Trichloroethane	5.00	5.24		ug/L		105	80 - 140
Carbon tetrachloride	5.00	5.27		ug/L		105	75 - 140
1,1-Dichloropropene	5.00	4.81		ug/L		96	80 - 130
Benzene	5.00	4.81		ug/L		96	80 - 120
1,2-Dichloroethane	5.00	5.00		ug/L		100	80 - 140
Trichloroethene	5.00	5.27		ug/L		105	80 - 130
1,2-Dichloropropane	5.00	4.88		ug/L		98	80 - 120
Dibromomethane	5.00	5.41		ug/L		108	80 - 130
Dichlorobromomethane	5.00	5.35		ug/L		107	80 - 125

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

Lab Sample ID: LCS 580-159486/7
Matrix: Water
Analysis Batch: 159486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.06		ug/L		81	70 - 120
Toluene	5.00	4.58		ug/L		92	80 - 120
trans-1,3-Dichloropropene	5.00	4.54		ug/L		91	60 - 140
1,1,2-Trichloroethane	5.00	4.75		ug/L		95	80 - 130
Tetrachloroethene	5.00	5.22		ug/L		104	40 - 180
1,3-Dichloropropane	5.00	4.67		ug/L		93	80 - 130
Chlorodibromomethane	5.00	4.53		ug/L		91	70 - 120
Ethylene Dibromide	5.00	5.13		ug/L		103	70 - 130
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.16		ug/L		83	75 - 125
Ethylbenzene	5.00	4.69		ug/L		94	80 - 125
m-Xylene & p-Xylene	5.00	5.08		ug/L		102	80 - 130
o-Xylene	5.00	4.68		ug/L		94	80 - 120
Styrene	5.00	4.51		ug/L		90	75 - 130
Bromoform	5.00	4.65		ug/L		93	65 - 130
Isopropylbenzene	5.00	4.31		ug/L		86	75 - 120
Bromobenzene	5.00	4.48		ug/L		90	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.26		ug/L		85	75 - 125
1,2,3-Trichloropropane	5.00	4.84		ug/L		97	75 - 120
N-Propylbenzene	5.00	4.88		ug/L		98	80 - 120
2-Chlorotoluene	5.00	4.62		ug/L		92	75 - 130
4-Chlorotoluene	5.00	4.67		ug/L		93	75 - 130
1,3,5-Trimethylbenzene	5.00	4.18		ug/L		84	80 - 125
tert-Butylbenzene	5.00	4.17		ug/L		83	80 - 130
1,2,4-Trimethylbenzene	5.00	4.09		ug/L		82	80 - 125
sec-Butylbenzene	5.00	4.13		ug/L		83	80 - 125
4-Isopropyltoluene	5.00	4.14		ug/L		83	80 - 120
1,3-Dichlorobenzene	5.00	4.41		ug/L		88	80 - 120
1,4-Dichlorobenzene	5.00	4.35		ug/L		87	80 - 120
n-Butylbenzene	5.00	4.21		ug/L		84	75 - 125
1,2-Dichlorobenzene	5.00	4.34		ug/L		87	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.70		ug/L		94	55 - 120
1,2,4-Trichlorobenzene	5.00	3.87		ug/L		77	60 - 125
Hexachlorobutadiene	5.00	4.28		ug/L		86	75 - 135
Naphthalene	5.00	3.64		ug/L		73	45 - 130
1,2,3-Trichlorobenzene	5.00	4.67		ug/L		93	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*109*		*75 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

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

Lab Sample ID: LCSD 580-159486/8
Matrix: Water
Analysis Batch: 159486

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
Dichlorodifluoromethane	5.00	5.74		ug/L		115	30 - 180	8	20
Chloromethane	5.00	5.70		ug/L		114	50 - 140	2	20
Vinyl chloride	5.00	5.81		ug/L		116	65 - 140	5	20
Bromomethane	5.00	5.08		ug/L		102	70 - 135	1	20
Chloroethane	5.00	5.45		ug/L		109	75 - 140	5	20
Trichlorofluoromethane	5.00	6.34		ug/L		127	30 - 180	2	20
1,1-Dichloroethene	5.00	5.45		ug/L		109	70 - 150	9	20
Methylene Chloride	5.00	5.44		ug/L		109	60 - 145	6	20
Methyl tert-butyl ether	5.00	5.35		ug/L		107	75 - 120	5	20
trans-1,2-Dichloroethene	5.00	5.50		ug/L		110	80 - 140	10	20
1,1-Dichloroethane	5.00	5.35		ug/L		107	75 - 135	6	20
2,2-Dichloropropane	5.00	6.28		ug/L		126	60 - 150	10	20
cis-1,2-Dichloroethene	5.00	5.09		ug/L		102	80 - 130	8	20
Chlorobromomethane	5.00	5.56		ug/L		111	80 - 125	4	20
Chloroform	5.00	5.24		ug/L		105	80 - 130	5	20
1,1,1-Trichloroethane	5.00	5.55		ug/L		111	80 - 140	6	20
Carbon tetrachloride	5.00	5.74		ug/L		115	75 - 140	9	20
1,1-Dichloropropene	5.00	5.18		ug/L		104	80 - 130	7	20
Benzene	5.00	5.16		ug/L		103	80 - 120	7	20
1,2-Dichloroethane	5.00	5.09		ug/L		102	80 - 140	2	20
Trichloroethene	5.00	5.54		ug/L		111	80 - 130	5	20
1,2-Dichloropropane	5.00	5.06		ug/L		101	80 - 120	4	20
Dibromomethane	5.00	5.88		ug/L		118	80 - 130	8	20
Dichlorobromomethane	5.00	5.60		ug/L		112	80 - 125	5	20
cis-1,3-Dichloropropene	5.00	4.28		ug/L		86	70 - 120	5	20
Toluene	5.00	4.82		ug/L		96	80 - 120	5	20
trans-1,3-Dichloropropene	5.00	4.31		ug/L		86	60 - 140	5	20
1,1,2-Trichloroethane	5.00	5.08		ug/L		102	80 - 130	7	20
Tetrachloroethene	5.00	6.35		ug/L		127	40 - 180	20	20
1,3-Dichloropropane	5.00	5.04		ug/L		101	80 - 130	8	20
Chlorodibromomethane	5.00	4.84		ug/L		97	70 - 120	7	20
Ethylene Dibromide	5.00	5.54		ug/L		111	70 - 130	8	20
Chlorobenzene	5.00	4.99		ug/L		100	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	4.57		ug/L		91	75 - 125	9	20
Ethylbenzene	5.00	4.96		ug/L		99	80 - 125	6	20
m-Xylene & p-Xylene	5.00	5.16		ug/L		103	80 - 130	2	20
o-Xylene	5.00	5.10		ug/L		102	80 - 120	9	20
Styrene	5.00	4.71		ug/L		94	75 - 130	4	20
Bromoform	5.00	5.09		ug/L		102	65 - 130	9	20
Isopropylbenzene	5.00	4.81		ug/L		96	75 - 120	11	20
Bromobenzene	5.00	4.79		ug/L		96	80 - 130	7	20
1,1,2,2-Tetrachloroethane	5.00	4.61		ug/L		92	75 - 125	8	20
1,2,3-Trichloropropane	5.00	5.10		ug/L		102	75 - 120	5	20
N-Propylbenzene	5.00	5.12		ug/L		102	80 - 120	5	20
2-Chlorotoluene	5.00	4.83		ug/L		97	75 - 130	5	20
4-Chlorotoluene	5.00	5.09		ug/L		102	75 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.39		ug/L		88	80 - 125	5	20
tert-Butylbenzene	5.00	4.58		ug/L		92	80 - 130	9	20

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

Lab Sample ID: LCSD 580-159486/8
Matrix: Water
Analysis Batch: 159486

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
1,2,4-Trimethylbenzene			5.00	4.38		ug/L		88	80 - 125	7	20
sec-Butylbenzene			5.00	4.45		ug/L		89	80 - 125	7	20
4-Isopropyltoluene			5.00	4.51		ug/L		90	80 - 120	9	20
1,3-Dichlorobenzene			5.00	4.70		ug/L		94	80 - 120	6	20
1,4-Dichlorobenzene			5.00	4.64		ug/L		93	80 - 120	7	20
n-Butylbenzene			5.00	4.33		ug/L		87	75 - 125	3	20
1,2-Dichlorobenzene			5.00	4.80		ug/L		96	80 - 130	10	20
1,2-Dibromo-3-Chloropropane			5.00	5.63		ug/L		113	55 - 120	18	20
1,2,4-Trichlorobenzene			5.00	4.30		ug/L		86	60 - 125	10	20
Hexachlorobutadiene			5.00	4.18		ug/L		84	75 - 135	2	20
Naphthalene			5.00	4.21		ug/L		84	45 - 130	15	20
1,2,3-Trichlorobenzene			5.00	5.03		ug/L		101	60 - 125	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-131580/23
Matrix: Water
Analysis Batch: 131580

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			05/21/14 20:05	1
Ethane	ND		0.50		ug/L			05/21/14 20:05	1
Ethene	ND		0.50		ug/L			05/21/14 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*94*		*66 - 132*		*05/21/14 20:05*	*1*

Lab Sample ID: LCS 240-131580/24
Matrix: Water
Analysis Batch: 131580

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	129		ug/L		111	76 - 120
Ethane			218	259		ug/L		119	80 - 120
Ethene			203	231		ug/L		114	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*95*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-159170/3
Matrix: Water
Analysis Batch: 159170

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			05/15/14 12:39	1
Sulfate	ND		1.2		mg/L			05/15/14 12:39	1

Lab Sample ID: LCS 580-159170/4
Matrix: Water
Analysis Batch: 159170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	8.86		mg/L		98	90 - 110
Sulfate	12.0	12.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-159170/5
Matrix: Water
Analysis Batch: 159170

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
Chloride	9.00	8.74		mg/L		97	90 - 110	1	15
Sulfate	12.0	12.3		mg/L		102	90 - 110	0	15

Lab Sample ID: 580-43593-3 MS
Matrix: Water
Analysis Batch: 159170

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	29		9.00	37.6		mg/L		90	90 - 110
Sulfate	9.6		12.0	20.9		mg/L		94	90 - 110

Lab Sample ID: 580-43593-3 DU
Matrix: Water
Analysis Batch: 159170

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	29		28.9		mg/L		2	10
Sulfate	9.6		9.52		mg/L		0.6	10

Lab Sample ID: MB 580-159194/3
Matrix: Water
Analysis Batch: 159194

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			05/15/14 12:39	1

Lab Sample ID: LCS 580-159194/4
Matrix: Water
Analysis Batch: 159194

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.72		mg/L		96	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-159194/5
Matrix: Water
Analysis Batch: 159194

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
Nitrate as N			1.80	1.75		mg/L		97	90 - 110	2	15

Lab Sample ID: 580-43593-3 MS
Matrix: Water
Analysis Batch: 159194

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	5.3		1.80	7.28	F1	mg/L		112	90 - 110		

Lab Sample ID: 580-43593-3 DU
Matrix: Water
Analysis Batch: 159194

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate as N	5.3			5.25		mg/L				0.4	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-159823/1
Matrix: Water
Analysis Batch: 159823

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			05/27/14 20:52	1

Lab Sample ID: LCS 580-159823/2
Matrix: Water
Analysis Batch: 159823

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			15.0	13.5		mg/L		90	85 - 115		

Client Sample ID: MW-1

Lab Sample ID: 580-43593-1

Date Collected: 05/13/14 14:39

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 13:59		TAL SEA
Total/NA	Analysis	8260B	DL2	1000	159276	05/19/14 18:26		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 16:26		TAL SEA

Client Sample ID: MW-2

Lab Sample ID: 580-43593-2

Date Collected: 05/13/14 16:09

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 14:24		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 16:51		TAL SEA

Client Sample ID: MW-3

Lab Sample ID: 580-43593-3

Date Collected: 05/14/14 07:37

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159276	05/19/14 12:45		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 17:15		TAL SEA
Total/NA	Analysis	RSK-175		1	131580	05/21/14 22:44	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159170	05/15/14 17:38	RSB	TAL SEA
Total/NA	Analysis	300.0		1	159194	05/15/14 17:38	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: MW-4

Lab Sample ID: 580-43593-4

Date Collected: 05/14/14 10:15

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 14:48		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 17:40		TAL SEA

Client Sample ID: MW-8

Lab Sample ID: 580-43593-5

Date Collected: 05/14/14 11:55

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 15:12		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 18:04		TAL SEA

Client Sample ID: MW-9

Lab Sample ID: 580-43593-6

Date Collected: 05/14/14 18:27

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 15:36		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 18:29		TAL SEA
Total/NA	Analysis	RSK-175		1	131580	05/21/14 22:56	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159170	05/15/14 18:22	RSB	TAL SEA
Total/NA	Analysis	300.0		1	159194	05/15/14 18:22	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: MW-10

Lab Sample ID: 580-43593-7

Date Collected: 05/14/14 17:04

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 16:00		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 18:53		TAL SEA
Total/NA	Analysis	RSK-175		1	131580	05/21/14 23:08	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159170	05/15/14 18:36	RSB	TAL SEA
Total/NA	Analysis	300.0		1	159194	05/15/14 18:36	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: SPW-12

Lab Sample ID: 580-43593-8

Date Collected: 05/14/14 14:21

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 16:25		TAL SEA
Total/NA	Analysis	8260B	DL	1000	159432	05/20/14 18:57		TAL SEA
Total/NA	Analysis	8260B		1	159171	05/16/14 19:18		TAL SEA

Client Sample ID: SPW-13

Lab Sample ID: 580-43593-9

Date Collected: 05/14/14 13:45

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 16:49		TAL SEA

Client Sample ID: SPW-13 DUP

Lab Sample ID: 580-43593-10

Date Collected: 05/14/14 13:45

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159276	05/19/14 17:13		TAL SEA

Client Sample ID: SPW-14

Lab Sample ID: 580-43593-11

Date Collected: 05/13/14 15:16

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159432	05/20/14 19:46		TAL SEA
Total/NA	Analysis	8260B	DL2	1000	159486	05/21/14 15:55		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 12:34		TAL SEA

Client Sample ID: SPW-15

Lab Sample ID: 580-43593-12

Date Collected: 05/14/14 12:39

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	159432	05/20/14 20:11		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 12:59		TAL SEA

Client Sample ID: MW-16

Lab Sample ID: 580-43593-13

Date Collected: 05/14/14 11:09

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	159486	05/21/14 10:56		TAL SEA
Total/NA	Analysis	8260B	RA	1	159486	05/21/14 11:21		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 13:23		TAL SEA

Client Sample ID: MW-20

Lab Sample ID: 580-43593-14

Date Collected: 05/14/14 09:24

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	159432	05/20/14 20:35		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 13:48		TAL SEA
Total/NA	Analysis	RSK-175		1	131580	05/21/14 23:20	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159170	05/15/14 18:50	RSB	TAL SEA
Total/NA	Analysis	300.0		1	159194	05/15/14 18:50	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: MW-21

Lab Sample ID: 580-43593-15

Date Collected: 05/13/14 18:01

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159432	05/20/14 17:44		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 14:13		TAL SEA

Client Sample ID: MW-22

Lab Sample ID: 580-43593-16

Date Collected: 05/15/14 08:02

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	159432	05/20/14 21:00		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 14:38		TAL SEA

Client Sample ID: MW-23

Lab Sample ID: 580-43593-17

Date Collected: 05/14/14 08:27

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159432	05/20/14 18:08		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 15:03		TAL SEA
Total/NA	Analysis	RSK-175		1	131580	05/21/14 23:33	BPM	TAL CAN
Total/NA	Analysis	300.0		1	159170	05/15/14 19:05	RSB	TAL SEA
Total/NA	Analysis	300.0		5	159194	05/16/14 09:32	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: MW-24

Lab Sample ID: 580-43593-18

Date Collected: 05/13/14 17:12

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	159432	05/20/14 21:25		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 15:28		TAL SEA

Client Sample ID: MW-24 DUP

Lab Sample ID: 580-43593-19

Date Collected: 05/13/14 17:12

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	159486	05/21/14 10:32		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 15:53		TAL SEA

Client Sample ID: MW-25

Lab Sample ID: 580-43593-20

Date Collected: 05/14/14 15:52

Matrix: Water

Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159432	05/20/14 18:32		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 16:18		TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Client Sample ID: EXT-2

Lab Sample ID: 580-43593-21

Date Collected: 05/14/14 17:47
Matrix: Water
Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	1000	159432	05/20/14 19:22		TAL SEA
Total/NA	Analysis	8260B	RA	1	159486	05/21/14 11:46		TAL SEA
Total/NA	Analysis	SM 5310B		1	159823	05/27/14 20:52	IWH	TAL SEA

Client Sample ID: Equip Blank 1

Lab Sample ID: 580-43593-22

Date Collected: 05/14/14 06:50
Matrix: Water
Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159432	05/20/14 16:54		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 11:44		TAL SEA

Client Sample ID: Equip Blank 2

Lab Sample ID: 580-43593-23

Date Collected: 05/15/14 08:36
Matrix: Water
Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	159432	05/20/14 17:19		TAL SEA
Total/NA	Analysis	8260B		1	159275	05/19/14 12:09		TAL SEA

Client Sample ID: TB #353

Lab Sample ID: 580-43593-24

Date Collected: 05/13/14 00:00
Matrix: Water
Date Received: 05/15/14 13:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	159275	05/19/14 11:19		TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14 *
Georgia	State Program	4	N/A	06-30-14 *
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-14 *
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14 *
New Jersey	NELAP	2	OH001	06-30-14 *
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Wear

TestAmerica Job ID: 580-43593-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-43593-1	MW-1	Water	05/13/14 14:39	05/15/14 13:58
580-43593-2	MW-2	Water	05/13/14 16:09	05/15/14 13:58
580-43593-3	MW-3	Water	05/14/14 07:37	05/15/14 13:58
580-43593-4	MW-4	Water	05/14/14 10:15	05/15/14 13:58
580-43593-5	MW-8	Water	05/14/14 11:55	05/15/14 13:58
580-43593-6	MW-9	Water	05/14/14 18:27	05/15/14 13:58
580-43593-7	MW-10	Water	05/14/14 17:04	05/15/14 13:58
580-43593-8	SPW-12	Water	05/14/14 14:21	05/15/14 13:58
580-43593-9	SPW-13	Water	05/14/14 13:45	05/15/14 13:58
580-43593-10	SPW-13 DUP	Water	05/14/14 13:45	05/15/14 13:58
580-43593-11	SPW-14	Water	05/13/14 15:16	05/15/14 13:58
580-43593-12	SPW-15	Water	05/14/14 12:39	05/15/14 13:58
580-43593-13	MW-16	Water	05/14/14 11:09	05/15/14 13:58
580-43593-14	MW-20	Water	05/14/14 09:24	05/15/14 13:58
580-43593-15	MW-21	Water	05/13/14 18:01	05/15/14 13:58
580-43593-16	MW-22	Water	05/15/14 08:02	05/15/14 13:58
580-43593-17	MW-23	Water	05/14/14 08:27	05/15/14 13:58
580-43593-18	MW-24	Water	05/13/14 17:12	05/15/14 13:58
580-43593-19	MW-24 DUP	Water	05/13/14 17:12	05/15/14 13:58
580-43593-20	MW-25	Water	05/14/14 15:52	05/15/14 13:58
580-43593-21	EXT-2	Water	05/14/14 17:47	05/15/14 13:58
580-43593-22	Equip Blank 1	Water	05/14/14 06:50	05/15/14 13:58
580-43593-23	Equip Blank 2	Water	05/15/14 08:36	05/15/14 13:58
580-43593-24	TB #353	Water	05/13/14 00:00	05/15/14 13:58

TestAmerica Portland

9405 SW Nimbus Ave.
Beaverton, OR 97008
Phone (503) 906-9200 Fax (503) 906-9210

Chain of Custody Record

43593

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Miles	Lab PM: Allen, Kristine D	Carrier Tracking No(s):	COC No: 580-10811-4021.1
Client Contact: Jill Kiernan	Phone: 503-620-7284	E-Mail: kristine.allen@testamericainc.com		Page: Page 1 of 3 SM
Company: Hart Crowser, Inc.				Job #:
Address: 8910 SW Gemini Drive	Due Date Requested:			
City: Beaverton	TAT Requested (days): Standard TAT			
State, Zip: OR, 97008				
Phone: 503-620-7284	PO #: 17800-23			
Email: jill.kiernan@hartcrowser.com	WO #:			
Project Name: Yakima/Frank Wear	Project #: 58005577			
Site: Yakima, WA	SSOW#:			

Analysis Requested

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)	8260B_LL - (MOD) Standard List Volatile Organics	RSK_175 - MEE Only	SM5310_TOC_B - Total Organic Carbon	300.0_28D, 300_48HR	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	S	N		
-1 MW-1	5-13-14	14:39	G	Water	N		X				3	
-2 MW-2	5-13-14	16:09	G	Water	N		X				3	
-3 MW-3	5-14-14	07:37	G	Water	N		X	X	X	X	8	
-4 MW-4	5-14-14	10:15	G	Water	N		X				3	
-5 MW-8	5-14-14	11:55	G	Water	N		X				3	
-6 MW-9	5-14-14	18:27	G	Water	N		X	X	X	X	8	
-7 MW-10	5-14-14	17:04	G	Water	N		X	X	X	X	6	
-8 SPW-12	5-14-14	14:21	G	Water	N		X				3	
-9 SPW-13	5-14-14	13:45	G	Water	N		X				3	
-10 SPW-13 Dup	5-14-14	13:4[illegible]	G	Water	N		X				3	
-11 SPW-14	5-13-14	15:16	G	Water	N		X				3	

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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

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
[signature]	5-15-14 / 13:58	Hart Crowser	Tom B[signature]	5/15/14 1358	TA-Sea

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

Cooler Temperature(s) °C and Other Remarks: client drop Lg Bl/wki wet/bub IR= 5.1/5.2 %

580-43593 Chain of Custody

TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Phone (503) 906-9200 Fax (503) 906-9210

Chain of Custody Record

43593

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/30/2014

Client Information	Sampler: Jason Miles	Lab PM: Allen, Kristine D	Carrier Tracking No(s):	COC No: 580-10811-4021.2
Client Contact: Jill Kiernan	Phone: 503-620-7284	E-Mail: kristine.allen@testamericainc.com		Page: Page 2 of 4
Company: Hart Crowser, Inc.		Analysis Requested		Job #:
Address: 8910 SW Gemini Drive	Due Date 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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Beaverton	TAT Requested (days): Standard TAT			
State, Zip: OR, 97008				
Phone: 503-620-7284	PO #: 17800-23			Other:
Email: jill.kiernan@hartcrowser.com	WO #:			
Project Name: Yakima/Frank Wear	Project #: 58005577			
Site: Yakima, WA	SSOW#:			

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)	8260B_LL - (MOD) Standard List Volatile Organics	RSK_175 - MEE Only	SM5310_TOC_B - Total Organic Carbon	300.0_28D, 300_48HR	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	S	N		
-12 SPW-15	5-14-14	12:39	G	Water	N		X				3	
-13 MW-16	5-14-14	11:09	G	Water	N		X				3	
-14 MW-20	5-14-14	09:24	G	Water	N		X	X	X	X	6	
-15 MW-21	5-13-14	18:01	G	Water	N		X				3	
-16 MW-22	5-15-14	08:02	G	Water	N		X				3	
-17 MW-23	5-14-14	08:27	G	Water	N		X	X	X	X	6	
-18 MW-24	5-13-14	17:12	G	Water	N		X				3	
-19 MW-24 Dup	5-13-14	17:12	G	Water	N		X				3	
-20 MW-25	5-14-14	15:52	G	Water	N		X				3	
-21 EXT-2	5-14-14	17:47	G	Water	N		X		X		2	
-22 Equip Blank 1	5-14-14	06:50	G	Water	N		X				3	

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
[signature]	5-15-14 / 13:58	Hart Crowser	Tom [signature]	5/15/14 1358	TA-Sea
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Phone (503) 906-9200 Fax (503) 906-9210

Chain of Custody Record

43593

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/30/2014

Client Information	Sampler: Jason Miles	Lab PM: Allen, Kristine D	Carrier Tracking No(s):	COC No: 580-10811-4021.3
Client Contact: Jill Kiernan	Phone: 503-620-7284	E-Mail: kristine.allen@testamericainc.com		Page: TM3 Page 3 of 4
Company: Hart Crowser, Inc.				Job #:
Address: 8910 SW Gemini Drive	Due Date Requested:			
City: Beaverton	TAT Requested (days): Standard TAT			
State, Zip: OR, 97008				
Phone: 503-620-7284	PO #: 17800-23			
Email: jill.kiernan@hartcrowser.com	WO #:			
Project Name: Yakima/Frank Wear	Project #: 58005577			
Site: Yakima, WA	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 - Na2S2SO3
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)	8260B_LL - (MOD) Standard List Volatile Organics	RSK_175 - MEE Only	SM5310_TOC_B - Total Organic Carbon	300.0_28D, 300_48HR	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	S	N		
-23 Equip Blank 2	5-15-14	0836	G	Water			X				3	
-24 TB#353	3-27-14	—	G	Water			X				1	
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

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: 5-15-14 13:58	Company Hart Crowser	Received by:	Date/Time: 5/15/14 1358	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

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

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-43593-1

Login Number: 43593

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-44465-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
7/29/2014 5:56:10 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-44465-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 7/15/2014 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 164390 recovered above the upper control limit for 1,1,1-Trichloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 580-164390/3).

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 164390 recovered outside control limits for the following analytes: Isopropylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Analytical Batch: 164390: The following analyte: N-Propylbenzene recovered outside control limits for the LCSD associated with batch 164390. This is not indicative of a systematic control problem because these were random marginal exceedances. The SOP allows for 3 marginal exceedances when running a compound list of 51-70 compounds. The target analyte was within marginal exceedance limits. Qualified results have been reported.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: EXT-2 (580-44465-1). 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.

General Chemistry

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

Definitions/Glossary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
*	LCS or LCSD exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Client Sample ID: EXT-2
Date Collected: 07/14/14 09:30
Date Received: 07/15/14 09:30

Lab Sample ID: 580-44465-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			07/21/14 01:21	1
Chloromethane	ND		0.10		ug/L			07/21/14 01:21	1
Vinyl chloride	**0.24**		0.020		ug/L			07/21/14 01:21	1
Bromomethane	ND		0.10		ug/L			07/21/14 01:21	1
Chloroethane	ND		0.25		ug/L			07/21/14 01:21	1
Trichlorofluoromethane	ND		0.10		ug/L			07/21/14 01:21	1
1,1-Dichloroethene	**2.3**		0.10		ug/L			07/21/14 01:21	1
Methylene Chloride	ND		0.50		ug/L			07/21/14 01:21	1
Methyl tert-butyl ether	ND		0.10		ug/L			07/21/14 01:21	1
trans-1,2-Dichloroethene	**13**		0.10		ug/L			07/21/14 01:21	1
1,1-Dichloroethane	ND		0.10		ug/L			07/21/14 01:21	1
2,2-Dichloropropane	ND		0.10		ug/L			07/21/14 01:21	1
Chlorobromomethane	ND		0.10		ug/L			07/21/14 01:21	1
Chloroform	**3.2**		0.10		ug/L			07/21/14 01:21	1
1,1,1-Trichloroethane	**38**	^	0.10		ug/L			07/21/14 01:21	1
Carbon tetrachloride	ND		0.10		ug/L			07/21/14 01:21	1
1,1-Dichloropropene	ND		0.10		ug/L			07/21/14 01:21	1
Benzene	ND		0.10		ug/L			07/21/14 01:21	1
1,2-Dichloroethane	ND		0.10		ug/L			07/21/14 01:21	1
1,2-Dichloropropane	ND		0.10		ug/L			07/21/14 01:21	1
Dibromomethane	ND		0.10		ug/L			07/21/14 01:21	1
Dichlorobromomethane	ND		0.10		ug/L			07/21/14 01:21	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			07/21/14 01:21	1
Toluene	**1.1**		0.10		ug/L			07/21/14 01:21	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			07/21/14 01:21	1
1,1,2-Trichloroethane	ND		0.10		ug/L			07/21/14 01:21	1
1,3-Dichloropropane	ND		0.10		ug/L			07/21/14 01:21	1
Chlorodibromomethane	ND		0.10		ug/L			07/21/14 01:21	1
Ethylene Dibromide	ND		0.10		ug/L			07/21/14 01:21	1
Chlorobenzene	**1.2**		0.10		ug/L			07/21/14 01:21	1
1,1,1,2-Tetrachloroethane	**10**		0.10		ug/L			07/21/14 01:21	1
Ethylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
m-Xylene & p-Xylene	ND		0.20		ug/L			07/21/14 01:21	1
o-Xylene	ND		0.10		ug/L			07/21/14 01:21	1
Styrene	ND		0.10		ug/L			07/21/14 01:21	1
Bromoform	ND		0.10		ug/L			07/21/14 01:21	1
Isopropylbenzene	ND	*	0.10		ug/L			07/21/14 01:21	1
Bromobenzene	ND		0.10		ug/L			07/21/14 01:21	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			07/21/14 01:21	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/21/14 01:21	1
N-Propylbenzene	**0.66**	*	0.10		ug/L			07/21/14 01:21	1
2-Chlorotoluene	ND		0.10		ug/L			07/21/14 01:21	1
4-Chlorotoluene	ND		0.20		ug/L			07/21/14 01:21	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
tert-Butylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
sec-Butylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
4-Isopropyltoluene	ND		0.20		ug/L			07/21/14 01:21	1
1,3-Dichlorobenzene	ND		0.20		ug/L			07/21/14 01:21	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Client Sample ID: EXT-2
Date Collected: 07/14/14 09:30
Date Received: 07/15/14 09:30

Lab Sample ID: 580-44465-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			07/21/14 01:21	1
n-Butylbenzene	ND		0.10		ug/L			07/21/14 01:21	1
1,2-Dichlorobenzene	**1.6**		0.20		ug/L			07/21/14 01:21	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			07/21/14 01:21	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			07/21/14 01:21	1
Hexachlorobutadiene	ND		0.20		ug/L			07/21/14 01:21	1
Naphthalene	ND		0.40		ug/L			07/21/14 01:21	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			07/21/14 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*109*		*80 - 127*		*07/21/14 01:21*	*1*
Toluene-d8 (Surr)	*120*		*75 - 125*		*07/21/14 01:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*07/21/14 01:21*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 120*		*07/21/14 01:21*	*1*
Dibromofluoromethane (Surr)	*110*		*85 - 115*		*07/21/14 01:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**62000**		100		ug/L			07/24/14 15:38	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*07/24/14 15:38*	*1000*
Toluene-d8 (Surr)	*98*		*75 - 125*		*07/24/14 15:38*	*1000*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*07/24/14 15:38*	*1000*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*07/24/14 15:38*	*1000*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*07/24/14 15:38*	*1000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**710**		10		ug/L			07/24/14 16:03	100
1,1,1-Trichloroethane	**26**		10		ug/L			07/24/14 16:03	100
Trichloroethene	**130**		10		ug/L			07/24/14 16:03	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*94*		*80 - 127*		*07/24/14 16:03*	*100*
Toluene-d8 (Surr)	*97*		*75 - 125*		*07/24/14 16:03*	*100*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*07/24/14 16:03*	*100*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*07/24/14 16:03*	*100*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*07/24/14 16:03*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.6**		1.0		mg/L			07/16/14 08:48	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-164390/6
Matrix: Water
Analysis Batch: 164390

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			07/20/14 18:47	1
Chloromethane	ND		0.10		ug/L			07/20/14 18:47	1
Vinyl chloride	ND		0.020		ug/L			07/20/14 18:47	1
Bromomethane	ND		0.10		ug/L			07/20/14 18:47	1
Chloroethane	ND		0.25		ug/L			07/20/14 18:47	1
Trichlorofluoromethane	ND		0.10		ug/L			07/20/14 18:47	1
1,1-Dichloroethene	ND		0.10		ug/L			07/20/14 18:47	1
Methylene Chloride	ND		0.50		ug/L			07/20/14 18:47	1
Methyl tert-butyl ether	ND		0.10		ug/L			07/20/14 18:47	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			07/20/14 18:47	1
1,1-Dichloroethane	ND		0.10		ug/L			07/20/14 18:47	1
2,2-Dichloropropane	ND		0.10		ug/L			07/20/14 18:47	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			07/20/14 18:47	1
Chlorobromomethane	ND		0.10		ug/L			07/20/14 18:47	1
Chloroform	ND		0.10		ug/L			07/20/14 18:47	1
1,1,1-Trichloroethane	ND	^	0.10		ug/L			07/20/14 18:47	1
Carbon tetrachloride	ND		0.10		ug/L			07/20/14 18:47	1
1,1-Dichloropropene	ND		0.10		ug/L			07/20/14 18:47	1
Benzene	ND		0.10		ug/L			07/20/14 18:47	1
1,2-Dichloroethane	ND		0.10		ug/L			07/20/14 18:47	1
Trichloroethene	ND		0.10		ug/L			07/20/14 18:47	1
1,2-Dichloropropane	ND		0.10		ug/L			07/20/14 18:47	1
Dibromomethane	ND		0.10		ug/L			07/20/14 18:47	1
Dichlorobromomethane	ND		0.10		ug/L			07/20/14 18:47	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			07/20/14 18:47	1
Toluene	ND		0.10		ug/L			07/20/14 18:47	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			07/20/14 18:47	1
1,1,2-Trichloroethane	ND		0.10		ug/L			07/20/14 18:47	1
Tetrachloroethene	ND		0.10		ug/L			07/20/14 18:47	1
1,3-Dichloropropane	ND		0.10		ug/L			07/20/14 18:47	1
Chlorodibromomethane	ND		0.10		ug/L			07/20/14 18:47	1
Ethylene Dibromide	ND		0.10		ug/L			07/20/14 18:47	1
Chlorobenzene	ND		0.10		ug/L			07/20/14 18:47	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			07/20/14 18:47	1
Ethylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
m-Xylene & p-Xylene	ND		0.20		ug/L			07/20/14 18:47	1
o-Xylene	ND		0.10		ug/L			07/20/14 18:47	1
Styrene	ND		0.10		ug/L			07/20/14 18:47	1
Bromoform	ND		0.10		ug/L			07/20/14 18:47	1
Isopropylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
Bromobenzene	ND		0.10		ug/L			07/20/14 18:47	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			07/20/14 18:47	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/20/14 18:47	1
N-Propylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
2-Chlorotoluene	ND		0.10		ug/L			07/20/14 18:47	1
4-Chlorotoluene	ND		0.20		ug/L			07/20/14 18:47	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
tert-Butylbenzene	ND		0.10		ug/L			07/20/14 18:47	1

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

Lab Sample ID: MB 580-164390/6
Matrix: Water
Analysis Batch: 164390

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
sec-Butylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
4-Isopropyltoluene	ND		0.20		ug/L			07/20/14 18:47	1
1,3-Dichlorobenzene	ND		0.20		ug/L			07/20/14 18:47	1
1,4-Dichlorobenzene	ND		0.20		ug/L			07/20/14 18:47	1
n-Butylbenzene	ND		0.10		ug/L			07/20/14 18:47	1
1,2-Dichlorobenzene	ND		0.20		ug/L			07/20/14 18:47	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			07/20/14 18:47	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			07/20/14 18:47	1
Hexachlorobutadiene	ND		0.20		ug/L			07/20/14 18:47	1
Naphthalene	ND		0.40		ug/L			07/20/14 18:47	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			07/20/14 18:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*07/20/14 18:47*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*07/20/14 18:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*07/20/14 18:47*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*07/20/14 18:47*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*07/20/14 18:47*	*1*

Lab Sample ID: LCS 580-164390/7
Matrix: Water
Analysis Batch: 164390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.42		ug/L		128	30 - 180
Chloromethane	5.00	6.02		ug/L		121	50 - 140
Vinyl chloride	5.00	5.75		ug/L		115	65 - 140
Bromomethane	5.00	5.80		ug/L		116	70 - 135
Chloroethane	5.00	6.24		ug/L		125	75 - 140
Trichlorofluoromethane	5.00	5.76		ug/L		115	30 - 180
1,1-Dichloroethene	5.00	5.57		ug/L		111	70 - 150
Methylene Chloride	5.00	5.58		ug/L		112	60 - 145
Methyl tert-butyl ether	5.00	5.31		ug/L		106	75 - 120
trans-1,2-Dichloroethene	5.00	5.60		ug/L		112	80 - 140
1,1-Dichloroethane	5.00	5.55		ug/L		111	75 - 135
2,2-Dichloropropane	5.00	6.38		ug/L		128	60 - 150
cis-1,2-Dichloroethene	5.00	5.25		ug/L		105	80 - 130
Chlorobromomethane	5.00	5.52		ug/L		110	80 - 125
Chloroform	5.00	6.12		ug/L		122	80 - 130
1,1,1-Trichloroethane	5.00	6.68	^	ug/L		134	80 - 140
Carbon tetrachloride	5.00	6.48		ug/L		130	75 - 140
1,1-Dichloropropene	5.00	5.37		ug/L		107	80 - 130
Benzene	5.00	5.30		ug/L		106	80 - 120
1,2-Dichloroethane	5.00	5.59		ug/L		112	80 - 140
Trichloroethene	5.00	5.76		ug/L		115	80 - 130
1,2-Dichloropropane	5.00	5.53		ug/L		111	80 - 120
Dibromomethane	5.00	5.48		ug/L		110	80 - 130

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

Lab Sample ID: LCS 580-164390/7
Matrix: Water
Analysis Batch: 164390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	6.02		ug/L		120	80 - 125
cis-1,3-Dichloropropene	5.00	5.68		ug/L		114	70 - 120
Toluene	5.00	5.46		ug/L		109	80 - 120
trans-1,3-Dichloropropene	5.00	6.29		ug/L		126	60 - 140
1,1,2-Trichloroethane	5.00	5.30		ug/L		106	80 - 130
Tetrachloroethene	5.00	6.77		ug/L		135	40 - 180
1,3-Dichloropropane	5.00	5.41		ug/L		108	80 - 130
Chlorodibromomethane	5.00	5.85		ug/L		117	70 - 120
Ethylene Dibromide	5.00	5.35		ug/L		107	70 - 130
Chlorobenzene	5.00	5.31		ug/L		106	80 - 120
1,1,1,2-Tetrachloroethane	5.00	6.02		ug/L		120	75 - 125
Ethylbenzene	5.00	5.54		ug/L		111	80 - 125
m-Xylene & p-Xylene	5.00	5.87		ug/L		117	80 - 130
o-Xylene	5.00	5.77		ug/L		115	80 - 120
Styrene	5.00	6.03		ug/L		121	75 - 130
Bromoform	5.00	5.82		ug/L		116	65 - 130
Isopropylbenzene	5.00	6.04	*	ug/L		121	75 - 120
Bromobenzene	5.00	5.24		ug/L		105	80 - 130
1,1,2,2-Tetrachloroethane	5.00	5.72		ug/L		114	75 - 125
1,2,3-Trichloropropane	5.00	5.47		ug/L		109	75 - 120
N-Propylbenzene	5.00	5.94		ug/L		119	80 - 120
2-Chlorotoluene	5.00	5.47		ug/L		109	75 - 130
4-Chlorotoluene	5.00	5.78		ug/L		116	75 - 130
1,3,5-Trimethylbenzene	5.00	5.98		ug/L		120	80 - 125
tert-Butylbenzene	5.00	5.63		ug/L		113	80 - 130
1,2,4-Trimethylbenzene	5.00	6.02		ug/L		120	80 - 125
sec-Butylbenzene	5.00	5.25		ug/L		105	80 - 125
4-Isopropyltoluene	5.00	5.40		ug/L		108	80 - 120
1,3-Dichlorobenzene	5.00	5.36		ug/L		107	80 - 120
1,4-Dichlorobenzene	5.00	5.36		ug/L		107	80 - 120
n-Butylbenzene	5.00	4.99		ug/L		100	75 - 125
1,2-Dichlorobenzene	5.00	5.17		ug/L		103	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	5.61		ug/L		112	55 - 120
1,2,4-Trichlorobenzene	5.00	5.01		ug/L		100	60 - 125
Hexachlorobutadiene	5.00	5.41		ug/L		108	75 - 135
Naphthalene	5.00	4.51		ug/L		90	45 - 130
1,2,3-Trichlorobenzene	5.00	4.61		ug/L		92	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*105*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*106*		*75 - 120*
Dibromofluoromethane (Surr)	*107*		*85 - 115*

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

Lab Sample ID: LCSD 580-164390/8
Matrix: Water
Analysis Batch: 164390

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
Dichlorodifluoromethane	5.00	6.61		ug/L		132	30 - 180	3	20
Chloromethane	5.00	5.90		ug/L		118	50 - 140	2	20
Vinyl chloride	5.00	5.85		ug/L		117	65 - 140	2	20
Bromomethane	5.00	5.70		ug/L		114	70 - 135	2	20
Chloroethane	5.00	6.71		ug/L		134	75 - 140	7	20
Trichlorofluoromethane	5.00	5.83		ug/L		117	30 - 180	1	20
1,1-Dichloroethene	5.00	5.41		ug/L		108	70 - 150	3	20
Methylene Chloride	5.00	5.54		ug/L		111	60 - 145	1	20
Methyl tert-butyl ether	5.00	5.15		ug/L		103	75 - 120	3	20
trans-1,2-Dichloroethene	5.00	5.57		ug/L		111	80 - 140	1	20
1,1-Dichloroethane	5.00	5.47		ug/L		109	75 - 135	2	20
2,2-Dichloropropane	5.00	5.85		ug/L		117	60 - 150	9	20
cis-1,2-Dichloroethene	5.00	5.37		ug/L		107	80 - 130	2	20
Chlorobromomethane	5.00	5.17		ug/L		103	80 - 125	7	20
Chloroform	5.00	5.93		ug/L		119	80 - 130	3	20
1,1,1-Trichloroethane	5.00	6.43	^	ug/L		129	80 - 140	4	20
Carbon tetrachloride	5.00	6.29		ug/L		126	75 - 140	3	20
1,1-Dichloropropene	5.00	5.33		ug/L		107	80 - 130	1	20
Benzene	5.00	5.33		ug/L		107	80 - 120	1	20
1,2-Dichloroethane	5.00	5.77		ug/L		115	80 - 140	3	20
Trichloroethene	5.00	5.34		ug/L		107	80 - 130	7	20
1,2-Dichloropropane	5.00	5.48		ug/L		110	80 - 120	1	20
Dibromomethane	5.00	5.24		ug/L		105	80 - 130	4	20
Dichlorobromomethane	5.00	5.63		ug/L		113	80 - 125	7	20
cis-1,3-Dichloropropene	5.00	5.18		ug/L		104	70 - 120	9	20
Toluene	5.00	5.36		ug/L		107	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	6.27		ug/L		125	60 - 140	0	20
1,1,2-Trichloroethane	5.00	5.32		ug/L		106	80 - 130	0	20
Tetrachloroethene	5.00	6.53		ug/L		131	40 - 180	4	20
1,3-Dichloropropane	5.00	5.41		ug/L		108	80 - 130	0	20
Chlorodibromomethane	5.00	5.64		ug/L		113	70 - 120	4	20
Ethylene Dibromide	5.00	5.28		ug/L		106	70 - 130	1	20
Chlorobenzene	5.00	5.46		ug/L		109	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	5.52		ug/L		110	75 - 125	9	20
Ethylbenzene	5.00	5.73		ug/L		115	80 - 125	3	20
m-Xylene & p-Xylene	5.00	5.69		ug/L		114	80 - 130	3	20
o-Xylene	5.00	5.91		ug/L		118	80 - 120	2	20
Styrene	5.00	6.30		ug/L		126	75 - 130	4	20
Bromoform	5.00	5.15		ug/L		103	65 - 130	12	20
Isopropylbenzene	5.00	6.22	*	ug/L		124	75 - 120	3	20
Bromobenzene	5.00	5.26		ug/L		105	80 - 130	0	20
1,1,2,2-Tetrachloroethane	5.00	5.55		ug/L		111	75 - 125	3	20
1,2,3-Trichloropropane	5.00	5.08		ug/L		102	75 - 120	7	20
N-Propylbenzene	5.00	6.10	*	ug/L		122	80 - 120	3	20
2-Chlorotoluene	5.00	5.54		ug/L		111	75 - 130	1	20
4-Chlorotoluene	5.00	5.58		ug/L		112	75 - 130	4	20
1,3,5-Trimethylbenzene	5.00	6.11		ug/L		122	80 - 125	2	20
tert-Butylbenzene	5.00	6.09		ug/L		122	80 - 130	8	20

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

Lab Sample ID: LCSD 580-164390/8
Matrix: Water
Analysis Batch: 164390

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
1,2,4-Trimethylbenzene	5.00	5.87		ug/L		117	80 - 125	2	20
sec-Butylbenzene	5.00	5.31		ug/L		106	80 - 125	1	20
4-Isopropyltoluene	5.00	5.48		ug/L		110	80 - 120	1	20
1,3-Dichlorobenzene	5.00	5.42		ug/L		108	80 - 120	1	20
1,4-Dichlorobenzene	5.00	5.26		ug/L		105	80 - 120	2	20
n-Butylbenzene	5.00	5.06		ug/L		101	75 - 125	1	20
1,2-Dichlorobenzene	5.00	5.20		ug/L		104	80 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	5.03		ug/L		101	55 - 120	11	20
1,2,4-Trichlorobenzene	5.00	4.86		ug/L		97	60 - 125	3	20
Hexachlorobutadiene	5.00	5.68		ug/L		114	75 - 135	5	20
Naphthalene	5.00	4.29		ug/L		86	45 - 130	5	20
1,2,3-Trichlorobenzene	5.00	4.72		ug/L		94	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*104*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

Lab Sample ID: MB 580-164813/6
Matrix: Water
Analysis Batch: 164813

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.10		ug/L			07/24/14 12:48	1
1,1,1-Trichloroethane	ND		0.10		ug/L			07/24/14 12:48	1
Trichloroethene	ND		0.10		ug/L			07/24/14 12:48	1
Tetrachloroethene	ND		0.10		ug/L			07/24/14 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*07/24/14 12:48*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*07/24/14 12:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 128*		*07/24/14 12:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*07/24/14 12:48*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*07/24/14 12:48*	*1*

Lab Sample ID: LCS 580-164813/7
Matrix: Water
Analysis Batch: 164813

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	5.00	5.87		ug/L		117	80 - 130
1,1,1-Trichloroethane	5.00	6.59		ug/L		132	80 - 140
Trichloroethene	5.00	5.59		ug/L		112	80 - 130
Tetrachloroethene	5.00	7.05		ug/L		141	40 - 180

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

Lab Sample ID: LCS 580-164813/7
Matrix: Water
Analysis Batch: 164813

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*102*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*
Dibromofluoromethane (Surr)	*110*		*85 - 115*

Lab Sample ID: LCSD 580-164813/8
Matrix: Water
Analysis Batch: 164813

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
cis-1,2-Dichloroethene			5.00	5.76		ug/L		115	80 - 130	2	20
1,1,1-Trichloroethane			5.00	6.70		ug/L		134	80 - 140	2	20
Trichloroethene			5.00	5.74		ug/L		115	80 - 130	3	20
Tetrachloroethene			5.00	6.97		ug/L		139	40 - 180	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Trifluorotoluene (Surr)	*94*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*
Dibromofluoromethane (Surr)	*111*		*85 - 115*

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-164116/1
Matrix: Water
Analysis Batch: 164116

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			07/16/14 08:48	1

Lab Sample ID: LCS 580-164116/2
Matrix: Water
Analysis Batch: 164116

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			15.0	15.5		mg/L		103	85 - 115

Lab Sample ID: 580-44465-1 MS
Matrix: Water
Analysis Batch: 164116

Client Sample ID: EXT-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.6		10.0	11.3		mg/L		97	85 - 115

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 580-44465-1 MSD
Matrix: Water
Analysis Batch: 164116

Client Sample ID: EXT-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.6		10.0	11.4		mg/L		98	85 - 115	1	20

Lab Sample ID: 580-44465-1 DU
Matrix: Water
Analysis Batch: 164116

Client Sample ID: EXT-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	1.6			1.31		mg/L				23	20

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Client Sample ID: EXT-2
Date Collected: 07/14/14 09:30
Date Received: 07/15/14 09:30

Lab Sample ID: 580-44465-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	164390	07/21/14 01:21	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	164813	07/24/14 15:38	AS	TAL SEA
Total/NA	Analysis	8260B	DL2	100	164813	07/24/14 16:03	AS	TAL SEA
Total/NA	Analysis	SM 5310B		1	164116	07/16/14 08:48	RSB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-44465-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-44465-1	EXT-2	Water	07/14/14 09:30	07/15/14 09:30

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

44465

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager: Jill Kiernan	Site Contact: Jason Miles	Date: 7/14/2014	COC No:
Your Company Name here: Hart Crowser	Tel/Fax:	Lab Contact: Kris Allen	Carrier: Fed Ex	____ of ____ COCs
Address: 8910 Gemini Drive	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Beaverton / OR / 97008	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503-620-7284	TAT if different from Below ____			Lab Sampling:
(xxx) xxx-xxxx FAX: 503-620-6918	☐ 2 weeks			Job / SDG No.:
Project Name: Frank Waer	☐ 1 week			
Site: Yakima, WA	☐ 2 days			Sampler:
P O # 17800-23 / T-9	☐ 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)	VOCs 8260	TOC	Sample Specific Notes:
EXT-2	7/14/14	09:30	G		H	N		X	X	

580-44465 Chain of Custody

Cooler/TB Dig/IR cor 5.6 unc 5.6 5.1g
Cooler Dsc SM. Ice/Wet Lab 930
Wet Packs Packing Bubble
FedEX

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: ____ Corr'd: ____ | Therm ID No.: ____

	Company	Date/Time		Company	Date/Time
Relinquished by: Kaylan Brewster	HC	7/14/14 14:30	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 7/15/14 9:30

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-44465-1

Login Number: 44465

List Source: TestAmerica Seattle

List Number: 1

Creator: Kim, Guerry

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-20409-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Vanessa Berry

Authorized for release by:
7/31/2014 11:05:36 AM

Vanessa Berry, Project Manager II
(503)906-9233
vanessa.berry@testamericainc.com

Table of Contents

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-20409-1	Ext-1	Water	07/24/14 18:06	07/25/14 07:30
250-20409-2	Ext-2	Water	07/24/14 18:15	07/25/14 07:30
250-20409-3	Ext-3	Water	07/24/14 18:20	07/25/14 07:30
250-20409-4	Ext-4	Water	07/24/14 18:24	07/25/14 07:30
250-20409-5	Trip Blank	Water	07/24/14 00:00	07/25/14 07:30

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Job ID: 250-20409-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-20409-1

Comments
No additional comments.

Receipt
The samples were received on 7/25/2014 7:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

Except:

A trip blank was not submitted for analysis with the sample shipment and was not listed on the Chain of Custody (COC). Per client request Trip Blank was analyzed for 8260 analysis.

GC/MS VOA
Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 29090 recovered outside control limits for the following analytes: Acetone. No acetone was detected in samples.

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.

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

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Ext-1
Date Collected: 07/24/14 18:06
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	1300		ug/L			07/29/14 14:42	50
Benzene	ND		10		ug/L			07/29/14 14:42	50
Bromobenzene	ND		25		ug/L			07/29/14 14:42	50
Bromochloromethane	ND		25		ug/L			07/29/14 14:42	50
Bromodichloromethane	ND		25		ug/L			07/29/14 14:42	50
Bromoform	ND		50		ug/L			07/29/14 14:42	50
Bromomethane	ND		250		ug/L			07/29/14 14:42	50
2-Butanone (MEK)	ND		500		ug/L			07/29/14 14:42	50
n-Butylbenzene	ND		250		ug/L			07/29/14 14:42	50
sec-Butylbenzene	ND		25		ug/L			07/29/14 14:42	50
tert-Butylbenzene	ND		50		ug/L			07/29/14 14:42	50
Carbon disulfide	ND		500		ug/L			07/29/14 14:42	50
Carbon tetrachloride	ND		25		ug/L			07/29/14 14:42	50
Chlorobenzene	ND		25		ug/L			07/29/14 14:42	50
Chloroethane	ND		25		ug/L			07/29/14 14:42	50
Chloroform	ND		25		ug/L			07/29/14 14:42	50
Chloromethane	ND		250		ug/L			07/29/14 14:42	50
2-Chlorotoluene	ND		25		ug/L			07/29/14 14:42	50
4-Chlorotoluene	ND		25		ug/L			07/29/14 14:42	50
1,2-Dibromo-3-Chloropropane	ND		250		ug/L			07/29/14 14:42	50
Dibromochloromethane	ND		50		ug/L			07/29/14 14:42	50
1,2-Dibromoethane	ND		25		ug/L			07/29/14 14:42	50
Dibromomethane	ND		25		ug/L			07/29/14 14:42	50
1,2-Dichloroethane	ND		25		ug/L			07/29/14 14:42	50
1,3-Dichlorobenzene	ND		25		ug/L			07/29/14 14:42	50
1,4-Dichlorobenzene	ND		25		ug/L			07/29/14 14:42	50
Dichlorodifluoromethane	ND		250		ug/L			07/29/14 14:42	50
1,1-Dichloroethane	ND		25		ug/L			07/29/14 14:42	50
1,1-Dichloroethene	ND		25		ug/L			07/29/14 14:42	50
cis-1,2-Dichloroethene	**550**		25		ug/L			07/29/14 14:42	50
trans-1,2-Dichloroethene	ND		25		ug/L			07/29/14 14:42	50
1,2-Dichloropropane	ND		25		ug/L			07/29/14 14:42	50
1,3-Dichloropropane	ND		25		ug/L			07/29/14 14:42	50
2,2-Dichloropropane	ND		25		ug/L			07/29/14 14:42	50
1,1-Dichloropropene	ND		50		ug/L			07/29/14 14:42	50
cis-1,3-Dichloropropene	ND		25		ug/L			07/29/14 14:42	50
trans-1,3-Dichloropropene	ND		25		ug/L			07/29/14 14:42	50
Ethylbenzene	ND		25		ug/L			07/29/14 14:42	50
Hexachlorobutadiene	ND		200		ug/L			07/29/14 14:42	50
2-Hexanone	ND		500		ug/L			07/29/14 14:42	50
Isopropylbenzene	ND		100		ug/L			07/29/14 14:42	50
p-Isopropyltoluene	ND		100		ug/L			07/29/14 14:42	50
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			07/29/14 14:42	50
Methyl tert-butyl ether	ND		50		ug/L			07/29/14 14:42	50
Methylene Chloride	ND		250		ug/L			07/29/14 14:42	50
Naphthalene	ND		100		ug/L			07/29/14 14:42	50
N-Propylbenzene	ND		25		ug/L			07/29/14 14:42	50
Styrene	ND		25		ug/L			07/29/14 14:42	50
1,1,1,2-Tetrachloroethane	ND		25		ug/L			07/29/14 14:42	50

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

Client Sample ID: Ext-1
Date Collected: 07/24/14 18:06
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		25		ug/L			07/29/14 14:42	50
Tetrachloroethene	**880**		25		ug/L			07/29/14 14:42	50
Toluene	ND		25		ug/L			07/29/14 14:42	50
1,2,3-Trichlorobenzene	ND		50		ug/L			07/29/14 14:42	50
1,2,4-Trichlorobenzene	ND		50		ug/L			07/29/14 14:42	50
1,1,1-Trichloroethane	ND		25		ug/L			07/29/14 14:42	50
1,1,2-Trichloroethane	ND		25		ug/L			07/29/14 14:42	50
Trichloroethene	**270**		25		ug/L			07/29/14 14:42	50
Trichlorofluoromethane	ND		25		ug/L			07/29/14 14:42	50
1,2,3-Trichloropropane	ND		25		ug/L			07/29/14 14:42	50
1,2,4-Trimethylbenzene	ND		50		ug/L			07/29/14 14:42	50
1,3,5-Trimethylbenzene	ND		25		ug/L			07/29/14 14:42	50
Vinyl chloride	ND		25		ug/L			07/29/14 14:42	50
m,p-Xylene	ND		50		ug/L			07/29/14 14:42	50
o-Xylene	ND		25		ug/L			07/29/14 14:42	50
1,2-Dichlorobenzene	ND		25		ug/L			07/29/14 14:42	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*07/29/14 14:42*	*50*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/29/14 14:42*	*50*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*07/29/14 14:42*	*50*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/29/14 14:42*	*50*

Client Sample ID: Ext-2
Date Collected: 07/24/14 18:15
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	5000		ug/L			07/29/14 16:07	200
Benzene	ND		40		ug/L			07/29/14 16:07	200
Bromobenzene	ND		100		ug/L			07/29/14 16:07	200
Bromochloromethane	ND		100		ug/L			07/29/14 16:07	200
Bromodichloromethane	ND		100		ug/L			07/29/14 16:07	200
Bromoform	ND		200		ug/L			07/29/14 16:07	200
Bromomethane	ND		1000		ug/L			07/29/14 16:07	200
2-Butanone (MEK)	ND		2000		ug/L			07/29/14 16:07	200
n-Butylbenzene	ND		1000		ug/L			07/29/14 16:07	200
sec-Butylbenzene	ND		100		ug/L			07/29/14 16:07	200
tert-Butylbenzene	ND		200		ug/L			07/29/14 16:07	200
Carbon disulfide	ND		2000		ug/L			07/29/14 16:07	200
Carbon tetrachloride	ND		100		ug/L			07/29/14 16:07	200
Chlorobenzene	ND		100		ug/L			07/29/14 16:07	200
Chloroethane	ND		100		ug/L			07/29/14 16:07	200
Chloroform	ND		100		ug/L			07/29/14 16:07	200
Chloromethane	ND		1000		ug/L			07/29/14 16:07	200
2-Chlorotoluene	ND		100		ug/L			07/29/14 16:07	200
4-Chlorotoluene	ND		100		ug/L			07/29/14 16:07	200
1,2-Dibromo-3-Chloropropane	ND		1000		ug/L			07/29/14 16:07	200
Dibromochloromethane	ND		200		ug/L			07/29/14 16:07	200
1,2-Dibromoethane	ND		100		ug/L			07/29/14 16:07	200
Dibromomethane	ND		100		ug/L			07/29/14 16:07	200

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

Client Sample ID: Ext-2
Date Collected: 07/24/14 18:15
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		100		ug/L			07/29/14 16:07	200
1,3-Dichlorobenzene	ND		100		ug/L			07/29/14 16:07	200
1,4-Dichlorobenzene	ND		100		ug/L			07/29/14 16:07	200
Dichlorodifluoromethane	ND		1000		ug/L			07/29/14 16:07	200
1,1-Dichloroethane	ND		100		ug/L			07/29/14 16:07	200
1,1-Dichloroethene	ND		100		ug/L			07/29/14 16:07	200
cis-1,2-Dichloroethene	**560**		100		ug/L			07/29/14 16:07	200
trans-1,2-Dichloroethene	ND		100		ug/L			07/29/14 16:07	200
1,2-Dichloropropane	ND		100		ug/L			07/29/14 16:07	200
1,3-Dichloropropane	ND		100		ug/L			07/29/14 16:07	200
2,2-Dichloropropane	ND		100		ug/L			07/29/14 16:07	200
1,1-Dichloropropene	ND		200		ug/L			07/29/14 16:07	200
cis-1,3-Dichloropropene	ND		100		ug/L			07/29/14 16:07	200
trans-1,3-Dichloropropene	ND		100		ug/L			07/29/14 16:07	200
Ethylbenzene	ND		100		ug/L			07/29/14 16:07	200
Hexachlorobutadiene	ND		800		ug/L			07/29/14 16:07	200
2-Hexanone	ND		2000		ug/L			07/29/14 16:07	200
Isopropylbenzene	ND		400		ug/L			07/29/14 16:07	200
p-Isopropyltoluene	ND		400		ug/L			07/29/14 16:07	200
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			07/29/14 16:07	200
Methyl tert-butyl ether	ND		200		ug/L			07/29/14 16:07	200
Methylene Chloride	ND		1000		ug/L			07/29/14 16:07	200
Naphthalene	ND		400		ug/L			07/29/14 16:07	200
N-Propylbenzene	ND		100		ug/L			07/29/14 16:07	200
Styrene	ND		100		ug/L			07/29/14 16:07	200
1,1,1,2-Tetrachloroethane	ND		100		ug/L			07/29/14 16:07	200
1,1,2,2-Tetrachloroethane	ND		100		ug/L			07/29/14 16:07	200
Tetrachloroethene	**48000**		250		ug/L			07/29/14 19:05	500
Toluene	ND		100		ug/L			07/29/14 16:07	200
1,2,3-Trichlorobenzene	ND		200		ug/L			07/29/14 16:07	200
1,2,4-Trichlorobenzene	ND		200		ug/L			07/29/14 16:07	200
1,1,1-Trichloroethane	ND		100		ug/L			07/29/14 16:07	200
1,1,2-Trichloroethane	ND		100		ug/L			07/29/14 16:07	200
Trichloroethene	**190**		100		ug/L			07/29/14 16:07	200
Trichlorofluoromethane	ND		100		ug/L			07/29/14 16:07	200
1,2,3-Trichloropropane	ND		100		ug/L			07/29/14 16:07	200
1,2,4-Trimethylbenzene	ND		200		ug/L			07/29/14 16:07	200
1,3,5-Trimethylbenzene	ND		100		ug/L			07/29/14 16:07	200
Vinyl chloride	ND		100		ug/L			07/29/14 16:07	200
m,p-Xylene	ND		200		ug/L			07/29/14 16:07	200
o-Xylene	ND		100		ug/L			07/29/14 16:07	200
1,2-Dichlorobenzene	ND		100		ug/L			07/29/14 16:07	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*07/29/14 16:07*	*200*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*07/29/14 19:05*	*500*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*07/29/14 16:07*	*200*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/29/14 19:05*	*500*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*07/29/14 16:07*	*200*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*07/29/14 19:05*	*500*

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

Client Sample ID: Ext-2
Date Collected: 07/24/14 18:15
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/29/14 16:07*	*200*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/29/14 19:05*	*500*

Client Sample ID: Ext-3
Date Collected: 07/24/14 18:20
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	1300		ug/L			07/29/14 15:22	50
Benzene	ND		10		ug/L			07/29/14 15:22	50
Bromobenzene	ND		25		ug/L			07/29/14 15:22	50
Bromochloromethane	ND		25		ug/L			07/29/14 15:22	50
Bromodichloromethane	ND		25		ug/L			07/29/14 15:22	50
Bromoform	ND		50		ug/L			07/29/14 15:22	50
Bromomethane	ND		250		ug/L			07/29/14 15:22	50
2-Butanone (MEK)	ND		500		ug/L			07/29/14 15:22	50
n-Butylbenzene	ND		250		ug/L			07/29/14 15:22	50
sec-Butylbenzene	ND		25		ug/L			07/29/14 15:22	50
tert-Butylbenzene	ND		50		ug/L			07/29/14 15:22	50
Carbon disulfide	ND		500		ug/L			07/29/14 15:22	50
Carbon tetrachloride	ND		25		ug/L			07/29/14 15:22	50
Chlorobenzene	ND		25		ug/L			07/29/14 15:22	50
Chloroethane	ND		25		ug/L			07/29/14 15:22	50
Chloroform	ND		25		ug/L			07/29/14 15:22	50
Chloromethane	ND		250		ug/L			07/29/14 15:22	50
2-Chlorotoluene	ND		25		ug/L			07/29/14 15:22	50
4-Chlorotoluene	ND		25		ug/L			07/29/14 15:22	50
1,2-Dibromo-3-Chloropropane	ND		250		ug/L			07/29/14 15:22	50
Dibromochloromethane	ND		50		ug/L			07/29/14 15:22	50
1,2-Dibromoethane	ND		25		ug/L			07/29/14 15:22	50
Dibromomethane	ND		25		ug/L			07/29/14 15:22	50
1,2-Dichloroethane	ND		25		ug/L			07/29/14 15:22	50
1,3-Dichlorobenzene	ND		25		ug/L			07/29/14 15:22	50
1,4-Dichlorobenzene	ND		25		ug/L			07/29/14 15:22	50
Dichlorodifluoromethane	ND		250		ug/L			07/29/14 15:22	50
1,1-Dichloroethane	ND		25		ug/L			07/29/14 15:22	50
1,1-Dichloroethene	ND		25		ug/L			07/29/14 15:22	50
cis-1,2-Dichloroethene	**3400**		25		ug/L			07/29/14 15:22	50
trans-1,2-Dichloroethene	**33**		25		ug/L			07/29/14 15:22	50
1,2-Dichloropropane	ND		25		ug/L			07/29/14 15:22	50
1,3-Dichloropropane	ND		25		ug/L			07/29/14 15:22	50
2,2-Dichloropropane	ND		25		ug/L			07/29/14 15:22	50
1,1-Dichloropropene	ND		50		ug/L			07/29/14 15:22	50
cis-1,3-Dichloropropene	ND		25		ug/L			07/29/14 15:22	50
trans-1,3-Dichloropropene	ND		25		ug/L			07/29/14 15:22	50
Ethylbenzene	ND		25		ug/L			07/29/14 15:22	50
Hexachlorobutadiene	ND		200		ug/L			07/29/14 15:22	50
2-Hexanone	ND		500		ug/L			07/29/14 15:22	50
Isopropylbenzene	ND		100		ug/L			07/29/14 15:22	50
p-Isopropyltoluene	ND		100		ug/L			07/29/14 15:22	50

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

Client Sample ID: Ext-3
Date Collected: 07/24/14 18:20
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			07/29/14 15:22	50
Methyl tert-butyl ether	ND		50		ug/L			07/29/14 15:22	50
Methylene Chloride	ND		250		ug/L			07/29/14 15:22	50
Naphthalene	ND		100		ug/L			07/29/14 15:22	50
N-Propylbenzene	ND		25		ug/L			07/29/14 15:22	50
Styrene	ND		25		ug/L			07/29/14 15:22	50
1,1,1,2-Tetrachloroethane	ND		25		ug/L			07/29/14 15:22	50
1,1,2,2-Tetrachloroethane	ND		25		ug/L			07/29/14 15:22	50
Tetrachloroethene	**1200**		25		ug/L			07/29/14 15:22	50
Toluene	ND		25		ug/L			07/29/14 15:22	50
1,2,3-Trichlorobenzene	ND		50		ug/L			07/29/14 15:22	50
1,2,4-Trichlorobenzene	ND		50		ug/L			07/29/14 15:22	50
1,1,1-Trichloroethane	ND		25		ug/L			07/29/14 15:22	50
1,1,2-Trichloroethane	ND		25		ug/L			07/29/14 15:22	50
Trichloroethene	**1200**		25		ug/L			07/29/14 15:22	50
Trichlorofluoromethane	ND		25		ug/L			07/29/14 15:22	50
1,2,3-Trichloropropane	ND		25		ug/L			07/29/14 15:22	50
1,2,4-Trimethylbenzene	ND		50		ug/L			07/29/14 15:22	50
1,3,5-Trimethylbenzene	ND		25		ug/L			07/29/14 15:22	50
Vinyl chloride	ND		25		ug/L			07/29/14 15:22	50
m,p-Xylene	ND		50		ug/L			07/29/14 15:22	50
o-Xylene	ND		25		ug/L			07/29/14 15:22	50
1,2-Dichlorobenzene	ND		25		ug/L			07/29/14 15:22	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*07/29/14 15:22*	*50*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/29/14 15:22*	*50*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*07/29/14 15:22*	*50*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/29/14 15:22*	*50*

Client Sample ID: Ext-4
Date Collected: 07/24/14 18:24
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	1300		ug/L			07/29/14 15:45	50
Benzene	ND		10		ug/L			07/29/14 15:45	50
Bromobenzene	ND		25		ug/L			07/29/14 15:45	50
Bromochloromethane	ND		25		ug/L			07/29/14 15:45	50
Bromodichloromethane	ND		25		ug/L			07/29/14 15:45	50
Bromoform	ND		50		ug/L			07/29/14 15:45	50
Bromomethane	ND		250		ug/L			07/29/14 15:45	50
2-Butanone (MEK)	ND		500		ug/L			07/29/14 15:45	50
n-Butylbenzene	ND		250		ug/L			07/29/14 15:45	50
sec-Butylbenzene	ND		25		ug/L			07/29/14 15:45	50
tert-Butylbenzene	ND		50		ug/L			07/29/14 15:45	50
Carbon disulfide	ND		500		ug/L			07/29/14 15:45	50
Carbon tetrachloride	ND		25		ug/L			07/29/14 15:45	50
Chlorobenzene	ND		25		ug/L			07/29/14 15:45	50
Chloroethane	ND		25		ug/L			07/29/14 15:45	50
Chloroform	ND		25		ug/L			07/29/14 15:45	50

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

Client Sample ID: Ext-4
Date Collected: 07/24/14 18:24
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		250		ug/L			07/29/14 15:45	50
2-Chlorotoluene	ND		25		ug/L			07/29/14 15:45	50
4-Chlorotoluene	ND		25		ug/L			07/29/14 15:45	50
1,2-Dibromo-3-Chloropropane	ND		250		ug/L			07/29/14 15:45	50
Dibromochloromethane	ND		50		ug/L			07/29/14 15:45	50
1,2-Dibromoethane	ND		25		ug/L			07/29/14 15:45	50
Dibromomethane	ND		25		ug/L			07/29/14 15:45	50
1,2-Dichloroethane	ND		25		ug/L			07/29/14 15:45	50
1,3-Dichlorobenzene	ND		25		ug/L			07/29/14 15:45	50
1,4-Dichlorobenzene	ND		25		ug/L			07/29/14 15:45	50
Dichlorodifluoromethane	ND		250		ug/L			07/29/14 15:45	50
1,1-Dichloroethane	ND		25		ug/L			07/29/14 15:45	50
1,1-Dichloroethene	ND		25		ug/L			07/29/14 15:45	50
cis-1,2-Dichloroethene	**3200**		25		ug/L			07/29/14 15:45	50
trans-1,2-Dichloroethene	**29**		25		ug/L			07/29/14 15:45	50
1,2-Dichloropropane	ND		25		ug/L			07/29/14 15:45	50
1,3-Dichloropropane	ND		25		ug/L			07/29/14 15:45	50
2,2-Dichloropropane	ND		25		ug/L			07/29/14 15:45	50
1,1-Dichloropropene	ND		50		ug/L			07/29/14 15:45	50
cis-1,3-Dichloropropene	ND		25		ug/L			07/29/14 15:45	50
trans-1,3-Dichloropropene	ND		25		ug/L			07/29/14 15:45	50
Ethylbenzene	ND		25		ug/L			07/29/14 15:45	50
Hexachlorobutadiene	ND		200		ug/L			07/29/14 15:45	50
2-Hexanone	ND		500		ug/L			07/29/14 15:45	50
Isopropylbenzene	ND		100		ug/L			07/29/14 15:45	50
p-Isopropyltoluene	ND		100		ug/L			07/29/14 15:45	50
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			07/29/14 15:45	50
Methyl tert-butyl ether	ND		50		ug/L			07/29/14 15:45	50
Methylene Chloride	ND		250		ug/L			07/29/14 15:45	50
Naphthalene	ND		100		ug/L			07/29/14 15:45	50
N-Propylbenzene	ND		25		ug/L			07/29/14 15:45	50
Styrene	ND		25		ug/L			07/29/14 15:45	50
1,1,1,2-Tetrachloroethane	ND		25		ug/L			07/29/14 15:45	50
1,1,2,2-Tetrachloroethane	ND		25		ug/L			07/29/14 15:45	50
Tetrachloroethene	**73**		25		ug/L			07/29/14 15:45	50
Toluene	ND		25		ug/L			07/29/14 15:45	50
1,2,3-Trichlorobenzene	ND		50		ug/L			07/29/14 15:45	50
1,2,4-Trichlorobenzene	ND		50		ug/L			07/29/14 15:45	50
1,1,1-Trichloroethane	ND		25		ug/L			07/29/14 15:45	50
1,1,2-Trichloroethane	ND		25		ug/L			07/29/14 15:45	50
Trichloroethene	**71**		25		ug/L			07/29/14 15:45	50
Trichlorofluoromethane	ND		25		ug/L			07/29/14 15:45	50
1,2,3-Trichloropropane	ND		25		ug/L			07/29/14 15:45	50
1,2,4-Trimethylbenzene	ND		50		ug/L			07/29/14 15:45	50
1,3,5-Trimethylbenzene	ND		25		ug/L			07/29/14 15:45	50
Vinyl chloride	ND		25		ug/L			07/29/14 15:45	50
m,p-Xylene	ND		50		ug/L			07/29/14 15:45	50
o-Xylene	ND		25		ug/L			07/29/14 15:45	50
1,2-Dichlorobenzene	ND		25		ug/L			07/29/14 15:45	50

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*07/29/14 15:45*	*50*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/29/14 15:45*	*50*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*07/29/14 15:45*	*50*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/29/14 15:45*	*50*

Client Sample ID: Trip Blank — **Lab Sample ID: 250-20409-5**
Date Collected: 07/24/14 00:00 — **Matrix: Water**
Date Received: 07/25/14 07:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	25		ug/L			07/29/14 12:07	1
Benzene	ND		0.20		ug/L			07/29/14 12:07	1
Bromobenzene	ND		0.50		ug/L			07/29/14 12:07	1
Bromochloromethane	ND		0.50		ug/L			07/29/14 12:07	1
Bromodichloromethane	ND		0.50		ug/L			07/29/14 12:07	1
Bromoform	ND		1.0		ug/L			07/29/14 12:07	1
Bromomethane	ND		5.0		ug/L			07/29/14 12:07	1
2-Butanone (MEK)	ND		10		ug/L			07/29/14 12:07	1
n-Butylbenzene	ND		5.0		ug/L			07/29/14 12:07	1
sec-Butylbenzene	ND		0.50		ug/L			07/29/14 12:07	1
tert-Butylbenzene	ND		1.0		ug/L			07/29/14 12:07	1
Carbon disulfide	ND		10		ug/L			07/29/14 12:07	1
Carbon tetrachloride	ND		0.50		ug/L			07/29/14 12:07	1
Chlorobenzene	ND		0.50		ug/L			07/29/14 12:07	1
Chloroethane	ND		0.50		ug/L			07/29/14 12:07	1
Chloroform	ND		0.50		ug/L			07/29/14 12:07	1
Chloromethane	ND		5.0		ug/L			07/29/14 12:07	1
2-Chlorotoluene	ND		0.50		ug/L			07/29/14 12:07	1
4-Chlorotoluene	ND		0.50		ug/L			07/29/14 12:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/29/14 12:07	1
Dibromochloromethane	ND		1.0		ug/L			07/29/14 12:07	1
1,2-Dibromoethane	ND		0.50		ug/L			07/29/14 12:07	1
Dibromomethane	ND		0.50		ug/L			07/29/14 12:07	1
1,2-Dichloroethane	ND		0.50		ug/L			07/29/14 12:07	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/29/14 12:07	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/29/14 12:07	1
Dichlorodifluoromethane	ND		5.0		ug/L			07/29/14 12:07	1
1,1-Dichloroethane	ND		0.50		ug/L			07/29/14 12:07	1
1,1-Dichloroethene	ND		0.50		ug/L			07/29/14 12:07	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/29/14 12:07	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/29/14 12:07	1
1,2-Dichloropropane	ND		0.50		ug/L			07/29/14 12:07	1
1,3-Dichloropropane	ND		0.50		ug/L			07/29/14 12:07	1
2,2-Dichloropropane	ND		0.50		ug/L			07/29/14 12:07	1
1,1-Dichloropropene	ND		1.0		ug/L			07/29/14 12:07	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/29/14 12:07	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/29/14 12:07	1
Ethylbenzene	ND		0.50		ug/L			07/29/14 12:07	1
Hexachlorobutadiene	ND		4.0		ug/L			07/29/14 12:07	1
2-Hexanone	ND		10		ug/L			07/29/14 12:07	1
Isopropylbenzene	ND		2.0		ug/L			07/29/14 12:07	1
p-Isopropyltoluene	ND		2.0		ug/L			07/29/14 12:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			07/29/14 12:07	1

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

Client Sample ID: Trip Blank
Date Collected: 07/24/14 00:00
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			07/29/14 12:07	1
Methylene Chloride	ND		5.0		ug/L			07/29/14 12:07	1
Naphthalene	ND		2.0		ug/L			07/29/14 12:07	1
N-Propylbenzene	ND		0.50		ug/L			07/29/14 12:07	1
Styrene	ND		0.50		ug/L			07/29/14 12:07	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/29/14 12:07	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/29/14 12:07	1
Tetrachloroethene	ND		0.50		ug/L			07/29/14 12:07	1
Toluene	ND		0.50		ug/L			07/29/14 12:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/29/14 12:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/29/14 12:07	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/29/14 12:07	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/29/14 12:07	1
Trichloroethene	ND		0.50		ug/L			07/29/14 12:07	1
Trichlorofluoromethane	ND		0.50		ug/L			07/29/14 12:07	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/29/14 12:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/29/14 12:07	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/29/14 12:07	1
Vinyl chloride	ND		0.50		ug/L			07/29/14 12:07	1
m,p-Xylene	ND		1.0		ug/L			07/29/14 12:07	1
o-Xylene	ND		0.50		ug/L			07/29/14 12:07	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/29/14 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*07/29/14 12:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/29/14 12:07*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*07/29/14 12:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/29/14 12:07*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

General Chemistry

Client Sample ID: Ext-1
Date Collected: 07/24/14 18:06
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.1		1.0		mg/L			07/28/14 14:50	1

Client Sample ID: Ext-2
Date Collected: 07/24/14 18:15
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.1		1.0		mg/L			07/28/14 14:50	1

Client Sample ID: Ext-3
Date Collected: 07/24/14 18:20
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	4.4		1.0		mg/L			07/28/14 14:50	1

Client Sample ID: Ext-4
Date Collected: 07/24/14 18:24
Date Received: 07/25/14 07:30

Lab Sample ID: 250-20409-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	10		1.0		mg/L			07/28/14 14:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 250-29090/7
Matrix: Water
Analysis Batch: 29090

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			07/29/14 10:29	1
Benzene	ND		0.20		ug/L			07/29/14 10:29	1
Bromobenzene	ND		0.50		ug/L			07/29/14 10:29	1
Bromochloromethane	ND		0.50		ug/L			07/29/14 10:29	1
Bromodichloromethane	ND		0.50		ug/L			07/29/14 10:29	1
Bromoform	ND		1.0		ug/L			07/29/14 10:29	1
Bromomethane	ND		5.0		ug/L			07/29/14 10:29	1
2-Butanone (MEK)	ND		10		ug/L			07/29/14 10:29	1
n-Butylbenzene	ND		5.0		ug/L			07/29/14 10:29	1
sec-Butylbenzene	ND		0.50		ug/L			07/29/14 10:29	1
tert-Butylbenzene	ND		1.0		ug/L			07/29/14 10:29	1
Carbon disulfide	ND		10		ug/L			07/29/14 10:29	1
Carbon tetrachloride	ND		0.50		ug/L			07/29/14 10:29	1
Chlorobenzene	ND		0.50		ug/L			07/29/14 10:29	1
Chloroethane	ND		0.50		ug/L			07/29/14 10:29	1
Chloroform	ND		0.50		ug/L			07/29/14 10:29	1
Chloromethane	ND		5.0		ug/L			07/29/14 10:29	1
2-Chlorotoluene	ND		0.50		ug/L			07/29/14 10:29	1
4-Chlorotoluene	ND		0.50		ug/L			07/29/14 10:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/29/14 10:29	1
Dibromochloromethane	ND		1.0		ug/L			07/29/14 10:29	1
1,2-Dibromoethane	ND		0.50		ug/L			07/29/14 10:29	1
Dibromomethane	ND		0.50		ug/L			07/29/14 10:29	1
1,2-Dichloroethane	ND		0.50		ug/L			07/29/14 10:29	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/29/14 10:29	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/29/14 10:29	1
Dichlorodifluoromethane	ND		5.0		ug/L			07/29/14 10:29	1
1,1-Dichloroethane	ND		0.50		ug/L			07/29/14 10:29	1
1,1-Dichloroethene	ND		0.50		ug/L			07/29/14 10:29	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/29/14 10:29	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/29/14 10:29	1
1,2-Dichloropropane	ND		0.50		ug/L			07/29/14 10:29	1
1,3-Dichloropropane	ND		0.50		ug/L			07/29/14 10:29	1
2,2-Dichloropropane	ND		0.50		ug/L			07/29/14 10:29	1
1,1-Dichloropropene	ND		1.0		ug/L			07/29/14 10:29	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/29/14 10:29	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/29/14 10:29	1
Ethylbenzene	ND		0.50		ug/L			07/29/14 10:29	1
Hexachlorobutadiene	ND		4.0		ug/L			07/29/14 10:29	1
2-Hexanone	ND		10		ug/L			07/29/14 10:29	1
Isopropylbenzene	ND		2.0		ug/L			07/29/14 10:29	1
p-Isopropyltoluene	ND		2.0		ug/L			07/29/14 10:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			07/29/14 10:29	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/29/14 10:29	1
Methylene Chloride	ND		5.0		ug/L			07/29/14 10:29	1
Naphthalene	ND		2.0		ug/L			07/29/14 10:29	1
N-Propylbenzene	ND		0.50		ug/L			07/29/14 10:29	1
Styrene	ND		0.50		ug/L			07/29/14 10:29	1

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

Lab Sample ID: MB 250-29090/7
Matrix: Water
Analysis Batch: 29090

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/29/14 10:29	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/29/14 10:29	1
Tetrachloroethene	ND		0.50		ug/L			07/29/14 10:29	1
Toluene	ND		0.50		ug/L			07/29/14 10:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/29/14 10:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/29/14 10:29	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/29/14 10:29	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/29/14 10:29	1
Trichloroethene	ND		0.50		ug/L			07/29/14 10:29	1
Trichlorofluoromethane	ND		0.50		ug/L			07/29/14 10:29	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/29/14 10:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/29/14 10:29	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/29/14 10:29	1
Vinyl chloride	ND		0.50		ug/L			07/29/14 10:29	1
m,p-Xylene	ND		1.0		ug/L			07/29/14 10:29	1
o-Xylene	ND		0.50		ug/L			07/29/14 10:29	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/29/14 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*07/29/14 10:29*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*07/29/14 10:29*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*07/29/14 10:29*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/29/14 10:29*	*1*

Lab Sample ID: LCS 250-29090/4
Matrix: Water
Analysis Batch: 29090

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	115		ug/L		115	55 - 145
Benzene	20.0	18.9		ug/L		94	80 - 120
Bromobenzene	20.0	20.1		ug/L		100	75 - 120
Bromochloromethane	20.0	19.3		ug/L		97	75 - 125
Bromodichloromethane	20.0	20.1		ug/L		101	80 - 130
Bromoform	20.0	21.5		ug/L		108	55 - 135
Bromomethane	20.0	21.5		ug/L		107	35 - 150
2-Butanone (MEK)	100	109		ug/L		109	70 - 140
n-Butylbenzene	20.0	21.1		ug/L		106	75 - 130
sec-Butylbenzene	20.0	20.9		ug/L		105	60 - 130
tert-Butylbenzene	20.0	20.4		ug/L		102	70 - 130
Carbon disulfide	40.0	43.2		ug/L		108	60 - 120
Carbon tetrachloride	20.0	18.9		ug/L		95	70 - 135
Chlorobenzene	20.0	20.3		ug/L		102	80 - 125
Chloroethane	20.0	21.7		ug/L		108	75 - 125
Chloroform	20.0	19.7		ug/L		99	80 - 120
Chloromethane	20.0	20.7		ug/L		103	45 - 150
2-Chlorotoluene	20.0	19.8		ug/L		99	70 - 125
4-Chlorotoluene	20.0	20.0		ug/L		100	75 - 125

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

Lab Sample ID: LCS 250-29090/4
Matrix: Water
Analysis Batch: 29090

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	20.0	20.4		ug/L		102	70 - 135
Dibromochloromethane	20.0	22.6		ug/L		113	65 - 140
1,2-Dibromoethane	20.0	20.3		ug/L		101	80 - 125
Dibromomethane	20.0	20.3		ug/L		102	80 - 120
1,2-Dichloroethane	20.0	19.4		ug/L		97	75 - 125
1,3-Dichlorobenzene	20.0	20.9		ug/L		105	75 - 125
1,4-Dichlorobenzene	20.0	20.5		ug/L		102	70 - 120
Dichlorodifluoromethane	20.0	23.8		ug/L		119	45 - 140
1,1-Dichloroethane	20.0	18.7		ug/L		94	80 - 120
1,1-Dichloroethene	20.0	18.3		ug/L		91	75 - 120
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	80 - 120
trans-1,2-Dichloroethene	20.0	18.5		ug/L		92	80 - 120
1,2-Dichloropropane	20.0	19.5		ug/L		97	80 - 130
1,3-Dichloropropane	20.0	19.9		ug/L		99	80 - 120
2,2-Dichloropropane	20.0	16.0		ug/L		80	60 - 145
1,1-Dichloropropene	20.0	18.5		ug/L		93	80 - 120
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	80 - 125
trans-1,3-Dichloropropene	20.0	17.6		ug/L		88	80 - 130
Ethylbenzene	20.0	19.7		ug/L		99	80 - 120
Hexachlorobutadiene	20.0	22.0		ug/L		110	60 - 150
2-Hexanone	100	105		ug/L		105	70 - 140
Isopropylbenzene	20.0	20.5		ug/L		103	75 - 125
p-Isopropyltoluene	20.0	21.4		ug/L		107	65 - 130
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	70 - 135
Methyl tert-butyl ether	20.0	19.4		ug/L		97	80 - 130
Methylene Chloride	20.0	19.3		ug/L		96	80 - 120
Naphthalene	20.0	21.2		ug/L		106	70 - 150
N-Propylbenzene	20.0	20.7		ug/L		103	75 - 130
Styrene	20.0	20.0		ug/L		100	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.0		ug/L		105	65 - 140
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/L		107	75 - 130
Tetrachloroethene	20.0	19.9		ug/L		99	80 - 125
Toluene	20.0	19.5		ug/L		98	80 - 125
1,2,3-Trichlorobenzene	20.0	21.5		ug/L		107	65 - 140
1,2,4-Trichlorobenzene	20.0	21.5		ug/L		108	75 - 130
1,1,1-Trichloroethane	20.0	18.4		ug/L		92	75 - 135
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	80 - 125
Trichloroethene	20.0	19.1		ug/L		95	80 - 135
Trichlorofluoromethane	20.0	21.9		ug/L		109	75 - 140
1,2,3-Trichloropropane	20.0	20.1		ug/L		101	75 - 125
1,2,4-Trimethylbenzene	20.0	21.0		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	20.0	20.6		ug/L		103	75 - 135
Vinyl chloride	20.0	21.2		ug/L		106	75 - 135
m,p-Xylene	40.0	39.6		ug/L		99	70 - 130
o-Xylene	20.0	19.8		ug/L		99	75 - 125
1,2-Dichlorobenzene	20.0	19.9		ug/L		100	80 - 120

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

Lab Sample ID: LCS 250-29090/4
Matrix: Water
Analysis Batch: 29090

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCSD 250-29090/5
Matrix: Water
Analysis Batch: 29090

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
Acetone			100	151	*	ug/L		151	55 - 145	27	25
Benzene			20.0	18.5		ug/L		93	80 - 120	2	25
Bromobenzene			20.0	20.5		ug/L		103	75 - 120	2	25
Bromochloromethane			20.0	19.2		ug/L		96	75 - 125	1	25
Bromodichloromethane			20.0	20.0		ug/L		100	80 - 130	1	25
Bromoform			20.0	22.3		ug/L		111	55 - 135	4	25
Bromomethane			20.0	21.2		ug/L		106	35 - 150	1	25
2-Butanone (MEK)			100	117		ug/L		117	70 - 140	6	25
n-Butylbenzene			20.0	21.4		ug/L		107	75 - 130	2	25
sec-Butylbenzene			20.0	21.4		ug/L		107	60 - 130	2	25
tert-Butylbenzene			20.0	21.0		ug/L		105	70 - 130	3	25
Carbon disulfide			40.0	43.3		ug/L		108	60 - 120	0	25
Carbon tetrachloride			20.0	19.0		ug/L		95	70 - 135	0	25
Chlorobenzene			20.0	20.1		ug/L		101	80 - 125	1	25
Chloroethane			20.0	20.6		ug/L		103	75 - 125	5	25
Chloroform			20.0	19.3		ug/L		97	80 - 120	2	25
Chloromethane			20.0	19.8		ug/L		99	45 - 150	4	25
2-Chlorotoluene			20.0	20.2		ug/L		101	70 - 125	2	25
4-Chlorotoluene			20.0	20.1		ug/L		100	75 - 125	0	25
1,2-Dibromo-3-Chloropropane			20.0	22.5		ug/L		113	70 - 135	10	25
Dibromochloromethane			20.0	22.2		ug/L		111	65 - 140	2	25
1,2-Dibromoethane			20.0	20.3		ug/L		102	80 - 125	0	
Dibromomethane			20.0	20.4		ug/L		102	80 - 120	1	25
1,2-Dichloroethane			20.0	19.5		ug/L		98	75 - 125	0	25
1,3-Dichlorobenzene			20.0	20.6		ug/L		103	75 - 125	2	25
1,4-Dichlorobenzene			20.0	20.8		ug/L		104	70 - 120	2	25
Dichlorodifluoromethane			20.0	22.6		ug/L		113	45 - 140	5	25
1,1-Dichloroethane			20.0	18.2		ug/L		91	80 - 120	3	25
1,1-Dichloroethene			20.0	18.2		ug/L		91	75 - 120	1	25
cis-1,2-Dichloroethene			20.0	18.7		ug/L		94	80 - 120	2	25
trans-1,2-Dichloroethene			20.0	18.3		ug/L		92	80 - 120	1	25
1,2-Dichloropropane			20.0	19.1		ug/L		95	80 - 130	2	25
1,3-Dichloropropane			20.0	20.3		ug/L		101	80 - 120	2	25
2,2-Dichloropropane			20.0	15.7		ug/L		78	60 - 145	2	25
1,1-Dichloropropene			20.0	18.0		ug/L		90	80 - 120	3	25
cis-1,3-Dichloropropene			20.0	18.2		ug/L		91	80 - 125	2	25
trans-1,3-Dichloropropene			20.0	17.7		ug/L		89	80 - 130	1	25
Ethylbenzene			20.0	19.7		ug/L		98	80 - 120	0	25

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

Lab Sample ID: LCSD 250-29090/5
Matrix: Water
Analysis Batch: 29090

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
Hexachlorobutadiene			20.0	22.3		ug/L		112	60 - 150	1	25
2-Hexanone			100	111		ug/L		111	70 - 140	6	25
Isopropylbenzene			20.0	20.6		ug/L		103	75 - 125	1	25
p-Isopropyltoluene			20.0	21.8		ug/L		109	65 - 130	2	25
4-Methyl-2-pentanone (MIBK)			100	115		ug/L		115	70 - 135	9	25
Methyl tert-butyl ether			20.0	20.5		ug/L		103	80 - 130	6	25
Methylene Chloride			20.0	19.1		ug/L		95	80 - 120	1	25
Naphthalene			20.0	21.7		ug/L		109	70 - 150	3	25
N-Propylbenzene			20.0	21.0		ug/L		105	75 - 130	1	25
Styrene			20.0	20.1		ug/L		100	70 - 130	1	25
1,1,1,2-Tetrachloroethane			20.0	20.8		ug/L		104	65 - 140	1	25
1,1,2,2-Tetrachloroethane			20.0	22.9		ug/L		114	75 - 130	6	25
Tetrachloroethene			20.0	19.4		ug/L		97	80 - 125	3	25
Toluene			20.0	19.4		ug/L		97	80 - 125	1	25
1,2,3-Trichlorobenzene			20.0	21.7		ug/L		109	65 - 140	1	25
1,2,4-Trichlorobenzene			20.0	21.4		ug/L		107	75 - 130	0	25
1,1,1-Trichloroethane			20.0	18.3		ug/L		91	75 - 135	1	25
1,1,2-Trichloroethane			20.0	21.3		ug/L		107	80 - 125	2	25
Trichloroethene			20.0	18.8		ug/L		94	80 - 135	2	25
Trichlorofluoromethane			20.0	21.5		ug/L		108	75 - 140	2	25
1,2,3-Trichloropropane			20.0	21.6		ug/L		108	75 - 125	7	25
1,2,4-Trimethylbenzene			20.0	21.6		ug/L		108	70 - 130	3	25
1,3,5-Trimethylbenzene			20.0	21.1		ug/L		106	75 - 135	3	25
Vinyl chloride			20.0	21.8		ug/L		109	75 - 135	3	25
m,p-Xylene			40.0	39.6		ug/L		99	70 - 130	0	25
o-Xylene			20.0	20.2		ug/L		101	75 - 125	2	25
1,2-Dichlorobenzene			20.0	20.7		ug/L		103	80 - 120	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 415.1 - TOC

Lab Sample ID: MB 580-165187/1
Matrix: Water
Analysis Batch: 165187

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			07/28/14 14:50	1

Method: 415.1 - TOC (Continued)

Lab Sample ID: LCS 580-165187/2
Matrix: Water
Analysis Batch: 165187

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	15.0	15.2		mg/L		102	85 - 115

Lab Sample ID: 250-20195-A-1 MS
Matrix: Water
Analysis Batch: 165187

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	ND		10.0	9.59		mg/L		91	85 - 115

Lab Sample ID: 250-20195-A-1 MSD
Matrix: Water
Analysis Batch: 165187

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	ND		10.0	9.77		mg/L		93	85 - 115	2	20

Lab Sample ID: 250-20195-A-1 DU
Matrix: Water
Analysis Batch: 165187

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	ND		ND		mg/L		NC	20

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13 *
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-20409-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
415.1	TOC	MCAWW	TAL SEA

Protocol References:

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 PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Cu

250-20409 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA

Client Contact	Project Manager: Jill Kiernan	Site Contact:	Date:	COC No:
Your Company Name here: Hart Crowser	Tel/Fax:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 8910 SW Gemini Dr.	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Beaverton, OR 97008	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone	TAT if different from Below: Standard			Lab Sampling:
(xxx) xxx-xxxx FAX	☐ 2 weeks			
Project Name: Frank Moan	☐ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO # 17800-23	☐ 1 day			Sampler: CM

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TOC	VOC	Sample Specific Notes:
Ext-1	7/24	1800	G	W	4			X	X	
Ext-2	1	1815	1	1	1			X	X	
Ext-3	1	1820	1	1	1			X	X	
Ext-4	↓	1824	↓	↓	↓			X	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:

2.1 IR/6-L

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____		Therm ID No.: ____
Relinquished by: Chris Martin	Company: Hart Crowser	Date/Time: 7/25 0730	Received by:	Company: THP	Date/Time: 7/25/14 @ 0730
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-20409-1

Login Number: 20409

List Source: TestAmerica Portland

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-20409-1

Login Number: 20409
List Number: 2
Creator: Abello, Andrea N

List Source: TestAmerica Seattle
List Creation: 07/26/14 10:16 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-45151-1
Client Project/Site: Frank Wear Site

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
9/12/2014 2:09:43 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Job ID: 580-45151-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-45151-1

Comments
No additional comments.

Receipt
The samples were received on 8/28/2014 7:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º C.

Except:

The chain of custody was filled out with a pencil.

One or more containers for the following samples were received broken or leaking: MW-16 (580-45151-10), MW-22 (580-45151-9). The C vials of samples MW-22 and MW-16 were received broken. Vial B of sample MW-16 was received with cracks in the vial. The content of the vial is not compromised but the vial can not be expected to maintain its integrity so it will be discarded. One vial remains of sample MW-16. No bubble wrap/bag was used for the vials which were shipped loose in zip-lock bags (3 per bag).

GC/MS VOA
Method(s) 8260B: The following sample(s) was received unpreserved and presented a pH between 5-8. Analysis was performed within 7 days per EPA recommendation: Equip. Blank #1 (580-45151-6) .

Method(s) 8260B: The associated sample MW-22 (580-45151-9), MW-24 (580-45151-1), MW-24 DUP (580-45151-2), MW-19 (580-45151-4) was reanalyzed due to potential carryover from a highly contaminated sample in the original analysis. The reanalysis is reported as the primary result for the affected compounds.

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.

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

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-24
Date Collected: 08/26/14 12:04
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 17:43	1
Chloromethane	ND		0.10		ug/L			08/28/14 17:43	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 17:43	1
Bromomethane	ND		0.10		ug/L			08/28/14 17:43	1
Chloroethane	ND		0.25		ug/L			08/28/14 17:43	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 17:43	1
1,1-Dichloroethene	**0.12**		0.10		ug/L			08/28/14 17:43	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 17:43	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 17:43	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 17:43	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 17:43	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 17:43	1
Chloroform	**1.9**		0.10		ug/L			08/28/14 17:43	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 17:43	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 17:43	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 17:43	1
Benzene	ND		0.10		ug/L			08/28/14 17:43	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 17:43	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 17:43	1
Dibromomethane	ND		0.10		ug/L			08/28/14 17:43	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 17:43	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 17:43	1
Toluene	ND		0.10		ug/L			08/28/14 17:43	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 17:43	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 17:43	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 17:43	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 17:43	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 17:43	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 17:43	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 17:43	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 17:43	1
o-Xylene	ND		0.10		ug/L			08/28/14 17:43	1
Styrene	ND		0.10		ug/L			08/28/14 17:43	1
Bromoform	ND		0.10		ug/L			08/28/14 17:43	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
Bromobenzene	ND		0.10		ug/L			08/28/14 17:43	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 17:43	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 17:43	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 17:43	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 17:43	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 17:43	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 17:43	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 17:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-24
Date Collected: 08/26/14 12:04
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			08/28/14 17:43	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 17:43	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 17:43	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 17:43	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 17:43	1
Naphthalene	ND		0.40		ug/L			08/28/14 17:43	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*87*		*80 - 127*		*08/28/14 17:43*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/28/14 17:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*08/28/14 17:43*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/28/14 17:43*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*08/28/14 17:43*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**150**		1.0		ug/L			08/29/14 14:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*91*		*80 - 127*		*08/29/14 14:13*	*10*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 14:13*	*10*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*08/29/14 14:13*	*10*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/29/14 14:13*	*10*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*08/29/14 14:13*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**1.8**		0.10		ug/L			08/29/14 17:27	1
Trichloroethene	**57**		0.10		ug/L			08/29/14 17:27	1
Tetrachloroethene	**60**		0.10		ug/L			08/29/14 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*91*		*80 - 127*		*08/29/14 17:27*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 17:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*08/29/14 17:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/29/14 17:27*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*08/29/14 17:27*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-24 DUP
Date Collected: 08/26/14 12:04
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 18:07	1
Chloromethane	ND		0.10		ug/L			08/28/14 18:07	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 18:07	1
Bromomethane	ND		0.10		ug/L			08/28/14 18:07	1
Chloroethane	ND		0.25		ug/L			08/28/14 18:07	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 18:07	1
1,1-Dichloroethene	**0.12**		0.10		ug/L			08/28/14 18:07	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 18:07	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 18:07	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 18:07	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:07	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 18:07	1
Chloroform	**2.0**		0.10		ug/L			08/28/14 18:07	1
1,1,1-Trichloroethane	**0.16**		0.10		ug/L			08/28/14 18:07	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 18:07	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 18:07	1
Benzene	ND		0.10		ug/L			08/28/14 18:07	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 18:07	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:07	1
Dibromomethane	ND		0.10		ug/L			08/28/14 18:07	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 18:07	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:07	1
Toluene	ND		0.10		ug/L			08/28/14 18:07	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:07	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 18:07	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 18:07	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 18:07	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 18:07	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 18:07	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:07	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 18:07	1
o-Xylene	ND		0.10		ug/L			08/28/14 18:07	1
Styrene	ND		0.10		ug/L			08/28/14 18:07	1
Bromoform	ND		0.10		ug/L			08/28/14 18:07	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
Bromobenzene	ND		0.10		ug/L			08/28/14 18:07	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:07	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 18:07	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 18:07	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 18:07	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 18:07	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:07	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:07	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-24 DUP
Date Collected: 08/26/14 12:04
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			08/28/14 18:07	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:07	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 18:07	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 18:07	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 18:07	1
Naphthalene	ND		0.40		ug/L			08/28/14 18:07	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/28/14 18:07*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/28/14 18:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*		*08/28/14 18:07*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*08/28/14 18:07*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*08/28/14 18:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**1.9**		1.0		ug/L			08/29/14 14:37	10
cis-1,2-Dichloroethene	**150**		1.0		ug/L			08/29/14 14:37	10
Trichloroethene	**46**		1.0		ug/L			08/29/14 14:37	10
Tetrachloroethene	**48**		1.0		ug/L			08/29/14 14:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*91*		*80 - 127*		*08/29/14 14:37*	*10*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/29/14 14:37*	*10*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*08/29/14 14:37*	*10*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*08/29/14 14:37*	*10*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*08/29/14 14:37*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**1.9**		0.10		ug/L			08/29/14 17:51	1
Trichloroethene	**59**		0.10		ug/L			08/29/14 17:51	1
Tetrachloroethene	**61**		0.10		ug/L			08/29/14 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*95*		*80 - 127*		*08/29/14 17:51*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 17:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*08/29/14 17:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/29/14 17:51*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*08/29/14 17:51*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-21
Date Collected: 08/26/14 13:51
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 18:32	1
Chloromethane	ND		0.10		ug/L			08/28/14 18:32	1
Vinyl chloride	**0.39**		0.020		ug/L			08/28/14 18:32	1
Bromomethane	ND		0.10		ug/L			08/28/14 18:32	1
Chloroethane	ND		0.25		ug/L			08/28/14 18:32	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 18:32	1
1,1-Dichloroethene	**0.57**		0.10		ug/L			08/28/14 18:32	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 18:32	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 18:32	1
trans-1,2-Dichloroethene	**10**		0.10		ug/L			08/28/14 18:32	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 18:32	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:32	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 18:32	1
Chloroform	**4.0**		0.10		ug/L			08/28/14 18:32	1
1,1,1-Trichloroethane	**0.78**		0.10		ug/L			08/28/14 18:32	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 18:32	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 18:32	1
Benzene	ND		0.10		ug/L			08/28/14 18:32	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 18:32	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:32	1
Dibromomethane	ND		0.10		ug/L			08/28/14 18:32	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 18:32	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:32	1
Toluene	ND		0.10		ug/L			08/28/14 18:32	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:32	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 18:32	1
Tetrachloroethene	**75**		0.10		ug/L			08/28/14 18:32	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 18:32	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 18:32	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 18:32	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 18:32	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:32	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 18:32	1
o-Xylene	ND		0.10		ug/L			08/28/14 18:32	1
Styrene	ND		0.10		ug/L			08/28/14 18:32	1
Bromoform	ND		0.10		ug/L			08/28/14 18:32	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
Bromobenzene	ND		0.10		ug/L			08/28/14 18:32	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:32	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 18:32	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 18:32	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 18:32	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 18:32	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-21
Date Collected: 08/26/14 13:51
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:32	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:32	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 18:32	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:32	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 18:32	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 18:32	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 18:32	1
Naphthalene	ND		0.40		ug/L			08/28/14 18:32	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*81*		*80 - 127*		*08/28/14 18:32*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/28/14 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*08/28/14 18:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*08/28/14 18:32*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*08/28/14 18:32*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**910**		10		ug/L			08/29/14 13:24	100
Trichloroethene	**430**		10		ug/L			08/29/14 13:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*91*		*80 - 127*		*08/29/14 13:24*	*100*
Toluene-d8 (Surr)	*98*		*75 - 125*		*08/29/14 13:24*	*100*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*08/29/14 13:24*	*100*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/29/14 13:24*	*100*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*08/29/14 13:24*	*100*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-19
Date Collected: 08/26/14 15:36
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 18:57	1
Chloromethane	ND		0.10		ug/L			08/28/14 18:57	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 18:57	1
Bromomethane	ND		0.10		ug/L			08/28/14 18:57	1
Chloroethane	ND		0.25		ug/L			08/28/14 18:57	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 18:57	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 18:57	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 18:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 18:57	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 18:57	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 18:57	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:57	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 18:57	1
Chloroform	**0.13**		0.10		ug/L			08/28/14 18:57	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 18:57	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 18:57	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 18:57	1
Benzene	ND		0.10		ug/L			08/28/14 18:57	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 18:57	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 18:57	1
Dibromomethane	ND		0.10		ug/L			08/28/14 18:57	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 18:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:57	1
Toluene	ND		0.10		ug/L			08/28/14 18:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 18:57	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 18:57	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 18:57	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 18:57	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 18:57	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 18:57	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:57	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 18:57	1
o-Xylene	ND		0.10		ug/L			08/28/14 18:57	1
Styrene	ND		0.10		ug/L			08/28/14 18:57	1
Bromoform	ND		0.10		ug/L			08/28/14 18:57	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
Bromobenzene	ND		0.10		ug/L			08/28/14 18:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 18:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 18:57	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 18:57	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 18:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 18:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:57	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-19
Date Collected: 08/26/14 15:36
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:57	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 18:57	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 18:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 18:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 18:57	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 18:57	1
Naphthalene	ND		0.40		ug/L			08/28/14 18:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*82*		*80 - 127*		*08/28/14 18:57*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*08/28/14 18:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*		*08/28/14 18:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/28/14 18:57*	*1*
Dibromofluoromethane (Surr)	*94*		*85 - 115*		*08/28/14 18:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 14:52	1
Trichloroethene	ND		0.10		ug/L			09/03/14 14:52	1
Tetrachloroethene	ND		0.10		ug/L			09/03/14 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*09/03/14 14:52*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/03/14 14:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/03/14 14:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/03/14 14:52*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/03/14 14:52*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-20
Date Collected: 08/26/14 16:46
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 19:21	1
Chloromethane	ND		0.10		ug/L			08/28/14 19:21	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 19:21	1
Bromomethane	ND		0.10		ug/L			08/28/14 19:21	1
Chloroethane	ND		0.25		ug/L			08/28/14 19:21	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 19:21	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 19:21	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 19:21	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 19:21	1
trans-1,2-Dichloroethene	**0.78**		0.10		ug/L			08/28/14 19:21	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 19:21	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 19:21	1
cis-1,2-Dichloroethene	**78**		0.10		ug/L			08/28/14 19:21	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 19:21	1
Chloroform	**3.5**		0.10		ug/L			08/28/14 19:21	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 19:21	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 19:21	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 19:21	1
Benzene	ND		0.10		ug/L			08/28/14 19:21	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 19:21	1
Trichloroethene	**35**		0.10		ug/L			08/28/14 19:21	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 19:21	1
Dibromomethane	ND		0.10		ug/L			08/28/14 19:21	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 19:21	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 19:21	1
Toluene	ND		0.10		ug/L			08/28/14 19:21	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 19:21	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 19:21	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 19:21	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 19:21	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 19:21	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 19:21	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 19:21	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 19:21	1
o-Xylene	ND		0.10		ug/L			08/28/14 19:21	1
Styrene	ND		0.10		ug/L			08/28/14 19:21	1
Bromoform	ND		0.10		ug/L			08/28/14 19:21	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
Bromobenzene	ND		0.10		ug/L			08/28/14 19:21	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 19:21	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 19:21	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 19:21	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 19:21	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 19:21	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-20
Date Collected: 08/26/14 16:46
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 19:21	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:21	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:21	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 19:21	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:21	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 19:21	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 19:21	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 19:21	1
Naphthalene	ND		0.40		ug/L			08/28/14 19:21	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*87*		*80 - 127*		*08/28/14 19:21*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*08/28/14 19:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*		*08/28/14 19:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/28/14 19:21*	*1*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*08/28/14 19:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**84**		1.0		ug/L			08/29/14 15:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*87*		*80 - 127*		*08/29/14 15:01*	*10*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 15:01*	*10*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*08/29/14 15:01*	*10*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/29/14 15:01*	*10*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*08/29/14 15:01*	*10*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/04/14 11:57	1
Ethane	ND		0.50		ug/L			09/04/14 11:57	1
Ethene	ND		0.50		ug/L			09/04/14 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*114*		*66 - 132*		*09/04/14 11:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.90		mg/L			08/28/14 10:51	1
Nitrate as N	**3.4**		0.90		mg/L			08/28/14 10:51	1
Sulfate	**9.9**		1.2		mg/L			08/28/14 10:51	1
Total Organic Carbon	ND		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: Equip. Blank #1
Date Collected: 08/26/14 17:15
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 16:04	1
Chloromethane	ND		0.10		ug/L			08/28/14 16:04	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 16:04	1
Bromomethane	ND		0.10		ug/L			08/28/14 16:04	1
Chloroethane	ND		0.25		ug/L			08/28/14 16:04	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 16:04	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 16:04	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 16:04	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 16:04	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 16:04	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 16:04	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 16:04	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 16:04	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 16:04	1
Chloroform	ND		0.10		ug/L			08/28/14 16:04	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 16:04	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 16:04	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 16:04	1
Benzene	ND		0.10		ug/L			08/28/14 16:04	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 16:04	1
Trichloroethene	ND		0.10		ug/L			08/28/14 16:04	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 16:04	1
Dibromomethane	ND		0.10		ug/L			08/28/14 16:04	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 16:04	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 16:04	1
Toluene	**0.11**		0.10		ug/L			08/28/14 16:04	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 16:04	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 16:04	1
Tetrachloroethene	ND		0.10		ug/L			08/28/14 16:04	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 16:04	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 16:04	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 16:04	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 16:04	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 16:04	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 16:04	1
o-Xylene	ND		0.10		ug/L			08/28/14 16:04	1
Styrene	ND		0.10		ug/L			08/28/14 16:04	1
Bromoform	ND		0.10		ug/L			08/28/14 16:04	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
Bromobenzene	ND		0.10		ug/L			08/28/14 16:04	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 16:04	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 16:04	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 16:04	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 16:04	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 16:04	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: Equip. Blank #1
Date Collected: 08/26/14 17:15
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 16:04	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:04	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:04	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 16:04	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:04	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 16:04	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 16:04	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 16:04	1
Naphthalene	ND		0.40		ug/L			08/28/14 16:04	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/28/14 16:04*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*08/28/14 16:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*08/28/14 16:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*08/28/14 16:04*	*1*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*08/28/14 16:04*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-4/EXT-8
Date Collected: 08/27/14 07:29
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 19:45	1
Chloromethane	ND		0.10		ug/L			08/28/14 19:45	1
Vinyl chloride	**0.20**		0.020		ug/L			08/28/14 19:45	1
Bromomethane	ND		0.10		ug/L			08/28/14 19:45	1
Chloroethane	ND		0.25		ug/L			08/28/14 19:45	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 19:45	1
1,1-Dichloroethene	**0.16**		0.10		ug/L			08/28/14 19:45	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 19:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 19:45	1
trans-1,2-Dichloroethene	**2.4**		0.10		ug/L			08/28/14 19:45	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 19:45	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 19:45	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 19:45	1
Chloroform	**2.3**		0.10		ug/L			08/28/14 19:45	1
1,1,1-Trichloroethane	**0.44**		0.10		ug/L			08/28/14 19:45	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 19:45	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 19:45	1
Benzene	ND		0.10		ug/L			08/28/14 19:45	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 19:45	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 19:45	1
Dibromomethane	ND		0.10		ug/L			08/28/14 19:45	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 19:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 19:45	1
Toluene	ND		0.10		ug/L			08/28/14 19:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 19:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 19:45	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 19:45	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 19:45	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 19:45	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 19:45	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 19:45	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 19:45	1
o-Xylene	ND		0.10		ug/L			08/28/14 19:45	1
Styrene	ND		0.10		ug/L			08/28/14 19:45	1
Bromoform	ND		0.10		ug/L			08/28/14 19:45	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
Bromobenzene	ND		0.10		ug/L			08/28/14 19:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 19:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 19:45	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 19:45	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 19:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 19:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:45	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-4/EXT-8
Date Collected: 08/27/14 07:29
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:45	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 19:45	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 19:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 19:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 19:45	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 19:45	1
Naphthalene	ND		0.40		ug/L			08/28/14 19:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*85*		*80 - 127*		*08/28/14 19:45*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*08/28/14 19:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*		*08/28/14 19:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/28/14 19:45*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*08/28/14 19:45*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**200**		1.0		ug/L			08/29/14 15:25	10
Trichloroethene	**150**		1.0		ug/L			08/29/14 15:25	10
Tetrachloroethene	**320**		1.0		ug/L			08/29/14 15:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/29/14 15:25*	*10*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 15:25*	*10*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*08/29/14 15:25*	*10*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/29/14 15:25*	*10*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*08/29/14 15:25*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-25
Date Collected: 08/27/14 09:58
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 20:10	1
Chloromethane	ND		0.10		ug/L			08/28/14 20:10	1
Vinyl chloride	**0.34**		0.020		ug/L			08/28/14 20:10	1
Bromomethane	ND		0.10		ug/L			08/28/14 20:10	1
Chloroethane	ND		0.25		ug/L			08/28/14 20:10	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 20:10	1
1,1-Dichloroethene	**0.14**		0.10		ug/L			08/28/14 20:10	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 20:10	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 20:10	1
trans-1,2-Dichloroethene	**1.8**		0.10		ug/L			08/28/14 20:10	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 20:10	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 20:10	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 20:10	1
Chloroform	**6.9**		0.10		ug/L			08/28/14 20:10	1
1,1,1-Trichloroethane	**0.27**		0.10		ug/L			08/28/14 20:10	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 20:10	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 20:10	1
Benzene	ND		0.10		ug/L			08/28/14 20:10	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 20:10	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 20:10	1
Dibromomethane	ND		0.10		ug/L			08/28/14 20:10	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 20:10	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 20:10	1
Toluene	ND		0.10		ug/L			08/28/14 20:10	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 20:10	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 20:10	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 20:10	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 20:10	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 20:10	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 20:10	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 20:10	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 20:10	1
o-Xylene	ND		0.10		ug/L			08/28/14 20:10	1
Styrene	ND		0.10		ug/L			08/28/14 20:10	1
Bromoform	ND		0.10		ug/L			08/28/14 20:10	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
Bromobenzene	ND		0.10		ug/L			08/28/14 20:10	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 20:10	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 20:10	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 20:10	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 20:10	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 20:10	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:10	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-25
Date Collected: 08/27/14 09:58
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:10	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 20:10	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:10	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 20:10	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 20:10	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 20:10	1
Naphthalene	ND		0.40		ug/L			08/28/14 20:10	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/28/14 20:10*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/28/14 20:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*08/28/14 20:10*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/28/14 20:10*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*08/28/14 20:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**200**		1.0		ug/L			08/29/14 15:50	10
Trichloroethene	**80**		1.0		ug/L			08/29/14 15:50	10
Tetrachloroethene	**210**		1.0		ug/L			08/29/14 15:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/29/14 15:50*	*10*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/29/14 15:50*	*10*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*08/29/14 15:50*	*10*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*08/29/14 15:50*	*10*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*08/29/14 15:50*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-22
Date Collected: 08/27/14 10:56
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 20:34	1
Chloromethane	ND		0.10		ug/L			08/28/14 20:34	1
Vinyl chloride	**0.034**		0.020		ug/L			08/28/14 20:34	1
Bromomethane	ND		0.10		ug/L			08/28/14 20:34	1
Chloroethane	ND		0.25		ug/L			08/28/14 20:34	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 20:34	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 20:34	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 20:34	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 20:34	1
trans-1,2-Dichloroethene	**0.37**		0.10		ug/L			08/28/14 20:34	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 20:34	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 20:34	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 20:34	1
Chloroform	**1.9**		0.10		ug/L			08/28/14 20:34	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 20:34	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 20:34	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 20:34	1
Benzene	ND		0.10		ug/L			08/28/14 20:34	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 20:34	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 20:34	1
Dibromomethane	ND		0.10		ug/L			08/28/14 20:34	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 20:34	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 20:34	1
Toluene	ND		0.10		ug/L			08/28/14 20:34	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 20:34	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 20:34	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 20:34	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 20:34	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 20:34	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 20:34	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 20:34	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 20:34	1
o-Xylene	ND		0.10		ug/L			08/28/14 20:34	1
Styrene	ND		0.10		ug/L			08/28/14 20:34	1
Bromoform	ND		0.10		ug/L			08/28/14 20:34	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
Bromobenzene	ND		0.10		ug/L			08/28/14 20:34	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 20:34	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 20:34	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 20:34	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 20:34	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 20:34	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:34	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-22
Date Collected: 08/27/14 10:56
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:34	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 20:34	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 20:34	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 20:34	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 20:34	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 20:34	1
Naphthalene	ND		0.40		ug/L			08/28/14 20:34	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*85*		*80 - 127*		*08/28/14 20:34*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/28/14 20:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*08/28/14 20:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*08/28/14 20:34*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*08/28/14 20:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**32**		0.10		ug/L			08/29/14 17:03	1
Trichloroethene	**15**		0.10		ug/L			08/29/14 17:03	1
Tetrachloroethene	**73**		0.10		ug/L			08/29/14 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*89*		*80 - 127*		*08/29/14 17:03*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*08/29/14 17:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*08/29/14 17:03*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*08/29/14 17:03*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*08/29/14 17:03*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-16
Date Collected: 08/27/14 13:41
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 16:53	1
Chloromethane	ND		0.10		ug/L			08/28/14 16:53	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 16:53	1
Bromomethane	ND		0.10		ug/L			08/28/14 16:53	1
Chloroethane	ND		0.25		ug/L			08/28/14 16:53	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 16:53	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 16:53	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 16:53	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 16:53	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 16:53	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 16:53	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 16:53	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 16:53	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 16:53	1
Chloroform	**2.1**		0.10		ug/L			08/28/14 16:53	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 16:53	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 16:53	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 16:53	1
Benzene	ND		0.10		ug/L			08/28/14 16:53	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 16:53	1
Trichloroethene	**0.13**		0.10		ug/L			08/28/14 16:53	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 16:53	1
Dibromomethane	ND		0.10		ug/L			08/28/14 16:53	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 16:53	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 16:53	1
Toluene	ND		0.10		ug/L			08/28/14 16:53	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 16:53	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 16:53	1
Tetrachloroethene	**52**		0.10		ug/L			08/28/14 16:53	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 16:53	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 16:53	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 16:53	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 16:53	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 16:53	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 16:53	1
o-Xylene	ND		0.10		ug/L			08/28/14 16:53	1
Styrene	ND		0.10		ug/L			08/28/14 16:53	1
Bromoform	ND		0.10		ug/L			08/28/14 16:53	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
Bromobenzene	ND		0.10		ug/L			08/28/14 16:53	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 16:53	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 16:53	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 16:53	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 16:53	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
1,2,4-Trimethylbenzene	**0.11**		0.10		ug/L			08/28/14 16:53	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-16
Date Collected: 08/27/14 13:41
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 16:53	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:53	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:53	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 16:53	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 16:53	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 16:53	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 16:53	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 16:53	1
Naphthalene	ND		0.40		ug/L			08/28/14 16:53	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*90*		*80 - 127*		*08/28/14 16:53*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/28/14 16:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*08/28/14 16:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*08/28/14 16:53*	*1*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*08/28/14 16:53*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-5
Date Collected: 08/27/14 14:33
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			08/29/14 13:48	50
Chloromethane	ND		5.0		ug/L			08/29/14 13:48	50
Vinyl chloride	ND		1.0		ug/L			08/29/14 13:48	50
Bromomethane	ND		5.0		ug/L			08/29/14 13:48	50
Chloroethane	ND		13		ug/L			08/29/14 13:48	50
Trichlorofluoromethane	ND		5.0		ug/L			08/29/14 13:48	50
1,1-Dichloroethene	ND		5.0		ug/L			08/29/14 13:48	50
Methylene Chloride	ND		25		ug/L			08/29/14 13:48	50
Methyl tert-butyl ether	ND		5.0		ug/L			08/29/14 13:48	50
trans-1,2-Dichloroethene	**110**		5.0		ug/L			08/29/14 13:48	50
1,1-Dichloroethane	ND		5.0		ug/L			08/29/14 13:48	50
2,2-Dichloropropane	ND		5.0		ug/L			08/29/14 13:48	50
Chlorobromomethane	ND		5.0		ug/L			08/29/14 13:48	50
Chloroform	ND		5.0		ug/L			08/29/14 13:48	50
1,1,1-Trichloroethane	ND		5.0		ug/L			08/29/14 13:48	50
Carbon tetrachloride	ND		5.0		ug/L			08/29/14 13:48	50
1,1-Dichloropropene	ND		5.0		ug/L			08/29/14 13:48	50
Benzene	ND		5.0		ug/L			08/29/14 13:48	50
1,2-Dichloroethane	ND		5.0		ug/L			08/29/14 13:48	50
1,2-Dichloropropane	ND		5.0		ug/L			08/29/14 13:48	50
Dibromomethane	ND		5.0		ug/L			08/29/14 13:48	50
Dichlorobromomethane	ND		5.0		ug/L			08/29/14 13:48	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			08/29/14 13:48	50
Toluene	ND		5.0		ug/L			08/29/14 13:48	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			08/29/14 13:48	50
1,1,2-Trichloroethane	ND		5.0		ug/L			08/29/14 13:48	50
Tetrachloroethene	**76**		5.0		ug/L			08/29/14 13:48	50
1,3-Dichloropropane	ND		5.0		ug/L			08/29/14 13:48	50
Chlorodibromomethane	ND		5.0		ug/L			08/29/14 13:48	50
Ethylene Dibromide	ND		5.0		ug/L			08/29/14 13:48	50
Chlorobenzene	ND		5.0		ug/L			08/29/14 13:48	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			08/29/14 13:48	50
Ethylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
m-Xylene & p-Xylene	ND		10		ug/L			08/29/14 13:48	50
o-Xylene	ND		5.0		ug/L			08/29/14 13:48	50
Styrene	ND		5.0		ug/L			08/29/14 13:48	50
Bromoform	ND		5.0		ug/L			08/29/14 13:48	50
Isopropylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
Bromobenzene	ND		5.0		ug/L			08/29/14 13:48	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			08/29/14 13:48	50
1,2,3-Trichloropropane	ND		10		ug/L			08/29/14 13:48	50
N-Propylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
2-Chlorotoluene	ND		5.0		ug/L			08/29/14 13:48	50
4-Chlorotoluene	ND		10		ug/L			08/29/14 13:48	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
tert-Butylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
sec-Butylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
4-Isopropyltoluene	ND		10		ug/L			08/29/14 13:48	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Client Sample ID: MW-5
Date Collected: 08/27/14 14:33
Date Received: 08/28/14 07:40

Lab Sample ID: 580-45151-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		10		ug/L			08/29/14 13:48	50
1,4-Dichlorobenzene	ND		10		ug/L			08/29/14 13:48	50
n-Butylbenzene	ND		5.0		ug/L			08/29/14 13:48	50
1,2-Dichlorobenzene	ND		10		ug/L			08/29/14 13:48	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			08/29/14 13:48	50
1,2,4-Trichlorobenzene	ND		10		ug/L			08/29/14 13:48	50
Hexachlorobutadiene	ND		10		ug/L			08/29/14 13:48	50
Naphthalene	ND		20		ug/L			08/29/14 13:48	50
1,2,3-Trichlorobenzene	ND		20		ug/L			08/29/14 13:48	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*93*		*80 - 127*		*08/29/14 13:48*	*50*
Toluene-d8 (Surr)	*99*		*75 - 125*		*08/29/14 13:48*	*50*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*08/29/14 13:48*	*50*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/29/14 13:48*	*50*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*08/29/14 13:48*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**7700**		50		ug/L			08/29/14 19:28	500
Trichloroethene	**15000**		50		ug/L			08/29/14 19:28	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*90*		*80 - 127*		*08/29/14 19:28*	*500*
Toluene-d8 (Surr)	*102*		*75 - 125*		*08/29/14 19:28*	*500*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*08/29/14 19:28*	*500*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*08/29/14 19:28*	*500*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*08/29/14 19:28*	*500*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-168317/7
Matrix: Water
Analysis Batch: 168317

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/28/14 12:48	1
Chloromethane	ND		0.10		ug/L			08/28/14 12:48	1
Vinyl chloride	ND		0.020		ug/L			08/28/14 12:48	1
Bromomethane	ND		0.10		ug/L			08/28/14 12:48	1
Chloroethane	ND		0.25		ug/L			08/28/14 12:48	1
Trichlorofluoromethane	ND		0.10		ug/L			08/28/14 12:48	1
1,1-Dichloroethene	ND		0.10		ug/L			08/28/14 12:48	1
Methylene Chloride	ND		0.50		ug/L			08/28/14 12:48	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/28/14 12:48	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 12:48	1
1,1-Dichloroethane	ND		0.10		ug/L			08/28/14 12:48	1
2,2-Dichloropropane	ND		0.10		ug/L			08/28/14 12:48	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			08/28/14 12:48	1
Chlorobromomethane	ND		0.10		ug/L			08/28/14 12:48	1
Chloroform	ND		0.10		ug/L			08/28/14 12:48	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/28/14 12:48	1
Carbon tetrachloride	ND		0.10		ug/L			08/28/14 12:48	1
1,1-Dichloropropene	ND		0.10		ug/L			08/28/14 12:48	1
Benzene	ND		0.10		ug/L			08/28/14 12:48	1
1,2-Dichloroethane	ND		0.10		ug/L			08/28/14 12:48	1
Trichloroethene	ND		0.10		ug/L			08/28/14 12:48	1
1,2-Dichloropropane	ND		0.10		ug/L			08/28/14 12:48	1
Dibromomethane	ND		0.10		ug/L			08/28/14 12:48	1
Dichlorobromomethane	ND		0.10		ug/L			08/28/14 12:48	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 12:48	1
Toluene	ND		0.10		ug/L			08/28/14 12:48	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/28/14 12:48	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/28/14 12:48	1
Tetrachloroethene	ND		0.10		ug/L			08/28/14 12:48	1
1,3-Dichloropropane	ND		0.10		ug/L			08/28/14 12:48	1
Chlorodibromomethane	ND		0.10		ug/L			08/28/14 12:48	1
Ethylene Dibromide	ND		0.10		ug/L			08/28/14 12:48	1
Chlorobenzene	ND		0.10		ug/L			08/28/14 12:48	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 12:48	1
Ethylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/28/14 12:48	1
o-Xylene	ND		0.10		ug/L			08/28/14 12:48	1
Styrene	ND		0.10		ug/L			08/28/14 12:48	1
Bromoform	ND		0.10		ug/L			08/28/14 12:48	1
Isopropylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
Bromobenzene	ND		0.10		ug/L			08/28/14 12:48	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/28/14 12:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/28/14 12:48	1
N-Propylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
2-Chlorotoluene	ND		0.10		ug/L			08/28/14 12:48	1
4-Chlorotoluene	ND		0.20		ug/L			08/28/14 12:48	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
tert-Butylbenzene	ND		0.10		ug/L			08/28/14 12:48	1

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

Lab Sample ID: MB 580-168317/7
Matrix: Water
Analysis Batch: 168317

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
sec-Butylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
4-Isopropyltoluene	ND		0.20		ug/L			08/28/14 12:48	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/28/14 12:48	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/28/14 12:48	1
n-Butylbenzene	ND		0.10		ug/L			08/28/14 12:48	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/28/14 12:48	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/28/14 12:48	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/28/14 12:48	1
Hexachlorobutadiene	ND		0.20		ug/L			08/28/14 12:48	1
Naphthalene	ND		0.40		ug/L			08/28/14 12:48	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/28/14 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*86*		*80 - 127*		*08/28/14 12:48*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*08/28/14 12:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*		*08/28/14 12:48*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*08/28/14 12:48*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*08/28/14 12:48*	*1*

Lab Sample ID: LCS 580-168317/8
Matrix: Water
Analysis Batch: 168317

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.15		ug/L		103	30 - 180
Chloromethane	5.00	5.59		ug/L		112	50 - 140
Vinyl chloride	5.00	5.31		ug/L		106	65 - 140
Bromomethane	5.00	5.88		ug/L		118	70 - 135
Chloroethane	5.00	5.79		ug/L		116	75 - 140
Trichlorofluoromethane	5.00	5.64		ug/L		113	30 - 180
1,1-Dichloroethene	5.00	5.19		ug/L		104	70 - 150
Methylene Chloride	5.00	5.35		ug/L		107	60 - 145
Methyl tert-butyl ether	5.00	5.18		ug/L		104	75 - 120
trans-1,2-Dichloroethene	5.00	5.40		ug/L		108	80 - 140
1,1-Dichloroethane	5.00	5.35		ug/L		107	75 - 135
2,2-Dichloropropane	5.00	6.04		ug/L		121	60 - 150
cis-1,2-Dichloroethene	5.00	5.17		ug/L		103	80 - 130
Chlorobromomethane	5.00	5.26		ug/L		105	80 - 125
Chloroform	5.00	5.37		ug/L		107	80 - 130
1,1,1-Trichloroethane	5.00	5.55		ug/L		111	80 - 140
Carbon tetrachloride	5.00	5.20		ug/L		104	75 - 140
1,1-Dichloropropene	5.00	5.48		ug/L		110	80 - 130
Benzene	5.00	5.20		ug/L		104	80 - 120
1,2-Dichloroethane	5.00	4.75		ug/L		95	80 - 140
Trichloroethene	5.00	5.21		ug/L		104	80 - 130
1,2-Dichloropropane	5.00	5.16		ug/L		103	80 - 120
Dibromomethane	5.00	4.90		ug/L		98	80 - 130

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

Lab Sample ID: LCS 580-168317/8
Matrix: Water
Analysis Batch: 168317

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	4.82		ug/L		96	80 - 125
cis-1,3-Dichloropropene	5.00	4.54		ug/L		91	70 - 120
Toluene	5.00	5.31		ug/L		106	80 - 120
trans-1,3-Dichloropropene	5.00	4.30		ug/L		86	60 - 140
1,1,2-Trichloroethane	5.00	4.95		ug/L		99	80 - 130
Tetrachloroethene	5.00	5.07		ug/L		101	40 - 180
1,3-Dichloropropane	5.00	5.06		ug/L		101	80 - 130
Chlorodibromomethane	5.00	4.25		ug/L		85	70 - 120
Ethylene Dibromide	5.00	5.16		ug/L		103	70 - 130
Chlorobenzene	5.00	5.38		ug/L		108	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.38		ug/L		108	75 - 125
Ethylbenzene	5.00	5.68		ug/L		114	80 - 125
m-Xylene & p-Xylene	5.00	5.64		ug/L		113	80 - 130
o-Xylene	5.00	5.65		ug/L		113	80 - 120
Styrene	5.00	5.17		ug/L		103	75 - 130
Bromoform	5.00	3.76		ug/L		75	65 - 130
Isopropylbenzene	5.00	5.47		ug/L		109	75 - 120
Bromobenzene	5.00	4.74		ug/L		95	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.55		ug/L		91	75 - 125
1,2,3-Trichloropropane	5.00	4.79		ug/L		96	75 - 120
N-Propylbenzene	5.00	5.65		ug/L		113	80 - 120
2-Chlorotoluene	5.00	5.38		ug/L		108	75 - 130
4-Chlorotoluene	5.00	5.47		ug/L		109	75 - 130
1,3,5-Trimethylbenzene	5.00	5.13		ug/L		103	80 - 125
tert-Butylbenzene	5.00	5.24		ug/L		105	80 - 130
1,2,4-Trimethylbenzene	5.00	5.02		ug/L		100	80 - 125
sec-Butylbenzene	5.00	5.03		ug/L		101	80 - 125
4-Isopropyltoluene	5.00	5.00		ug/L		100	80 - 120
1,3-Dichlorobenzene	5.00	5.04		ug/L		101	80 - 120
1,4-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120
n-Butylbenzene	5.00	4.79		ug/L		96	75 - 125
1,2-Dichlorobenzene	5.00	5.17		ug/L		103	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.88		ug/L		78	55 - 120
1,2,4-Trichlorobenzene	5.00	4.50		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	5.33		ug/L		107	75 - 135
Naphthalene	5.00	3.81		ug/L		76	45 - 130
1,2,3-Trichlorobenzene	5.00	5.34		ug/L		107	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*91*		*80 - 127*
Toluene-d8 (Surr)	*103*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

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

Lab Sample ID: LCSD 580-168317/9
Matrix: Water
Analysis Batch: 168317

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
Dichlorodifluoromethane	5.00	5.56		ug/L		111	30 - 180	8	20
Chloromethane	5.00	5.73		ug/L		115	50 - 140	2	20
Vinyl chloride	5.00	5.51		ug/L		110	65 - 140	4	20
Bromomethane	5.00	6.24		ug/L		125	70 - 135	6	20
Chloroethane	5.00	5.69		ug/L		114	75 - 140	2	20
Trichlorofluoromethane	5.00	5.93		ug/L		119	30 - 180	5	20
1,1-Dichloroethene	5.00	5.21		ug/L		104	70 - 150	0	20
Methylene Chloride	5.00	5.28		ug/L		106	60 - 145	1	20
Methyl tert-butyl ether	5.00	5.26		ug/L		105	75 - 120	2	20
trans-1,2-Dichloroethene	5.00	5.45		ug/L		109	80 - 140	1	20
1,1-Dichloroethane	5.00	5.39		ug/L		108	75 - 135	1	20
2,2-Dichloropropane	5.00	6.32		ug/L		126	60 - 150	4	20
cis-1,2-Dichloroethene	5.00	5.37		ug/L		107	80 - 130	4	20
Chlorobromomethane	5.00	5.19		ug/L		104	80 - 125	1	20
Chloroform	5.00	5.39		ug/L		108	80 - 130	0	20
1,1,1-Trichloroethane	5.00	5.70		ug/L		114	80 - 140	3	20
Carbon tetrachloride	5.00	5.36		ug/L		107	75 - 140	3	20
1,1-Dichloropropene	5.00	5.61		ug/L		112	80 - 130	2	20
Benzene	5.00	5.25		ug/L		105	80 - 120	1	20
1,2-Dichloroethane	5.00	4.91		ug/L		98	80 - 140	3	20
Trichloroethene	5.00	5.27		ug/L		105	80 - 130	1	20
1,2-Dichloropropane	5.00	5.05		ug/L		101	80 - 120	2	20
Dibromomethane	5.00	4.86		ug/L		97	80 - 130	1	20
Dichlorobromomethane	5.00	4.86		ug/L		97	80 - 125	1	20
cis-1,3-Dichloropropene	5.00	4.56		ug/L		91	70 - 120	0	20
Toluene	5.00	5.45		ug/L		109	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	3.99		ug/L		80	60 - 140	7	20
1,1,2-Trichloroethane	5.00	4.86		ug/L		97	80 - 130	2	20
Tetrachloroethene	5.00	5.28		ug/L		106	40 - 180	4	20
1,3-Dichloropropane	5.00	4.89		ug/L		98	80 - 130	3	20
Chlorodibromomethane	5.00	4.08		ug/L		82	70 - 120	4	20
Ethylene Dibromide	5.00	5.23		ug/L		105	70 - 130	1	20
Chlorobenzene	5.00	5.20		ug/L		104	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	5.66		ug/L		113	75 - 125	5	20
Ethylbenzene	5.00	5.70		ug/L		114	80 - 125	0	20
m-Xylene & p-Xylene	5.00	5.66		ug/L		113	80 - 130	0	20
o-Xylene	5.00	5.57		ug/L		111	80 - 120	1	20
Styrene	5.00	5.06		ug/L		101	75 - 130	2	20
Bromoform	5.00	3.71		ug/L		74	65 - 130	1	20
Isopropylbenzene	5.00	5.73		ug/L		115	75 - 120	5	20
Bromobenzene	5.00	4.77		ug/L		95	80 - 130	1	20
1,1,2,2-Tetrachloroethane	5.00	4.48		ug/L		90	75 - 125	2	20
1,2,3-Trichloropropane	5.00	4.74		ug/L		95	75 - 120	1	20
N-Propylbenzene	5.00	5.75		ug/L		115	80 - 120	2	20
2-Chlorotoluene	5.00	5.47		ug/L		109	75 - 130	2	20
4-Chlorotoluene	5.00	5.54		ug/L		111	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.32		ug/L		106	80 - 125	4	20
tert-Butylbenzene	5.00	4.86		ug/L		97	80 - 130	8	20

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

Lab Sample ID: LCSD 580-168317/9
Matrix: Water
Analysis Batch: 168317

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
1,2,4-Trimethylbenzene			5.00	5.18		ug/L		104	80 - 125	3	20
sec-Butylbenzene			5.00	5.28		ug/L		106	80 - 125	5	20
4-Isopropyltoluene			5.00	5.18		ug/L		104	80 - 120	3	20
1,3-Dichlorobenzene			5.00	5.20		ug/L		104	80 - 120	3	20
1,4-Dichlorobenzene			5.00	5.01		ug/L		100	80 - 120	2	20
n-Butylbenzene			5.00	4.99		ug/L		100	75 - 125	4	20
1,2-Dichlorobenzene			5.00	5.36		ug/L		107	80 - 130	4	20
1,2-Dibromo-3-Chloropropane			5.00	3.67		ug/L		73	55 - 120	5	20
1,2,4-Trichlorobenzene			5.00	4.67		ug/L		93	60 - 125	4	20
Hexachlorobutadiene			5.00	5.87		ug/L		117	75 - 135	10	20
Naphthalene			5.00	4.06		ug/L		81	45 - 130	6	20
1,2,3-Trichlorobenzene			5.00	5.49		ug/L		110	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*102*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*

Lab Sample ID: MB 580-168393/7
Matrix: Water
Analysis Batch: 168393

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			08/29/14 09:28	1
Chloromethane	ND		0.10		ug/L			08/29/14 09:28	1
Vinyl chloride	ND		0.020		ug/L			08/29/14 09:28	1
Bromomethane	ND		0.10		ug/L			08/29/14 09:28	1
Chloroethane	ND		0.25		ug/L			08/29/14 09:28	1
Trichlorofluoromethane	ND		0.10		ug/L			08/29/14 09:28	1
1,1-Dichloroethene	ND		0.10		ug/L			08/29/14 09:28	1
Methylene Chloride	ND		0.50		ug/L			08/29/14 09:28	1
Methyl tert-butyl ether	ND		0.10		ug/L			08/29/14 09:28	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			08/29/14 09:28	1
1,1-Dichloroethane	ND		0.10		ug/L			08/29/14 09:28	1
2,2-Dichloropropane	ND		0.10		ug/L			08/29/14 09:28	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			08/29/14 09:28	1
Chlorobromomethane	ND		0.10		ug/L			08/29/14 09:28	1
Chloroform	ND		0.10		ug/L			08/29/14 09:28	1
1,1,1-Trichloroethane	ND		0.10		ug/L			08/29/14 09:28	1
Carbon tetrachloride	ND		0.10		ug/L			08/29/14 09:28	1
1,1-Dichloropropene	ND		0.10		ug/L			08/29/14 09:28	1
Benzene	ND		0.10		ug/L			08/29/14 09:28	1
1,2-Dichloroethane	ND		0.10		ug/L			08/29/14 09:28	1
Trichloroethene	ND		0.10		ug/L			08/29/14 09:28	1
1,2-Dichloropropane	ND		0.10		ug/L			08/29/14 09:28	1
Dibromomethane	ND		0.10		ug/L			08/29/14 09:28	1

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

Lab Sample ID: MB 580-168393/7
Matrix: Water
Analysis Batch: 168393

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			08/29/14 09:28	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			08/29/14 09:28	1
Toluene	ND		0.10		ug/L			08/29/14 09:28	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			08/29/14 09:28	1
1,1,2-Trichloroethane	ND		0.10		ug/L			08/29/14 09:28	1
Tetrachloroethene	ND		0.10		ug/L			08/29/14 09:28	1
1,3-Dichloropropane	ND		0.10		ug/L			08/29/14 09:28	1
Chlorodibromomethane	ND		0.10		ug/L			08/29/14 09:28	1
Ethylene Dibromide	ND		0.10		ug/L			08/29/14 09:28	1
Chlorobenzene	ND		0.10		ug/L			08/29/14 09:28	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			08/29/14 09:28	1
Ethylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
m-Xylene & p-Xylene	ND		0.20		ug/L			08/29/14 09:28	1
o-Xylene	ND		0.10		ug/L			08/29/14 09:28	1
Styrene	ND		0.10		ug/L			08/29/14 09:28	1
Bromoform	ND		0.10		ug/L			08/29/14 09:28	1
Isopropylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
Bromobenzene	ND		0.10		ug/L			08/29/14 09:28	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			08/29/14 09:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			08/29/14 09:28	1
N-Propylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
2-Chlorotoluene	ND		0.10		ug/L			08/29/14 09:28	1
4-Chlorotoluene	ND		0.20		ug/L			08/29/14 09:28	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
tert-Butylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
sec-Butylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
4-Isopropyltoluene	ND		0.20		ug/L			08/29/14 09:28	1
1,3-Dichlorobenzene	ND		0.20		ug/L			08/29/14 09:28	1
1,4-Dichlorobenzene	ND		0.20		ug/L			08/29/14 09:28	1
n-Butylbenzene	ND		0.10		ug/L			08/29/14 09:28	1
1,2-Dichlorobenzene	ND		0.20		ug/L			08/29/14 09:28	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			08/29/14 09:28	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			08/29/14 09:28	1
Hexachlorobutadiene	ND		0.20		ug/L			08/29/14 09:28	1
Naphthalene	ND		0.40		ug/L			08/29/14 09:28	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			08/29/14 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*80*		*80 - 127*		*08/29/14 09:28*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*08/29/14 09:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*		*08/29/14 09:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*08/29/14 09:28*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*08/29/14 09:28*	*1*

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

Lab Sample ID: LCS 580-168393/8
Matrix: Water
Analysis Batch: 168393

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.16		ug/L		123	30 - 180
Chloromethane	5.00	5.87		ug/L		117	50 - 140
Vinyl chloride	5.00	5.76		ug/L		115	65 - 140
Bromomethane	5.00	6.36		ug/L		127	70 - 135
Chloroethane	5.00	5.97		ug/L		119	75 - 140
Trichlorofluoromethane	5.00	6.57		ug/L		131	30 - 180
1,1-Dichloroethene	5.00	5.55		ug/L		111	70 - 150
Methylene Chloride	5.00	5.65		ug/L		113	60 - 145
Methyl tert-butyl ether	5.00	5.36		ug/L		107	75 - 120
trans-1,2-Dichloroethene	5.00	5.65		ug/L		113	80 - 140
1,1-Dichloroethane	5.00	5.76		ug/L		115	75 - 135
2,2-Dichloropropane	5.00	6.62		ug/L		132	60 - 150
cis-1,2-Dichloroethene	5.00	5.59		ug/L		112	80 - 130
Chlorobromomethane	5.00	5.42		ug/L		108	80 - 125
Chloroform	5.00	5.72		ug/L		114	80 - 130
1,1,1-Trichloroethane	5.00	5.76		ug/L		115	80 - 140
Carbon tetrachloride	5.00	5.58		ug/L		112	75 - 140
1,1-Dichloropropene	5.00	5.78		ug/L		116	80 - 130
Benzene	5.00	5.40		ug/L		108	80 - 120
1,2-Dichloroethane	5.00	5.37		ug/L		107	80 - 140
Trichloroethene	5.00	5.37		ug/L		107	80 - 130
1,2-Dichloropropane	5.00	5.30		ug/L		106	80 - 120
Dibromomethane	5.00	4.97		ug/L		99	80 - 130
Dichlorobromomethane	5.00	5.10		ug/L		102	80 - 125
cis-1,3-Dichloropropene	5.00	4.64		ug/L		93	70 - 120
Toluene	5.00	5.60		ug/L		112	80 - 120
trans-1,3-Dichloropropene	5.00	4.26		ug/L		85	60 - 140
1,1,2-Trichloroethane	5.00	5.05		ug/L		101	80 - 130
Tetrachloroethene	5.00	3.92		ug/L		78	40 - 180
1,3-Dichloropropane	5.00	5.01		ug/L		100	80 - 130
Chlorodibromomethane	5.00	4.34		ug/L		87	70 - 120
Ethylene Dibromide	5.00	5.18		ug/L		104	70 - 130
Chlorobenzene	5.00	5.47		ug/L		109	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.47		ug/L		109	75 - 125
Ethylbenzene	5.00	5.94		ug/L		119	80 - 125
m-Xylene & p-Xylene	5.00	6.00		ug/L		120	80 - 130
o-Xylene	5.00	5.82		ug/L		116	80 - 120
Styrene	5.00	5.35		ug/L		107	75 - 130
Bromoform	5.00	3.63		ug/L		73	65 - 130
Isopropylbenzene	5.00	5.68		ug/L		114	75 - 120
Bromobenzene	5.00	4.83		ug/L		97	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.80		ug/L		96	75 - 125
1,2,3-Trichloropropane	5.00	5.03		ug/L		101	75 - 120
N-Propylbenzene	5.00	5.99		ug/L		120	80 - 120
2-Chlorotoluene	5.00	5.74		ug/L		115	75 - 130
4-Chlorotoluene	5.00	5.82		ug/L		116	75 - 130
1,3,5-Trimethylbenzene	5.00	5.30		ug/L		106	80 - 125
tert-Butylbenzene	5.00	4.80		ug/L		96	80 - 130

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

Lab Sample ID: LCS 580-168393/8
Matrix: Water
Analysis Batch: 168393

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			5.00	5.19		ug/L		104	80 - 125		
sec-Butylbenzene			5.00	5.37		ug/L		107	80 - 125		
4-Isopropyltoluene			5.00	5.28		ug/L		106	80 - 120		
1,3-Dichlorobenzene			5.00	5.23		ug/L		105	80 - 120		
1,4-Dichlorobenzene			5.00	5.07		ug/L		101	80 - 120		
n-Butylbenzene			5.00	4.88		ug/L		98	75 - 125		
1,2-Dichlorobenzene			5.00	5.23		ug/L		105	80 - 130		
1,2-Dibromo-3-Chloropropane			5.00	3.51		ug/L		70	55 - 120		
1,2,4-Trichlorobenzene			5.00	4.18		ug/L		84	60 - 125		
Hexachlorobutadiene			5.00	5.51		ug/L		110	75 - 135		
Naphthalene			5.00	3.50		ug/L		70	45 - 130		
1,2,3-Trichlorobenzene			5.00	4.91		ug/L		98	60 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*101*		*80 - 127*
Toluene-d8 (Surr)	*103*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

Lab Sample ID: LCSD 580-168393/9
Matrix: Water
Analysis Batch: 168393

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
Dichlorodifluoromethane			5.00	5.52		ug/L		110	30 - 180	11	20
Chloromethane			5.00	5.81		ug/L		116	50 - 140	1	20
Vinyl chloride			5.00	5.56		ug/L		111	65 - 140	4	20
Bromomethane			5.00	6.29		ug/L		126	70 - 135	1	20
Chloroethane			5.00	5.36		ug/L		107	75 - 140	11	20
Trichlorofluoromethane			5.00	6.21		ug/L		124	30 - 180	6	20
1,1-Dichloroethene			5.00	5.57		ug/L		111	70 - 150	0	20
Methylene Chloride			5.00	5.72		ug/L		114	60 - 145	1	20
Methyl tert-butyl ether			5.00	5.25		ug/L		105	75 - 120	2	20
trans-1,2-Dichloroethene			5.00	5.50		ug/L		110	80 - 140	3	20
1,1-Dichloroethane			5.00	5.68		ug/L		114	75 - 135	1	20
2,2-Dichloropropane			5.00	6.58		ug/L		132	60 - 150	1	20
cis-1,2-Dichloroethene			5.00	5.69		ug/L		114	80 - 130	2	20
Chlorobromomethane			5.00	5.33		ug/L		107	80 - 125	2	20
Chloroform			5.00	5.57		ug/L		111	80 - 130	3	20
1,1,1-Trichloroethane			5.00	5.60		ug/L		112	80 - 140	3	20
Carbon tetrachloride			5.00	5.49		ug/L		110	75 - 140	2	20
1,1-Dichloropropene			5.00	5.81		ug/L		116	80 - 130	1	20
Benzene			5.00	5.51		ug/L		110	80 - 120	2	20
1,2-Dichloroethane			5.00	5.18		ug/L		104	80 - 140	3	20
Trichloroethene			5.00	5.24		ug/L		105	80 - 130	2	20
1,2-Dichloropropane			5.00	5.11		ug/L		102	80 - 120	4	20
Dibromomethane			5.00	4.90		ug/L		98	80 - 130	1	20

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

Lab Sample ID: LCSD 580-168393/9
Matrix: Water
Analysis Batch: 168393

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
Dichlorobromomethane	5.00	4.87		ug/L		97	80 - 125	5	20
cis-1,3-Dichloropropene	5.00	4.76		ug/L		95	70 - 120	2	20
Toluene	5.00	5.42		ug/L		108	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	4.01		ug/L		80	60 - 140	6	20
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 130	1	20
Tetrachloroethene	5.00	4.32		ug/L		86	40 - 180	10	20
1,3-Dichloropropane	5.00	5.06		ug/L		101	80 - 130	1	20
Chlorodibromomethane	5.00	4.15		ug/L		83	70 - 120	5	20
Ethylene Dibromide	5.00	5.20		ug/L		104	70 - 130	0	20
Chlorobenzene	5.00	5.30		ug/L		106	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	5.40		ug/L		108	75 - 125	1	20
Ethylbenzene	5.00	5.74		ug/L		115	80 - 125	3	20
m-Xylene & p-Xylene	5.00	5.86		ug/L		117	80 - 130	2	20
o-Xylene	5.00	5.56		ug/L		111	80 - 120	5	20
Styrene	5.00	4.97		ug/L		99	75 - 130	7	20
Bromoform	5.00	3.78		ug/L		76	65 - 130	4	20
Isopropylbenzene	5.00	5.61		ug/L		112	75 - 120	1	20
Bromobenzene	5.00	4.96		ug/L		99	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	4.75		ug/L		95	75 - 125	1	20
1,2,3-Trichloropropane	5.00	4.98		ug/L		100	75 - 120	1	20
N-Propylbenzene	5.00	5.83		ug/L		117	80 - 120	3	20
2-Chlorotoluene	5.00	5.45		ug/L		109	75 - 130	5	20
4-Chlorotoluene	5.00	5.71		ug/L		114	75 - 130	2	20
1,3,5-Trimethylbenzene	5.00	5.24		ug/L		105	80 - 125	1	20
tert-Butylbenzene	5.00	4.32		ug/L		86	80 - 130	11	20
1,2,4-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125	1	20
sec-Butylbenzene	5.00	5.20		ug/L		104	80 - 125	3	20
4-Isopropyltoluene	5.00	5.06		ug/L		101	80 - 120	4	20
1,3-Dichlorobenzene	5.00	5.34		ug/L		107	80 - 120	2	20
1,4-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 120	2	20
n-Butylbenzene	5.00	4.87		ug/L		97	75 - 125	0	20
1,2-Dichlorobenzene	5.00	5.36		ug/L		107	80 - 130	3	20
1,2-Dibromo-3-Chloropropane	5.00	3.74		ug/L		75	55 - 120	6	20
1,2,4-Trichlorobenzene	5.00	4.39		ug/L		88	60 - 125	5	20
Hexachlorobutadiene	5.00	5.57		ug/L		111	75 - 135	1	20
Naphthalene	5.00	3.69		ug/L		74	45 - 130	5	20
1,2,3-Trichlorobenzene	5.00	5.08		ug/L		102	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*100*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*

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

Lab Sample ID: MB 580-168655/6
Matrix: Water
Analysis Batch: 168655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 12:01	1
Chloromethane	ND		0.10		ug/L			09/03/14 12:01	1
Vinyl chloride	ND		0.020		ug/L			09/03/14 12:01	1
Bromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Chloroethane	ND		0.25		ug/L			09/03/14 12:01	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 12:01	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 12:01	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Chloroform	ND		0.10		ug/L			09/03/14 12:01	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
Benzene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Trichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
Dibromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 12:01	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
Toluene	ND		0.10		ug/L			09/03/14 12:01	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Tetrachloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 12:01	1
Chlorobenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 12:01	1
o-Xylene	ND		0.10		ug/L			09/03/14 12:01	1
Styrene	ND		0.10		ug/L			09/03/14 12:01	1
Bromoform	ND		0.10		ug/L			09/03/14 12:01	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
Bromobenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 12:01	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 12:01	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 12:01	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 12:01	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1

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

Lab Sample ID: MB 580-168655/6
Matrix: Water
Analysis Batch: 168655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 12:01	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
n-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 12:01	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 12:01	1
Naphthalene	ND		0.40		ug/L			09/03/14 12:01	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*09/03/14 12:01*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/03/14 12:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*09/03/14 12:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/03/14 12:01*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/03/14 12:01*	*1*

Lab Sample ID: LCS 580-168655/7
Matrix: Water
Analysis Batch: 168655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.03		ug/L		121	30 - 180
Chloromethane	5.00	6.41		ug/L		128	50 - 140
Vinyl chloride	5.00	6.01		ug/L		120	65 - 140
Bromomethane	5.00	6.69		ug/L		134	70 - 135
Chloroethane	5.00	6.24		ug/L		125	75 - 140
Trichlorofluoromethane	5.00	6.94		ug/L		139	30 - 180
1,1-Dichloroethene	5.00	6.10		ug/L		122	70 - 150
Methylene Chloride	5.00	6.25		ug/L		125	60 - 145
Methyl tert-butyl ether	5.00	5.68		ug/L		114	75 - 120
trans-1,2-Dichloroethene	5.00	5.95		ug/L		119	80 - 140
1,1-Dichloroethane	5.00	6.07		ug/L		121	75 - 135
2,2-Dichloropropane	5.00	6.31		ug/L		126	60 - 150
cis-1,2-Dichloroethene	5.00	5.78		ug/L		116	80 - 130
Chlorobromomethane	5.00	5.60		ug/L		112	80 - 125
Chloroform	5.00	6.01		ug/L		120	80 - 130
1,1,1-Trichloroethane	5.00	5.94		ug/L		119	80 - 140
Carbon tetrachloride	5.00	5.73		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.87		ug/L		117	80 - 130
Benzene	5.00	5.54		ug/L		111	80 - 120
1,2-Dichloroethane	5.00	5.61		ug/L		112	80 - 140
Trichloroethene	5.00	5.50		ug/L		110	80 - 130
1,2-Dichloropropane	5.00	5.32		ug/L		106	80 - 120
Dibromomethane	5.00	5.19		ug/L		104	80 - 130

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

Lab Sample ID: LCS 580-168655/7
Matrix: Water
Analysis Batch: 168655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.04		ug/L		101	80 - 125
cis-1,3-Dichloropropene	5.00	4.51		ug/L		90	70 - 120
Toluene	5.00	5.48		ug/L		110	80 - 120
trans-1,3-Dichloropropene	5.00	4.11		ug/L		82	60 - 140
1,1,2-Trichloroethane	5.00	5.16		ug/L		103	80 - 130
Tetrachloroethene	5.00	5.08		ug/L		102	40 - 180
1,3-Dichloropropane	5.00	5.19		ug/L		104	80 - 130
Chlorodibromomethane	5.00	4.36		ug/L		87	70 - 120
Ethylene Dibromide	5.00	5.47		ug/L		109	70 - 130
Chlorobenzene	5.00	5.54		ug/L		111	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.53		ug/L		111	75 - 125
Ethylbenzene	5.00	5.90		ug/L		118	80 - 125
m-Xylene & p-Xylene	5.00	5.79		ug/L		116	80 - 130
o-Xylene	5.00	5.69		ug/L		114	80 - 120
Styrene	5.00	5.19		ug/L		104	75 - 130
Bromoform	5.00	3.71		ug/L		74	65 - 130
Isopropylbenzene	5.00	5.54		ug/L		111	75 - 120
Bromobenzene	5.00	4.72		ug/L		94	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.52		ug/L		90	75 - 125
1,2,3-Trichloropropane	5.00	4.97		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.65		ug/L		113	80 - 120
2-Chlorotoluene	5.00	5.29		ug/L		106	75 - 130
4-Chlorotoluene	5.00	5.34		ug/L		107	75 - 130
1,3,5-Trimethylbenzene	5.00	4.99		ug/L		100	80 - 125
tert-Butylbenzene	5.00	4.44		ug/L		89	80 - 130
1,2,4-Trimethylbenzene	5.00	4.98		ug/L		100	80 - 125
sec-Butylbenzene	5.00	4.96		ug/L		99	80 - 125
4-Isopropyltoluene	5.00	4.91		ug/L		98	80 - 120
1,3-Dichlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	4.85		ug/L		97	80 - 120
n-Butylbenzene	5.00	4.59		ug/L		92	75 - 125
1,2-Dichlorobenzene	5.00	5.30		ug/L		106	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.34		ug/L		67	55 - 120
1,2,4-Trichlorobenzene	5.00	3.98		ug/L		80	60 - 125
Hexachlorobutadiene	5.00	4.98		ug/L		100	75 - 135
Naphthalene	5.00	3.27		ug/L		65	45 - 130
1,2,3-Trichlorobenzene	5.00	4.62		ug/L		92	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*97*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

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

Lab Sample ID: LCSD 580-168655/8
Matrix: Water
Analysis Batch: 168655

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
Dichlorodifluoromethane	5.00	5.72		ug/L		114	30 - 180	5	20
Chloromethane	5.00	6.28		ug/L		126	50 - 140	2	20
Vinyl chloride	5.00	5.98		ug/L		120	65 - 140	0	20
Bromomethane	5.00	6.86	*	ug/L		137	70 - 135	3	20
Chloroethane	5.00	6.36		ug/L		127	75 - 140	2	20
Trichlorofluoromethane	5.00	7.10		ug/L		142	30 - 180	2	20
1,1-Dichloroethene	5.00	5.61		ug/L		112	70 - 150	8	20
Methylene Chloride	5.00	6.00		ug/L		120	60 - 145	4	20
Methyl tert-butyl ether	5.00	5.44		ug/L		109	75 - 120	4	20
trans-1,2-Dichloroethene	5.00	5.78		ug/L		116	80 - 140	3	20
1,1-Dichloroethane	5.00	5.74		ug/L		115	75 - 135	6	20
2,2-Dichloropropane	5.00	6.21		ug/L		124	60 - 150	2	20
cis-1,2-Dichloroethene	5.00	5.49		ug/L		110	80 - 130	5	20
Chlorobromomethane	5.00	5.36		ug/L		107	80 - 125	5	20
Chloroform	5.00	5.71		ug/L		114	80 - 130	5	20
1,1,1-Trichloroethane	5.00	5.72		ug/L		114	80 - 140	4	20
Carbon tetrachloride	5.00	5.32		ug/L		106	75 - 140	7	20
1,1-Dichloropropene	5.00	5.60		ug/L		112	80 - 130	5	20
Benzene	5.00	5.33		ug/L		107	80 - 120	4	20
1,2-Dichloroethane	5.00	5.53		ug/L		111	80 - 140	1	20
Trichloroethene	5.00	5.28		ug/L		106	80 - 130	4	20
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 120	2	20
Dibromomethane	5.00	5.04		ug/L		101	80 - 130	3	20
Dichlorobromomethane	5.00	5.07		ug/L		101	80 - 125	1	20
cis-1,3-Dichloropropene	5.00	4.27		ug/L		85	70 - 120	6	20
Toluene	5.00	5.33		ug/L		107	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	3.92		ug/L		78	60 - 140	5	20
1,1,2-Trichloroethane	5.00	5.01		ug/L		100	80 - 130	3	20
Tetrachloroethene	5.00	5.19		ug/L		104	40 - 180	2	20
1,3-Dichloropropane	5.00	4.97		ug/L		99	80 - 130	4	20
Chlorodibromomethane	5.00	4.11		ug/L		82	70 - 120	6	20
Ethylene Dibromide	5.00	5.11		ug/L		102	70 - 130	7	20
Chlorobenzene	5.00	5.27		ug/L		105	80 - 120	5	20
1,1,1,2-Tetrachloroethane	5.00	5.34		ug/L		107	75 - 125	3	20
Ethylbenzene	5.00	5.67		ug/L		113	80 - 125	4	20
m-Xylene & p-Xylene	5.00	5.68		ug/L		114	80 - 130	2	20
o-Xylene	5.00	5.48		ug/L		110	80 - 120	4	20
Styrene	5.00	4.97		ug/L		99	75 - 130	4	20
Bromoform	5.00	3.71		ug/L		74	65 - 130	0	20
Isopropylbenzene	5.00	5.38		ug/L		108	75 - 120	3	20
Bromobenzene	5.00	4.73		ug/L		95	80 - 130	0	20
1,1,2,2-Tetrachloroethane	5.00	4.59		ug/L		92	75 - 125	1	20
1,2,3-Trichloropropane	5.00	5.03		ug/L		101	75 - 120	1	20
N-Propylbenzene	5.00	5.66		ug/L		113	80 - 120	0	20
2-Chlorotoluene	5.00	5.11		ug/L		102	75 - 130	3	20
4-Chlorotoluene	5.00	5.46		ug/L		109	75 - 130	2	20
1,3,5-Trimethylbenzene	5.00	5.12		ug/L		102	80 - 125	3	20
tert-Butylbenzene	5.00	4.72		ug/L		94	80 - 130	6	20

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

Lab Sample ID: LCSD 580-168655/8
Matrix: Water
Analysis Batch: 168655

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
1,2,4-Trimethylbenzene			5.00	5.07		ug/L		101	80 - 125	2	20
sec-Butylbenzene			5.00	4.99		ug/L		100	80 - 125	1	20
4-Isopropyltoluene			5.00	4.89		ug/L		98	80 - 120	1	20
1,3-Dichlorobenzene			5.00	5.15		ug/L		103	80 - 120	1	20
1,4-Dichlorobenzene			5.00	4.84		ug/L		97	80 - 120	0	20
n-Butylbenzene			5.00	4.57		ug/L		91	75 - 125	0	20
1,2-Dichlorobenzene			5.00	5.20		ug/L		104	80 - 130	2	20
1,2-Dibromo-3-Chloropropane			5.00	3.45		ug/L		69	55 - 120	3	20
1,2,4-Trichlorobenzene			5.00	3.86		ug/L		77	60 - 125	3	20
Hexachlorobutadiene			5.00	5.03		ug/L		101	75 - 135	1	20
Naphthalene			5.00	3.34		ug/L		67	45 - 130	2	20
1,2,3-Trichlorobenzene			5.00	4.49		ug/L		90	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*100*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-145537/4
Matrix: Water
Analysis Batch: 145537

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/04/14 11:32	1
Ethane	ND		0.50		ug/L			09/04/14 11:32	1
Ethene	ND		0.50		ug/L			09/04/14 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*112*		*66 - 132*		*09/04/14 11:32*	*1*

Lab Sample ID: LCS 240-145537/5
Matrix: Water
Analysis Batch: 145537

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	102		ug/L		88	76 - 120
Ethane			218	210		ug/L		96	80 - 120
Ethene			203	199		ug/L		98	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-168377/1
Matrix: Water
Analysis Batch: 168377

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			08/28/14 09:47	1

Lab Sample ID: LCS 580-168377/2
Matrix: Water
Analysis Batch: 168377

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.80	1.77		mg/L		98	90 - 110		

Lab Sample ID: LCSD 580-168377/3
Matrix: Water
Analysis Batch: 168377

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
Nitrate as N			1.80	1.77		mg/L		98	90 - 110	0	15

Lab Sample ID: 580-45151-5 MS
Matrix: Water
Analysis Batch: 168377

Client Sample ID: MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	3.4		180	5.26	F1	mg/L		1	90 - 110		

Lab Sample ID: 580-45151-5 DU
Matrix: Water
Analysis Batch: 168377

Client Sample ID: MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate as N	3.4			3.43		mg/L				0	10

Lab Sample ID: MB 580-168386/3
Matrix: Water
Analysis Batch: 168386

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			08/28/14 09:47	1
Sulfate	ND		1.2		mg/L			08/28/14 09:47	1

Lab Sample ID: LCS 580-168386/4
Matrix: Water
Analysis Batch: 168386

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			9.00	8.88		mg/L		99	90 - 110		
Sulfate			12.0	11.8		mg/L		98	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-168386/5
Matrix: Water
Analysis Batch: 168386

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
Chloride			9.00	8.88		mg/L		99	90 - 110	0	15
Sulfate			12.0	11.8		mg/L		98	90 - 110	0	15

Lab Sample ID: 580-45151-5 MS
Matrix: Water
Analysis Batch: 168386

Client Sample ID: MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	19		9.00	28.2		mg/L		103	90 - 110		
Sulfate	9.9		12.0	22.1		mg/L		102	90 - 110		

Lab Sample ID: 580-45151-5 DU
Matrix: Water
Analysis Batch: 168386

Client Sample ID: MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	19			18.9		mg/L				0.05	10
Sulfate	9.9			9.97		mg/L				0.4	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-169386/1
Matrix: Water
Analysis Batch: 169386

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			09/10/14 10:21	1

Lab Sample ID: LCS 580-169386/2
Matrix: Water
Analysis Batch: 169386

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			15.0	14.2		mg/L		94	85 - 115		

Client Sample ID: MW-24

Lab Sample ID: 580-45151-1

Date Collected: 08/26/14 12:04

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 17:43	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	10	168393	08/29/14 14:13	YK	TAL SEA
Total/NA	Analysis	8260B	RA	1	168393	08/29/14 17:27	YK	TAL SEA

Client Sample ID: MW-24 DUP

Lab Sample ID: 580-45151-2

Date Collected: 08/26/14 12:04

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 18:07	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	10	168393	08/29/14 14:37	YK	TAL SEA
Total/NA	Analysis	8260B	RA	1	168393	08/29/14 17:51	YK	TAL SEA

Client Sample ID: MW-21

Lab Sample ID: 580-45151-3

Date Collected: 08/26/14 13:51

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 18:32	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	100	168393	08/29/14 13:24	YK	TAL SEA

Client Sample ID: MW-19

Lab Sample ID: 580-45151-4

Date Collected: 08/26/14 15:36

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 18:57	PS1	TAL SEA
Total/NA	Analysis	8260B	RA	1	168655	09/03/14 14:52	CJ	TAL SEA

Client Sample ID: MW-20

Lab Sample ID: 580-45151-5

Date Collected: 08/26/14 16:46

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 19:21	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	10	168393	08/29/14 15:01	YK	TAL SEA
Total/NA	Analysis	RSK-175		1	145537	09/04/14 11:57	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168377	08/28/14 10:51	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168386	08/28/14 10:51	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: Equip. Blank #1

Lab Sample ID: 580-45151-6

Date Collected: 08/26/14 17:15

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 16:04	PS1	TAL SEA

Client Sample ID: MW-4/EXT-8

Lab Sample ID: 580-45151-7

Date Collected: 08/27/14 07:29

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 19:45	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	10	168393	08/29/14 15:25	YK	TAL SEA

Client Sample ID: MW-25

Lab Sample ID: 580-45151-8

Date Collected: 08/27/14 09:58

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 20:10	PS1	TAL SEA
Total/NA	Analysis	8260B	DL	10	168393	08/29/14 15:50	YK	TAL SEA

Client Sample ID: MW-22

Lab Sample ID: 580-45151-9

Date Collected: 08/27/14 10:56

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 20:34	PS1	TAL SEA
Total/NA	Analysis	8260B	RA	1	168393	08/29/14 17:03	YK	TAL SEA

Client Sample ID: MW-16

Lab Sample ID: 580-45151-10

Date Collected: 08/27/14 13:41

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168317	08/28/14 16:53	PS1	TAL SEA

Client Sample ID: MW-5

Lab Sample ID: 580-45151-11

Date Collected: 08/27/14 14:33

Matrix: Water

Date Received: 08/28/14 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	168393	08/29/14 13:48	YK	TAL SEA
Total/NA	Analysis	8260B	DL2	500	168393	08/29/14 19:28	YK	TAL SEA

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-113	07-25-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14 *
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14 *

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-45151-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-45151-1	MW-24	Water	08/26/14 12:04	08/28/14 07:40
580-45151-2	MW-24 DUP	Water	08/26/14 12:04	08/28/14 07:40
580-45151-3	MW-21	Water	08/26/14 13:51	08/28/14 07:40
580-45151-4	MW-19	Water	08/26/14 15:36	08/28/14 07:40
580-45151-5	MW-20	Water	08/26/14 16:46	08/28/14 07:40
580-45151-6	Equip. Blank #1	Water	08/26/14 17:15	08/28/14 07:40
580-45151-7	MW-4/EXT-8	Water	08/27/14 07:29	08/28/14 07:40
580-45151-8	MW-25	Water	08/27/14 09:58	08/28/14 07:40
580-45151-9	MW-22	Water	08/27/14 10:56	08/28/14 07:40
580-45151-10	MW-16	Water	08/27/14 13:41	08/28/14 07:40
580-45151-11	MW-5	Water	08/27/14 14:33	08/28/14 07:40

Sample Custody Record

Samples Shipped to: Test America - Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel 253-922-2310

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • Fax 503.620.6918

JOB 17800-23 LAB NUMBER

PROJECT NAME Frank Wear Site

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY: Kaylan Smyth

REQUESTED ANALYSIS

OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS: 45151

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	VOC 8260B	Nitrate/Sulfate, Cl⁻ — 300.0	TOC SM 5310B	RSK-175 (Ethane, Ethene, Methane)	NO. OF CONTAINERS / OBSERVATIONS
-1	MW-24		8/26/14	12:04	Water	X				3 Containers
-2	MW-24-DUP		↓	12:04	↓	X				↓
-3	MW-21		↓	13:51	↓	X				↓
-4	MW-19		↓	15:36	↓	X				↓
-5	MW-20		↓	16:46	↓	X	X	X	X	8 Containers
-6	Equip Blank #1		↓	17:15	↓	X				3 Containers
-7	MW-4/EXT-8		8/27/14	7:29	↓	X				↓
-8	MW-25		↓	9:58	↓	X				↓
-9	MW-22		↓	10:56	↓	X				↓
-10	~~MW-16~~	MW-16	↓	13:41	↓	X				↓
-11	MW-5		↓	14:33	↓	X				↓
-12	Trip				↓					

580-45151 Chain of Custody

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE: Kaylan Smyth (signature)	8/27/14	SIGNATURE: Tom Blankinship (signature)	8/28/14
PRINT NAME: Kaylan Smyth	TIME: 15:30	PRINT NAME: Blankinship	TIME: 0740
COMPANY: Hart Crowser		COMPANY: TA-Sea	

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE		SIGNATURE	
PRINT NAME	TIME	PRINT NAME	TIME
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:
Results can be emailed to
jill.kiernan@hartcrowser.com
kaylan.smyth@hartcrowser.com

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. ______
for Other Contract Requirements

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE ______
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER ______

White and Yellow Copies to Lab · Pink to Project Manager · Lab to Return White Copy to Hart Crowser · Gold to Sample Custodian

Cooler/TB Dig/IR cor 4.8 unc 4.6 w/cs
Cooler Dsc Lg Blu/wh @Lab
Wet/Packs Packing other
FeJ 1st ON

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-45151-1

Login Number: 45151

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	False	COC filled out in pencil.
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-45173-1
Client Project/Site: Yakima/Frank Site

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
9/15/2014 5:22:58 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-45173-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-45173-1

Comments
No additional comments.

Receipt
The samples were received on 8/29/2014 12:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

The client filled out the chain of custody with a pencil instead of with a pen.

GC/MS VOA
Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 168613 recovered outside control limits for the following analytes: Dichlorodifluoromethane. The individual recoveries are within the acceptance limits.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for batch 168655 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for batch 168799 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 168915 recovered outside control limits for the following analytes: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for batch 169196 recovered outside control limits for the following analytes: N-Propylbenzene, o-Xylene, Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following samples were reanalyzed due to the likelihood of carryover from a previously analyzed heavily contaminated sample in the original analysis: MW-3 (580-45173-13), MW-17 (580-45173-12), Eq Blank #2 (580-45173-4).

Method(s) 8260B: The following sample was re-analyzed due to possible carryovers for cis-1,2-Dichloropropane: MW-18 (580-45173-20).

Method(s) 8260B: The following sample was re-analyzed due to possible carryover for cis-1,2-Dichloroethene: MW-23 (580-45173-18).

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.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-7
Date Collected: 08/27/14 17:36
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 19:44	1
Chloromethane	ND		0.10		ug/L			09/03/14 19:44	1
Vinyl chloride	**0.62**		0.020		ug/L			09/03/14 19:44	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 19:44	1
Chloroethane	ND		0.25		ug/L			09/03/14 19:44	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 19:44	1
1,1-Dichloroethene	**1.9**		0.10		ug/L			09/03/14 19:44	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 19:44	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 19:44	1
1,1-Dichloroethane	**0.19**		0.10		ug/L			09/03/14 19:44	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 19:44	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 19:44	1
Chloroform	**2.5**		0.10		ug/L			09/03/14 19:44	1
1,1,1-Trichloroethane	**4.3**		0.10		ug/L			09/03/14 19:44	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 19:44	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 19:44	1
Benzene	ND		0.10		ug/L			09/03/14 19:44	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 19:44	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 19:44	1
Dibromomethane	ND		0.10		ug/L			09/03/14 19:44	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 19:44	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 19:44	1
Toluene	ND		0.10		ug/L			09/03/14 19:44	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 19:44	1
1,1,2-Trichloroethane	**0.56**		0.10		ug/L			09/03/14 19:44	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 19:44	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 19:44	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 19:44	1
Chlorobenzene	**0.17**		0.10		ug/L			09/03/14 19:44	1
1,1,1,2-Tetrachloroethane	**0.36**		0.10		ug/L			09/03/14 19:44	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 19:44	1
o-Xylene	ND		0.10		ug/L			09/03/14 19:44	1
Styrene	ND		0.10		ug/L			09/03/14 19:44	1
Bromoform	ND		0.10		ug/L			09/03/14 19:44	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
Bromobenzene	ND		0.10		ug/L			09/03/14 19:44	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 19:44	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 19:44	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 19:44	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 19:44	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
1,2,4-Trimethylbenzene	**0.11**		0.10		ug/L			09/03/14 19:44	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 19:44	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 19:44	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 19:44	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-7
Date Collected: 08/27/14 17:36
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 19:44	1
1,2-Dichlorobenzene	**0.22**		0.20		ug/L			09/03/14 19:44	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 19:44	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 19:44	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 19:44	1
Naphthalene	ND		0.40		ug/L			09/03/14 19:44	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*93*		*80 - 127*		*09/03/14 19:44*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*09/03/14 19:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*09/03/14 19:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/03/14 19:44*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/03/14 19:44*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**32**		10		ug/L			09/04/14 16:04	100
cis-1,2-Dichloroethene	**2200**		10		ug/L			09/04/14 16:04	100
Trichloroethene	**2200**		10		ug/L			09/04/14 16:04	100
Tetrachloroethene	**280**		10		ug/L			09/04/14 16:04	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*09/04/14 16:04*	*100*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/04/14 16:04*	*100*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 16:04*	*100*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/04/14 16:04*	*100*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/04/14 16:04*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1.9**		0.50		ug/L			09/09/14 15:31	1
Ethane	ND		0.50		ug/L			09/09/14 15:31	1
Ethene	ND		0.50		ug/L			09/09/14 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*93*		*66 - 132*		*09/09/14 15:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		0.90		mg/L			08/29/14 15:41	1
Nitrate as N	**2.1**		0.90		mg/L			08/29/14 15:41	1
Sulfate	**13**		1.2		mg/L			08/29/14 15:41	1
Total Organic Carbon	**2.8**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-6
Date Collected: 08/27/14 18:39
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 18:07	1
Chloromethane	ND		0.10		ug/L			09/03/14 18:07	1
Vinyl chloride	**0.83**		0.020		ug/L			09/03/14 18:07	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 18:07	1
Chloroethane	ND		0.25		ug/L			09/03/14 18:07	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 18:07	1
1,1-Dichloroethene	**3.0**		0.10		ug/L			09/03/14 18:07	1
Methylene Chloride	**0.53**		0.50		ug/L			09/03/14 18:07	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 18:07	1
1,1-Dichloroethane	**0.25**		0.10		ug/L			09/03/14 18:07	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:07	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 18:07	1
Chloroform	**2.1**		0.10		ug/L			09/03/14 18:07	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 18:07	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 18:07	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 18:07	1
Benzene	ND		0.10		ug/L			09/03/14 18:07	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 18:07	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:07	1
Dibromomethane	ND		0.10		ug/L			09/03/14 18:07	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 18:07	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:07	1
Toluene	**0.10**		0.10		ug/L			09/03/14 18:07	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:07	1
1,1,2-Trichloroethane	**0.54**		0.10		ug/L			09/03/14 18:07	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 18:07	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 18:07	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 18:07	1
Chlorobenzene	**0.22**		0.10		ug/L			09/03/14 18:07	1
1,1,1,2-Tetrachloroethane	**0.29**		0.10		ug/L			09/03/14 18:07	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 18:07	1
o-Xylene	ND		0.10		ug/L			09/03/14 18:07	1
Styrene	ND		0.10		ug/L			09/03/14 18:07	1
Bromoform	ND		0.10		ug/L			09/03/14 18:07	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
Bromobenzene	ND		0.10		ug/L			09/03/14 18:07	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 18:07	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 18:07	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 18:07	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 18:07	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
1,2,4-Trimethylbenzene	**0.11**		0.10		ug/L			09/03/14 18:07	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 18:07	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:07	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:07	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-6
Date Collected: 08/27/14 18:39
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 18:07	1
1,2-Dichlorobenzene	**0.25**		0.20		ug/L			09/03/14 18:07	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 18:07	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 18:07	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 18:07	1
Naphthalene	ND		0.40		ug/L			09/03/14 18:07	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*94*		*80 - 127*		*09/03/14 18:07*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/03/14 18:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/03/14 18:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*09/03/14 18:07*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/03/14 18:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**91**		10		ug/L			09/04/14 16:28	100
cis-1,2-Dichloroethene	**5000**		10		ug/L			09/04/14 16:28	100
Trichloroethene	**5000**		10		ug/L			09/04/14 16:28	100
Tetrachloroethene	**570**		10		ug/L			09/04/14 16:28	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*114*		*80 - 127*		*09/04/14 16:28*	*100*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 16:28*	*100*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 16:28*	*100*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/04/14 16:28*	*100*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/04/14 16:28*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-2
Date Collected: 08/27/14 19:26
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 18:30	100
Chloromethane	ND		10		ug/L			09/04/14 18:30	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 18:30	100
Bromomethane	ND	*	10		ug/L			09/04/14 18:30	100
Chloroethane	ND		25		ug/L			09/04/14 18:30	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 18:30	100
1,1-Dichloroethene	**10**		10		ug/L			09/04/14 18:30	100
Methylene Chloride	ND		50		ug/L			09/04/14 18:30	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 18:30	100
trans-1,2-Dichloroethene	**220**		10		ug/L			09/04/14 18:30	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 18:30	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 18:30	100
Chlorobromomethane	ND		10		ug/L			09/04/14 18:30	100
Chloroform	ND		10		ug/L			09/04/14 18:30	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 18:30	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 18:30	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 18:30	100
Benzene	ND		10		ug/L			09/04/14 18:30	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 18:30	100
Trichloroethene	ND		10		ug/L			09/04/14 18:30	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 18:30	100
Dibromomethane	ND		10		ug/L			09/04/14 18:30	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 18:30	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 18:30	100
Toluene	ND		10		ug/L			09/04/14 18:30	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 18:30	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 18:30	100
Tetrachloroethene	ND		10		ug/L			09/04/14 18:30	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 18:30	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 18:30	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 18:30	100
Chlorobenzene	ND		10		ug/L			09/04/14 18:30	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 18:30	100
Ethylbenzene	ND		10		ug/L			09/04/14 18:30	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 18:30	100
o-Xylene	ND		10		ug/L			09/04/14 18:30	100
Styrene	ND		10		ug/L			09/04/14 18:30	100
Bromoform	ND		10		ug/L			09/04/14 18:30	100
Isopropylbenzene	ND		10		ug/L			09/04/14 18:30	100
Bromobenzene	ND		10		ug/L			09/04/14 18:30	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 18:30	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 18:30	100
N-Propylbenzene	ND		10		ug/L			09/04/14 18:30	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 18:30	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 18:30	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 18:30	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 18:30	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 18:30	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 18:30	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-2
Date Collected: 08/27/14 19:26
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 18:30	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 18:30	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 18:30	100
n-Butylbenzene	ND		10		ug/L			09/04/14 18:30	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 18:30	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 18:30	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 18:30	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 18:30	100
Naphthalene	ND		40		ug/L			09/04/14 18:30	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 18:30	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 18:30*	*100*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 18:30*	*100*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 18:30*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 18:30*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/04/14 18:30*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**16000**		100		ug/L			09/05/14 16:47	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*09/05/14 16:47*	*1000*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/05/14 16:47*	*1000*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/05/14 16:47*	*1000*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*09/05/14 16:47*	*1000*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/05/14 16:47*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: Eq Blank #2
Date Collected: 08/27/14 19:45
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 18:56	1
Chloromethane	ND		0.10		ug/L			09/03/14 18:56	1
Vinyl chloride	ND		0.020		ug/L			09/03/14 18:56	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 18:56	1
Chloroethane	ND		0.25		ug/L			09/03/14 18:56	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 18:56	1
1,1-Dichloroethene	ND		0.10		ug/L			09/03/14 18:56	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 18:56	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 18:56	1
1,1-Dichloroethane	ND		0.10		ug/L			09/03/14 18:56	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:56	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 18:56	1
Chloroform	**0.17**		0.10		ug/L			09/03/14 18:56	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 18:56	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 18:56	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 18:56	1
Benzene	ND		0.10		ug/L			09/03/14 18:56	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 18:56	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:56	1
Dibromomethane	ND		0.10		ug/L			09/03/14 18:56	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 18:56	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:56	1
Toluene	ND		0.10		ug/L			09/03/14 18:56	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:56	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/03/14 18:56	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 18:56	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 18:56	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 18:56	1
Chlorobenzene	ND		0.10		ug/L			09/03/14 18:56	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 18:56	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 18:56	1
o-Xylene	ND		0.10		ug/L			09/03/14 18:56	1
Styrene	ND		0.10		ug/L			09/03/14 18:56	1
Bromoform	ND		0.10		ug/L			09/03/14 18:56	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
Bromobenzene	ND		0.10		ug/L			09/03/14 18:56	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 18:56	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 18:56	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 18:56	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 18:56	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 18:56	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:56	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:56	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: Eq Blank #2
Date Collected: 08/27/14 19:45
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 18:56	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:56	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 18:56	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 18:56	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 18:56	1
Naphthalene	ND		0.40		ug/L			09/03/14 18:56	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*90*		*80 - 127*		*09/03/14 18:56*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*09/03/14 18:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/03/14 18:56*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/03/14 18:56*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/03/14 18:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 14:51	1
cis-1,2-Dichloroethene	**1.3**		0.10		ug/L			09/04/14 14:51	1
Trichloroethene	**0.17**		0.10		ug/L			09/04/14 14:51	1
Tetrachloroethene	ND		0.10		ug/L			09/04/14 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*09/04/14 14:51*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/04/14 14:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/04/14 14:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 14:51*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/04/14 14:51*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-8
Date Collected: 08/28/14 06:58
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 18:54	100
Chloromethane	ND		10		ug/L			09/04/14 18:54	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 18:54	100
Bromomethane	ND	*	10		ug/L			09/04/14 18:54	100
Chloroethane	ND		25		ug/L			09/04/14 18:54	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 18:54	100
1,1-Dichloroethene	ND		10		ug/L			09/04/14 18:54	100
Methylene Chloride	ND		50		ug/L			09/04/14 18:54	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 18:54	100
trans-1,2-Dichloroethene	**180**		10		ug/L			09/04/14 18:54	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 18:54	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 18:54	100
Chlorobromomethane	ND		10		ug/L			09/04/14 18:54	100
Chloroform	ND		10		ug/L			09/04/14 18:54	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 18:54	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 18:54	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 18:54	100
Benzene	ND		10		ug/L			09/04/14 18:54	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 18:54	100
Trichloroethene	**370**		10		ug/L			09/04/14 18:54	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 18:54	100
Dibromomethane	ND		10		ug/L			09/04/14 18:54	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 18:54	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 18:54	100
Toluene	ND		10		ug/L			09/04/14 18:54	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 18:54	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 18:54	100
Tetrachloroethene	**31**		10		ug/L			09/04/14 18:54	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 18:54	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 18:54	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 18:54	100
Chlorobenzene	ND		10		ug/L			09/04/14 18:54	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 18:54	100
Ethylbenzene	ND		10		ug/L			09/04/14 18:54	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 18:54	100
o-Xylene	ND		10		ug/L			09/04/14 18:54	100
Styrene	ND		10		ug/L			09/04/14 18:54	100
Bromoform	ND		10		ug/L			09/04/14 18:54	100
Isopropylbenzene	ND		10		ug/L			09/04/14 18:54	100
Bromobenzene	ND		10		ug/L			09/04/14 18:54	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 18:54	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 18:54	100
N-Propylbenzene	ND		10		ug/L			09/04/14 18:54	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 18:54	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 18:54	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 18:54	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 18:54	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 18:54	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 18:54	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-8
Date Collected: 08/28/14 06:58
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 18:54	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 18:54	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 18:54	100
n-Butylbenzene	ND		10		ug/L			09/04/14 18:54	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 18:54	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 18:54	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 18:54	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 18:54	100
Naphthalene	ND		40		ug/L			09/04/14 18:54	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 18:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 18:54*	*100*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/04/14 18:54*	*100*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 18:54*	*100*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*09/04/14 18:54*	*100*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*09/04/14 18:54*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**13000**		100		ug/L			09/05/14 17:12	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*112*		*80 - 127*		*09/05/14 17:12*	*1000*
Toluene-d8 (Surr)	*95*		*75 - 125*		*09/05/14 17:12*	*1000*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*09/05/14 17:12*	*1000*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/05/14 17:12*	*1000*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*09/05/14 17:12*	*1000*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**22**		0.50		ug/L			09/09/14 15:43	1
Ethane	ND		0.50		ug/L			09/09/14 15:43	1
Ethene	ND		0.50		ug/L			09/09/14 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*100*		*66 - 132*		*09/09/14 15:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42**		0.90		mg/L			08/29/14 15:55	1
Nitrate as N	ND		0.90		mg/L			08/29/14 15:55	1
Sulfate	**2.5**		1.2		mg/L			08/29/14 15:55	1
Total Organic Carbon	**33**		10		mg/L			09/10/14 10:21	10

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-15
Date Collected: 08/28/14 07:42
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 19:19	100
Chloromethane	ND		10		ug/L			09/04/14 19:19	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 19:19	100
Bromomethane	ND	*	10		ug/L			09/04/14 19:19	100
Chloroethane	ND		25		ug/L			09/04/14 19:19	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 19:19	100
1,1-Dichloroethene	ND		10		ug/L			09/04/14 19:19	100
Methylene Chloride	ND		50		ug/L			09/04/14 19:19	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 19:19	100
trans-1,2-Dichloroethene	**170**		10		ug/L			09/04/14 19:19	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 19:19	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 19:19	100
Chlorobromomethane	ND		10		ug/L			09/04/14 19:19	100
Chloroform	ND		10		ug/L			09/04/14 19:19	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 19:19	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 19:19	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 19:19	100
Benzene	ND		10		ug/L			09/04/14 19:19	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 19:19	100
Trichloroethene	**730**		10		ug/L			09/04/14 19:19	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 19:19	100
Dibromomethane	ND		10		ug/L			09/04/14 19:19	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 19:19	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 19:19	100
Toluene	ND		10		ug/L			09/04/14 19:19	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 19:19	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 19:19	100
Tetrachloroethene	**130**		10		ug/L			09/04/14 19:19	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 19:19	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 19:19	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 19:19	100
Chlorobenzene	ND		10		ug/L			09/04/14 19:19	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 19:19	100
Ethylbenzene	ND		10		ug/L			09/04/14 19:19	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 19:19	100
o-Xylene	ND		10		ug/L			09/04/14 19:19	100
Styrene	ND		10		ug/L			09/04/14 19:19	100
Bromoform	ND		10		ug/L			09/04/14 19:19	100
Isopropylbenzene	ND		10		ug/L			09/04/14 19:19	100
Bromobenzene	ND		10		ug/L			09/04/14 19:19	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 19:19	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 19:19	100
N-Propylbenzene	ND		10		ug/L			09/04/14 19:19	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 19:19	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 19:19	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 19:19	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 19:19	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 19:19	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 19:19	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-15
Date Collected: 08/28/14 07:42
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 19:19	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 19:19	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 19:19	100
n-Butylbenzene	ND		10		ug/L			09/04/14 19:19	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 19:19	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 19:19	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 19:19	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 19:19	100
Naphthalene	ND		40		ug/L			09/04/14 19:19	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 19:19	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*09/04/14 19:19*	*100*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/04/14 19:19*	*100*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*09/04/14 19:19*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/04/14 19:19*	*100*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*09/04/14 19:19*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**11000**		100		ug/L			09/05/14 17:36	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*09/05/14 17:36*	*1000*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/05/14 17:36*	*1000*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/05/14 17:36*	*1000*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/05/14 17:36*	*1000*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/05/14 17:36*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-14
Date Collected: 08/28/14 08:49
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 19:43	100
Chloromethane	ND		10		ug/L			09/04/14 19:43	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 19:43	100
Bromomethane	ND	*	10		ug/L			09/04/14 19:43	100
Chloroethane	ND		25		ug/L			09/04/14 19:43	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 19:43	100
1,1-Dichloroethene	ND		10		ug/L			09/04/14 19:43	100
Methylene Chloride	ND		50		ug/L			09/04/14 19:43	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 19:43	100
trans-1,2-Dichloroethene	**180**		10		ug/L			09/04/14 19:43	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 19:43	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 19:43	100
Chlorobromomethane	ND		10		ug/L			09/04/14 19:43	100
Chloroform	ND		10		ug/L			09/04/14 19:43	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 19:43	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 19:43	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 19:43	100
Benzene	ND		10		ug/L			09/04/14 19:43	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 19:43	100
Trichloroethene	ND		10		ug/L			09/04/14 19:43	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 19:43	100
Dibromomethane	ND		10		ug/L			09/04/14 19:43	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 19:43	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 19:43	100
Toluene	ND		10		ug/L			09/04/14 19:43	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 19:43	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 19:43	100
Tetrachloroethene	ND		10		ug/L			09/04/14 19:43	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 19:43	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 19:43	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 19:43	100
Chlorobenzene	ND		10		ug/L			09/04/14 19:43	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 19:43	100
Ethylbenzene	ND		10		ug/L			09/04/14 19:43	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 19:43	100
o-Xylene	ND		10		ug/L			09/04/14 19:43	100
Styrene	ND		10		ug/L			09/04/14 19:43	100
Bromoform	ND		10		ug/L			09/04/14 19:43	100
Isopropylbenzene	ND		10		ug/L			09/04/14 19:43	100
Bromobenzene	ND		10		ug/L			09/04/14 19:43	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 19:43	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 19:43	100
N-Propylbenzene	ND		10		ug/L			09/04/14 19:43	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 19:43	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 19:43	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 19:43	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 19:43	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 19:43	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 19:43	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-14
Date Collected: 08/28/14 08:49
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 19:43	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 19:43	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 19:43	100
n-Butylbenzene	ND		10		ug/L			09/04/14 19:43	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 19:43	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 19:43	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 19:43	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 19:43	100
Naphthalene	ND		40		ug/L			09/04/14 19:43	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 19:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*09/04/14 19:43*	*100*
Toluene-d8 (Surr)	*101*		*75 - 125*		*09/04/14 19:43*	*100*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 19:43*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/04/14 19:43*	*100*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*09/04/14 19:43*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**13000**		100		ug/L			09/05/14 18:01	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*09/05/14 18:01*	*1000*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/05/14 18:01*	*1000*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/05/14 18:01*	*1000*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/05/14 18:01*	*1000*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/05/14 18:01*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-1
Date Collected: 08/28/14 09:30
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 18:31	1
Chloromethane	ND		0.10		ug/L			09/03/14 18:31	1
Vinyl chloride	**2.3**		0.020		ug/L			09/03/14 18:31	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 18:31	1
Chloroethane	ND		0.25		ug/L			09/03/14 18:31	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 18:31	1
1,1-Dichloroethene	**8.7**		0.10		ug/L			09/03/14 18:31	1
Methylene Chloride	**0.67**		0.50		ug/L			09/03/14 18:31	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 18:31	1
1,1-Dichloroethane	**1.0**		0.10		ug/L			09/03/14 18:31	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:31	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 18:31	1
Chloroform	**0.18**		0.10		ug/L			09/03/14 18:31	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 18:31	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 18:31	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 18:31	1
Benzene	ND		0.10		ug/L			09/03/14 18:31	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 18:31	1
Trichloroethene	**32**		0.10		ug/L			09/04/14 22:57	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 18:31	1
Dibromomethane	ND		0.10		ug/L			09/03/14 18:31	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 18:31	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:31	1
Toluene	**0.27**		0.10		ug/L			09/03/14 18:31	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 18:31	1
1,1,2-Trichloroethane	**0.61**		0.10		ug/L			09/03/14 18:31	1
Tetrachloroethene	**0.75**		0.10		ug/L			09/04/14 22:57	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 18:31	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 18:31	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 18:31	1
Chlorobenzene	**0.36**		0.10		ug/L			09/03/14 18:31	1
1,1,1,2-Tetrachloroethane	**0.10**		0.10		ug/L			09/03/14 18:31	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 18:31	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 18:31	1
o-Xylene	ND		0.10		ug/L			09/03/14 18:31	1
Styrene	ND		0.10		ug/L			09/03/14 18:31	1
Bromoform	ND		0.10		ug/L			09/03/14 18:31	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 18:31	1
Bromobenzene	ND		0.10		ug/L			09/03/14 18:31	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 18:31	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 18:31	1
N-Propylbenzene	**0.12**		0.10		ug/L			09/03/14 18:31	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 18:31	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 18:31	1
1,3,5-Trimethylbenzene	**0.15**		0.10		ug/L			09/03/14 18:31	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 18:31	1
1,2,4-Trimethylbenzene	**0.14**		0.10		ug/L			09/03/14 18:31	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 18:31	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 18:31	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-1
Date Collected: 08/28/14 09:30
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:31	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 18:31	1
n-Butylbenzene	ND		0.10		ug/L			09/03/14 18:31	1
1,2-Dichlorobenzene	**0.43**		0.20		ug/L			09/03/14 18:31	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 18:31	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 18:31	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 18:31	1
Naphthalene	ND		0.40		ug/L			09/03/14 18:31	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*92*		*80 - 127*		*09/03/14 18:31*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*09/04/14 22:57*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/03/14 18:31*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/04/14 22:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/03/14 18:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*09/04/14 22:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/03/14 18:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 22:57*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/03/14 18:31*	*1*
Dibromofluoromethane (Surr)	*107*		*85 - 115*		*09/04/14 22:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**200**		10		ug/L			09/04/14 16:52	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*09/04/14 16:52*	*100*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/04/14 16:52*	*100*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*09/04/14 16:52*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/04/14 16:52*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/04/14 16:52*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**15000**		100		ug/L			09/05/14 15:58	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*111*		*80 - 127*		*09/05/14 15:58*	*1000*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/05/14 15:58*	*1000*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/05/14 15:58*	*1000*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/05/14 15:58*	*1000*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/05/14 15:58*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-12
Date Collected: 08/28/14 10:30
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 20:07	100
Chloromethane	ND		10		ug/L			09/04/14 20:07	100
Vinyl chloride	**3.3**		2.0		ug/L			09/04/14 20:07	100
Bromomethane	ND	*	10		ug/L			09/04/14 20:07	100
Chloroethane	ND		25		ug/L			09/04/14 20:07	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 20:07	100
1,1-Dichloroethene	**11**		10		ug/L			09/04/14 20:07	100
Methylene Chloride	ND		50		ug/L			09/04/14 20:07	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 20:07	100
trans-1,2-Dichloroethene	**240**		10		ug/L			09/04/14 20:07	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 20:07	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 20:07	100
Chlorobromomethane	ND		10		ug/L			09/04/14 20:07	100
Chloroform	ND		10		ug/L			09/04/14 20:07	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 20:07	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 20:07	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 20:07	100
Benzene	ND		10		ug/L			09/04/14 20:07	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 20:07	100
Trichloroethene	**18**		10		ug/L			09/04/14 20:07	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 20:07	100
Dibromomethane	ND		10		ug/L			09/04/14 20:07	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 20:07	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:07	100
Toluene	ND		10		ug/L			09/04/14 20:07	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:07	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 20:07	100
Tetrachloroethene	**14**		10		ug/L			09/04/14 20:07	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 20:07	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 20:07	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 20:07	100
Chlorobenzene	ND		10		ug/L			09/04/14 20:07	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:07	100
Ethylbenzene	ND		10		ug/L			09/04/14 20:07	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 20:07	100
o-Xylene	ND		10		ug/L			09/04/14 20:07	100
Styrene	ND		10		ug/L			09/04/14 20:07	100
Bromoform	ND		10		ug/L			09/04/14 20:07	100
Isopropylbenzene	ND		10		ug/L			09/04/14 20:07	100
Bromobenzene	ND		10		ug/L			09/04/14 20:07	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:07	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 20:07	100
N-Propylbenzene	ND		10		ug/L			09/04/14 20:07	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 20:07	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 20:07	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 20:07	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 20:07	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 20:07	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 20:07	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-12
Date Collected: 08/28/14 10:30
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 20:07	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 20:07	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 20:07	100
n-Butylbenzene	ND		10		ug/L			09/04/14 20:07	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 20:07	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 20:07	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 20:07	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 20:07	100
Naphthalene	ND		40		ug/L			09/04/14 20:07	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 20:07	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*09/04/14 20:07*	*100*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/04/14 20:07*	*100*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/04/14 20:07*	*100*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/04/14 20:07*	*100*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*09/04/14 20:07*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**16000**		100		ug/L			09/05/14 18:26	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/05/14 18:26*	*1000*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/05/14 18:26*	*1000*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*09/05/14 18:26*	*1000*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/05/14 18:26*	*1000*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/05/14 18:26*	*1000*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**15**		0.50		ug/L			09/09/14 15:55	1
Ethane	ND		0.50		ug/L			09/09/14 15:55	1
Ethene	**0.56**		0.50		ug/L			09/09/14 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*90*		*66 - 132*		*09/09/14 15:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44**		0.90		mg/L			08/29/14 16:10	1
Nitrate as N	ND		0.90		mg/L			08/29/14 16:10	1
Sulfate	**1.8**		1.2		mg/L			08/29/14 16:10	1
Total Organic Carbon	**62**		10		mg/L			09/10/14 10:21	10

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-13
Date Collected: 08/28/14 11:08
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 20:32	100
Chloromethane	ND		10		ug/L			09/04/14 20:32	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 20:32	100
Bromomethane	ND	*	10		ug/L			09/04/14 20:32	100
Chloroethane	ND		25		ug/L			09/04/14 20:32	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 20:32	100
1,1-Dichloroethene	ND		10		ug/L			09/04/14 20:32	100
Methylene Chloride	ND		50		ug/L			09/04/14 20:32	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 20:32	100
trans-1,2-Dichloroethene	**140**		10		ug/L			09/04/14 20:32	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 20:32	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 20:32	100
Chlorobromomethane	ND		10		ug/L			09/04/14 20:32	100
Chloroform	ND		10		ug/L			09/04/14 20:32	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 20:32	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 20:32	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 20:32	100
Benzene	ND		10		ug/L			09/04/14 20:32	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 20:32	100
Trichloroethene	**5600**		10		ug/L			09/04/14 20:32	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 20:32	100
Dibromomethane	ND		10		ug/L			09/04/14 20:32	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 20:32	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:32	100
Toluene	ND		10		ug/L			09/04/14 20:32	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:32	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 20:32	100
Tetrachloroethene	**640**		10		ug/L			09/04/14 20:32	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 20:32	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 20:32	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 20:32	100
Chlorobenzene	ND		10		ug/L			09/04/14 20:32	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:32	100
Ethylbenzene	ND		10		ug/L			09/04/14 20:32	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 20:32	100
o-Xylene	ND		10		ug/L			09/04/14 20:32	100
Styrene	ND		10		ug/L			09/04/14 20:32	100
Bromoform	ND		10		ug/L			09/04/14 20:32	100
Isopropylbenzene	ND		10		ug/L			09/04/14 20:32	100
Bromobenzene	ND		10		ug/L			09/04/14 20:32	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:32	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 20:32	100
N-Propylbenzene	ND		10		ug/L			09/04/14 20:32	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 20:32	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 20:32	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 20:32	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 20:32	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 20:32	100
sec-Butylbenzene	ND		10		ug/L			09/04/14 20:32	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-13
Date Collected: 08/28/14 11:08
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		20		ug/L			09/04/14 20:32	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 20:32	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 20:32	100
n-Butylbenzene	ND		10		ug/L			09/04/14 20:32	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 20:32	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 20:32	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 20:32	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 20:32	100
Naphthalene	ND		40		ug/L			09/04/14 20:32	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 20:32	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*09/04/14 20:32*	*100*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/04/14 20:32*	*100*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/04/14 20:32*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 20:32*	*100*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/04/14 20:32*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**9900**		100		ug/L			09/05/14 18:50	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*09/05/14 18:50*	*1000*
Toluene-d8 (Surr)	*100*		*75 - 125*		*09/05/14 18:50*	*1000*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*09/05/14 18:50*	*1000*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/05/14 18:50*	*1000*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/05/14 18:50*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: SPW-13-DUP
Date Collected: 08/28/14 11:08
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 19:20	1
Chloromethane	ND		0.10		ug/L			09/03/14 19:20	1
Vinyl chloride	**1.6**		0.020		ug/L			09/03/14 19:20	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 19:20	1
Chloroethane	ND		0.25		ug/L			09/03/14 19:20	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 19:20	1
1,1-Dichloroethene	**5.6**		0.10		ug/L			09/03/14 19:20	1
Methylene Chloride	**0.82**		0.50		ug/L			09/03/14 19:20	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 19:20	1
1,1-Dichloroethane	**0.79**		0.10		ug/L			09/03/14 19:20	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 19:20	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 19:20	1
Chloroform	**1.4**		0.10		ug/L			09/03/14 19:20	1
1,1,1-Trichloroethane	**11**		0.10		ug/L			09/03/14 19:20	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 19:20	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 19:20	1
Benzene	ND		0.10		ug/L			09/03/14 19:20	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 19:20	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 19:20	1
Dibromomethane	ND		0.10		ug/L			09/03/14 19:20	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 19:20	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 19:20	1
Toluene	**0.27**		0.10		ug/L			09/03/14 19:20	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 19:20	1
1,1,2-Trichloroethane	**1.2**		0.10		ug/L			09/03/14 19:20	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 19:20	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 19:20	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 19:20	1
Chlorobenzene	**0.38**		0.10		ug/L			09/03/14 19:20	1
1,1,1,2-Tetrachloroethane	**0.48**		0.10		ug/L			09/03/14 19:20	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 19:20	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 19:20	1
o-Xylene	**0.10**		0.10		ug/L			09/03/14 19:20	1
Styrene	ND		0.10		ug/L			09/03/14 19:20	1
Bromoform	ND		0.10		ug/L			09/03/14 19:20	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 19:20	1
Bromobenzene	ND		0.10		ug/L			09/03/14 19:20	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 19:20	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 19:20	1
N-Propylbenzene	**0.11**		0.10		ug/L			09/03/14 19:20	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 19:20	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 19:20	1
1,3,5-Trimethylbenzene	**0.13**		0.10		ug/L			09/03/14 19:20	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 19:20	1
1,2,4-Trimethylbenzene	**0.15**		0.10		ug/L			09/03/14 19:20	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 19:20	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 19:20	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 19:20	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 19:20	1

Client Sample ID: SPW-13-DUP
Date Collected: 08/28/14 11:08
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 19:20	1
1,2-Dichlorobenzene	**0.45**		0.20		ug/L			09/03/14 19:20	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 19:20	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 19:20	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 19:20	1
Naphthalene	ND		0.40		ug/L			09/03/14 19:20	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*124*		*80 - 127*		*09/03/14 19:20*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*09/03/14 19:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*09/03/14 19:20*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*09/03/14 19:20*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/03/14 19:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**140**		10		ug/L			09/04/14 17:16	100
Trichloroethene	**5600**		10		ug/L			09/04/14 17:16	100
Tetrachloroethene	**630**		10		ug/L			09/04/14 17:16	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 17:16*	*100*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 17:16*	*100*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 17:16*	*100*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/04/14 17:16*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/04/14 17:16*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**9000**		100		ug/L			09/05/14 16:22	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*108*		*80 - 127*		*09/05/14 16:22*	*1000*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/05/14 16:22*	*1000*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/05/14 16:22*	*1000*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/05/14 16:22*	*1000*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/05/14 16:22*	*1000*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-17
Date Collected: 08/28/14 13:11
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 20:08	1
Chloromethane	ND		0.10		ug/L			09/03/14 20:08	1
Vinyl chloride	ND		0.020		ug/L			09/03/14 20:08	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 20:08	1
Chloroethane	ND		0.25		ug/L			09/03/14 20:08	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 20:08	1
1,1-Dichloroethene	ND		0.10		ug/L			09/03/14 20:08	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 20:08	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 20:08	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 20:08	1
1,1-Dichloroethane	ND		0.10		ug/L			09/03/14 20:08	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:08	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 20:08	1
Chloroform	**0.67**		0.10		ug/L			09/03/14 20:08	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 20:08	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 20:08	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 20:08	1
Benzene	ND		0.10		ug/L			09/03/14 20:08	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 20:08	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:08	1
Dibromomethane	ND		0.10		ug/L			09/03/14 20:08	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 20:08	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:08	1
Toluene	ND		0.10		ug/L			09/03/14 20:08	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:08	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/03/14 20:08	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 20:08	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 20:08	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 20:08	1
Chlorobenzene	ND		0.10		ug/L			09/03/14 20:08	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 20:08	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 20:08	1
o-Xylene	ND		0.10		ug/L			09/03/14 20:08	1
Styrene	ND		0.10		ug/L			09/03/14 20:08	1
Bromoform	ND		0.10		ug/L			09/03/14 20:08	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
Bromobenzene	ND		0.10		ug/L			09/03/14 20:08	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 20:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 20:08	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 20:08	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 20:08	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 20:08	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:08	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-17
Date Collected: 08/28/14 13:11
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:08	1
n-Butylbenzene	ND		0.10		ug/L			09/03/14 20:08	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:08	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 20:08	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 20:08	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 20:08	1
Naphthalene	ND		0.40		ug/L			09/03/14 20:08	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*80 - 127*		*09/03/14 20:08*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/03/14 20:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*09/03/14 20:08*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/03/14 20:08*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*09/03/14 20:08*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 15:15	1
Trichloroethene	ND		0.10		ug/L			09/04/14 15:15	1
Tetrachloroethene	**0.17**		0.10		ug/L			09/04/14 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*09/04/14 15:15*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 15:15*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/04/14 15:15*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*09/04/14 15:15*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-3
Date Collected: 08/28/14 14:31
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 20:33	1
Chloromethane	ND		0.10		ug/L			09/03/14 20:33	1
Vinyl chloride	ND		0.020		ug/L			09/03/14 20:33	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 20:33	1
Chloroethane	ND		0.25		ug/L			09/03/14 20:33	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 20:33	1
1,1-Dichloroethene	ND		0.10		ug/L			09/03/14 20:33	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 20:33	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 20:33	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 20:33	1
1,1-Dichloroethane	ND		0.10		ug/L			09/03/14 20:33	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:33	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 20:33	1
Chloroform	**2.2**		0.10		ug/L			09/03/14 20:33	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 20:33	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 20:33	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 20:33	1
Benzene	ND		0.10		ug/L			09/03/14 20:33	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 20:33	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:33	1
Dibromomethane	ND		0.10		ug/L			09/03/14 20:33	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 20:33	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:33	1
Toluene	ND		0.10		ug/L			09/03/14 20:33	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:33	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/03/14 20:33	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 20:33	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 20:33	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 20:33	1
Chlorobenzene	ND		0.10		ug/L			09/03/14 20:33	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 20:33	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 20:33	1
o-Xylene	ND		0.10		ug/L			09/03/14 20:33	1
Styrene	ND		0.10		ug/L			09/03/14 20:33	1
Bromoform	ND		0.10		ug/L			09/03/14 20:33	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
Bromobenzene	ND		0.10		ug/L			09/03/14 20:33	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 20:33	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 20:33	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 20:33	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 20:33	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 20:33	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:33	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-3
Date Collected: 08/28/14 14:31
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:33	1
n-Butylbenzene	ND		0.10		ug/L			09/03/14 20:33	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:33	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 20:33	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 20:33	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 20:33	1
Naphthalene	ND		0.40		ug/L			09/03/14 20:33	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*111*		*80 - 127*		*09/03/14 20:33*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/03/14 20:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*09/03/14 20:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/03/14 20:33*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*09/03/14 20:33*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.61**		0.10		ug/L			09/04/14 15:39	1
Trichloroethene	**0.40**		0.10		ug/L			09/04/14 15:39	1
Tetrachloroethene	**1.9**		0.10		ug/L			09/04/14 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 15:39*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/04/14 15:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 15:39*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 15:39*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/04/14 15:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/09/14 16:07	1
Ethane	ND		0.50		ug/L			09/09/14 16:07	1
Ethene	ND		0.50		ug/L			09/09/14 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*97*		*66 - 132*		*09/09/14 16:07*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		0.90		mg/L			08/29/14 16:24	1
Nitrate as N	**6.5**		0.90		mg/L			08/29/14 16:24	1
Sulfate	**13**		1.2		mg/L			08/29/14 16:24	1
Total Organic Carbon	**2.1**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-2
Date Collected: 08/28/14 15:37
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			09/03/14 10:23	100
1,1,1-Trichloroethane	ND		100		ug/L			09/03/14 10:23	100
1,1,2,2-Tetrachloroethane	ND		100		ug/L			09/03/14 10:23	100
1,1,2-Trichloroethane	ND		100		ug/L			09/03/14 10:23	100
1,1-Dichloroethane	ND		100		ug/L			09/03/14 10:23	100
1,1-Dichloroethene	ND		100		ug/L			09/03/14 10:23	100
1,1-Dichloropropene	ND		100		ug/L			09/03/14 10:23	100
1,2,3-Trichlorobenzene	ND		100		ug/L			09/03/14 10:23	100
1,2,3-Trichloropropane	ND		200		ug/L			09/03/14 10:23	100
1,2,4-Trichlorobenzene	ND		100		ug/L			09/03/14 10:23	100
1,2,4-Trimethylbenzene	ND		100		ug/L			09/03/14 10:23	100
1,2-Dibromo-3-Chloropropane	ND		200		ug/L			09/03/14 10:23	100
1,2-Dichlorobenzene	ND		100		ug/L			09/03/14 10:23	100
1,2-Dichloroethane	ND		100		ug/L			09/03/14 10:23	100
1,2-Dichloropropane	ND		100		ug/L			09/03/14 10:23	100
1,3,5-Trimethylbenzene	ND		100		ug/L			09/03/14 10:23	100
1,3-Dichlorobenzene	ND		100		ug/L			09/03/14 10:23	100
1,3-Dichloropropane	ND		100		ug/L			09/03/14 10:23	100
1,4-Dichlorobenzene	ND		100		ug/L			09/03/14 10:23	100
2,2-Dichloropropane	ND		100		ug/L			09/03/14 10:23	100
2-Chlorotoluene	ND		100		ug/L			09/03/14 10:23	100
4-Chlorotoluene	ND		100		ug/L			09/03/14 10:23	100
4-Isopropyltoluene	ND		100		ug/L			09/03/14 10:23	100
Benzene	ND		100		ug/L			09/03/14 10:23	100
Bromobenzene	ND		100		ug/L			09/03/14 10:23	100
Bromoform	ND		100		ug/L			09/03/14 10:23	100
Bromomethane	ND		500		ug/L			09/03/14 10:23	100
Carbon tetrachloride	ND		100		ug/L			09/03/14 10:23	100
Chlorobenzene	ND		100		ug/L			09/03/14 10:23	100
Chlorobromomethane	ND		100		ug/L			09/03/14 10:23	100
Chlorodibromomethane	ND		100		ug/L			09/03/14 10:23	100
Chloroethane	ND		500		ug/L			09/03/14 10:23	100
Chloroform	ND		100		ug/L			09/03/14 10:23	100
Chloromethane	ND		500		ug/L			09/03/14 10:23	100
cis-1,2-Dichloroethene	**430**		100		ug/L			09/03/14 10:23	100
cis-1,3-Dichloropropene	ND		100		ug/L			09/03/14 10:23	100
Dibromomethane	ND		100		ug/L			09/03/14 10:23	100
Dichlorobromomethane	ND		100		ug/L			09/03/14 10:23	100
Dichlorodifluoromethane	ND	*	100		ug/L			09/03/14 10:23	100
Ethylbenzene	ND		100		ug/L			09/03/14 10:23	100
Ethylene Dibromide	ND		100		ug/L			09/03/14 10:23	100
Hexachlorobutadiene	ND		100		ug/L			09/03/14 10:23	100
Isopropylbenzene	ND		100		ug/L			09/03/14 10:23	100
Methyl tert-butyl ether	ND		100		ug/L			09/03/14 10:23	100
Methylene Chloride	ND		300		ug/L			09/03/14 10:23	100
m-Xylene & p-Xylene	ND		200		ug/L			09/03/14 10:23	100
Naphthalene	ND		300		ug/L			09/03/14 10:23	100
n-Butylbenzene	ND		200		ug/L			09/03/14 10:23	100
N-Propylbenzene	ND		100		ug/L			09/03/14 10:23	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-2
Date Collected: 08/28/14 15:37
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		100		ug/L			09/03/14 10:23	100
sec-Butylbenzene	ND		100		ug/L			09/03/14 10:23	100
Styrene	ND		500		ug/L			09/03/14 10:23	100
tert-Butylbenzene	ND		100		ug/L			09/03/14 10:23	100
Toluene	ND		100		ug/L			09/03/14 10:23	100
trans-1,2-Dichloroethene	ND		100		ug/L			09/03/14 10:23	100
trans-1,3-Dichloropropene	ND		100		ug/L			09/03/14 10:23	100
Trichloroethene	**350**		100		ug/L			09/03/14 10:23	100
Trichlorofluoromethane	ND		100		ug/L			09/03/14 10:23	100
Vinyl chloride	ND		100		ug/L			09/03/14 10:23	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 120*		*09/03/14 10:23*	*100*
Toluene-d8 (Surr)	*94*		*85 - 120*		*09/03/14 10:23*	*100*
Trifluorotoluene (Surr)	*88*		*70 - 136*		*09/03/14 10:23*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/03/14 10:23*	*100*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 120*		*09/03/14 10:23*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**68000**		1000		ug/L			09/03/14 15:55	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/03/14 15:55*	*1000*
Toluene-d8 (Surr)	*92*		*85 - 120*		*09/03/14 15:55*	*1000*
Trifluorotoluene (Surr)	*96*		*70 - 136*		*09/03/14 15:55*	*1000*
Dibromofluoromethane (Surr)	*110*		*85 - 115*		*09/03/14 15:55*	*1000*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 120*		*09/03/14 15:55*	*1000*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		0.90		mg/L			08/29/14 16:38	1
Nitrate as N	**3.2**		0.90		mg/L			08/29/14 16:38	1
Sulfate	**12**		1.2		mg/L			08/29/14 16:38	1
Total Organic Carbon	**2.2**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-3
Date Collected: 08/28/14 15:48
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 20:57	1
Chloromethane	ND		0.10		ug/L			09/03/14 20:57	1
Vinyl chloride	**2.9**		0.020		ug/L			09/03/14 20:57	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 20:57	1
Chloroethane	ND		0.25		ug/L			09/03/14 20:57	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 20:57	1
1,1-Dichloroethene	**4.0**		0.10		ug/L			09/03/14 20:57	1
Methylene Chloride	**0.60**		0.50		ug/L			09/03/14 20:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 20:57	1
1,1-Dichloroethane	**0.66**		0.10		ug/L			09/03/14 20:57	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:57	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 20:57	1
Chloroform	**1.3**		0.10		ug/L			09/03/14 20:57	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 20:57	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 20:57	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 20:57	1
Benzene	ND		0.10		ug/L			09/03/14 20:57	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 20:57	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 20:57	1
Dibromomethane	ND		0.10		ug/L			09/03/14 20:57	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 20:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:57	1
Toluene	**0.10**		0.10		ug/L			09/03/14 20:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 20:57	1
1,1,2-Trichloroethane	**0.29**		0.10		ug/L			09/03/14 20:57	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 20:57	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 20:57	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 20:57	1
Chlorobenzene	**0.21**		0.10		ug/L			09/03/14 20:57	1
1,1,1,2-Tetrachloroethane	**0.17**		0.10		ug/L			09/03/14 20:57	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 20:57	1
o-Xylene	ND		0.10		ug/L			09/03/14 20:57	1
Styrene	ND		0.10		ug/L			09/03/14 20:57	1
Bromoform	ND		0.10		ug/L			09/03/14 20:57	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
Bromobenzene	ND		0.10		ug/L			09/03/14 20:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 20:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 20:57	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 20:57	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 20:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 20:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:57	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 20:57	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-3
Date Collected: 08/28/14 15:48
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 20:57	1
1,2-Dichlorobenzene	**0.22**		0.20		ug/L			09/03/14 20:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 20:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 20:57	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 20:57	1
Naphthalene	ND		0.40		ug/L			09/03/14 20:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*105*		*80 - 127*		*09/03/14 20:57*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/03/14 20:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/03/14 20:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*09/03/14 20:57*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/03/14 20:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**93**		10		ug/L			09/04/14 17:41	100
cis-1,2-Dichloroethene	**7400**		10		ug/L			09/04/14 17:41	100
Trichloroethene	**380**		10		ug/L			09/04/14 17:41	100
Tetrachloroethene	**340**		10		ug/L			09/04/14 17:41	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*09/04/14 17:41*	*100*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/04/14 17:41*	*100*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 17:41*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 17:41*	*100*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*09/04/14 17:41*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-4
Date Collected: 08/28/14 16:00
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 21:21	1
Chloromethane	ND		0.10		ug/L			09/03/14 21:21	1
Vinyl chloride	**1.2**		0.020		ug/L			09/03/14 21:21	1
Bromomethane	ND	*	0.10		ug/L			09/03/14 21:21	1
Chloroethane	ND		0.25		ug/L			09/03/14 21:21	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 21:21	1
1,1-Dichloroethene	**2.8**		0.10		ug/L			09/03/14 21:21	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 21:21	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 21:21	1
1,1-Dichloroethane	**0.48**		0.10		ug/L			09/03/14 21:21	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 21:21	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 21:21	1
Chloroform	**4.0**		0.10		ug/L			09/03/14 21:21	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 21:21	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 21:21	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 21:21	1
Benzene	ND		0.10		ug/L			09/03/14 21:21	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 21:21	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 21:21	1
Dibromomethane	ND		0.10		ug/L			09/03/14 21:21	1
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 21:21	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 21:21	1
Toluene	ND		0.10		ug/L			09/03/14 21:21	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 21:21	1
1,1,2-Trichloroethane	**0.16**		0.10		ug/L			09/03/14 21:21	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 21:21	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 21:21	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 21:21	1
Chlorobenzene	**0.14**		0.10		ug/L			09/03/14 21:21	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 21:21	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 21:21	1
o-Xylene	ND		0.10		ug/L			09/03/14 21:21	1
Styrene	ND		0.10		ug/L			09/03/14 21:21	1
Bromoform	ND		0.10		ug/L			09/03/14 21:21	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
Bromobenzene	ND		0.10		ug/L			09/03/14 21:21	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 21:21	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 21:21	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 21:21	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 21:21	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 21:21	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 21:21	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 21:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-4
Date Collected: 08/28/14 16:00
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			09/03/14 21:21	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 21:21	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 21:21	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 21:21	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 21:21	1
Naphthalene	ND		0.40		ug/L			09/03/14 21:21	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*80 - 127*		*09/03/14 21:21*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/03/14 21:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*09/03/14 21:21*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/03/14 21:21*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/03/14 21:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**58**		10		ug/L			09/04/14 18:05	100
cis-1,2-Dichloroethene	**4700**		10		ug/L			09/04/14 18:05	100
Trichloroethene	**170**		10		ug/L			09/04/14 18:05	100
Tetrachloroethene	**140**		10		ug/L			09/04/14 18:05	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*09/04/14 18:05*	*100*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/04/14 18:05*	*100*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/04/14 18:05*	*100*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*09/04/14 18:05*	*100*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*09/04/14 18:05*	*100*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-9
Date Collected: 08/28/14 16:47
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	15000		100		ug/L			09/09/14 18:00	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/09/14 18:00*	*1000*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/09/14 18:00*	*1000*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/09/14 18:00*	*1000*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/09/14 18:00*	*1000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/09/14 18:25	100
Chloromethane	ND		10		ug/L			09/09/14 18:25	100
Vinyl chloride	ND		2.0		ug/L			09/09/14 18:25	100
Bromomethane	ND	*	10		ug/L			09/09/14 18:25	100
Chloroethane	ND		25		ug/L			09/09/14 18:25	100
Trichlorofluoromethane	ND		10		ug/L			09/09/14 18:25	100
1,1-Dichloroethene	15		10		ug/L			09/09/14 18:25	100
Methylene Chloride	ND		50		ug/L			09/09/14 18:25	100
Methyl tert-butyl ether	ND		10		ug/L			09/09/14 18:25	100
trans-1,2-Dichloroethene	210		10		ug/L			09/09/14 18:25	100
1,1-Dichloroethane	ND		10		ug/L			09/09/14 18:25	100
2,2-Dichloropropane	ND		10		ug/L			09/09/14 18:25	100
Chlorobromomethane	ND		10		ug/L			09/09/14 18:25	100
Chloroform	ND		10		ug/L			09/09/14 18:25	100
1,1,1-Trichloroethane	ND		10		ug/L			09/09/14 18:25	100
Carbon tetrachloride	ND		10		ug/L			09/09/14 18:25	100
1,1-Dichloropropene	ND		10		ug/L			09/09/14 18:25	100
Benzene	ND		10		ug/L			09/09/14 18:25	100
1,2-Dichloroethane	ND		10		ug/L			09/09/14 18:25	100
Trichloroethene	ND		10		ug/L			09/09/14 18:25	100
1,2-Dichloropropane	ND		10		ug/L			09/09/14 18:25	100
Dibromomethane	ND		10		ug/L			09/09/14 18:25	100
Dichlorobromomethane	ND		10		ug/L			09/09/14 18:25	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/09/14 18:25	100
Toluene	ND		10		ug/L			09/09/14 18:25	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/09/14 18:25	100
1,1,2-Trichloroethane	ND		10		ug/L			09/09/14 18:25	100
Tetrachloroethene	ND		10		ug/L			09/09/14 18:25	100
1,3-Dichloropropane	ND		10		ug/L			09/09/14 18:25	100
Chlorodibromomethane	ND		10		ug/L			09/09/14 18:25	100
Ethylene Dibromide	ND		10		ug/L			09/09/14 18:25	100
Chlorobenzene	ND		10		ug/L			09/09/14 18:25	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/09/14 18:25	100
Ethylbenzene	ND		10		ug/L			09/09/14 18:25	100
m-Xylene & p-Xylene	ND		20		ug/L			09/09/14 18:25	100
o-Xylene	ND	*	10		ug/L			09/09/14 18:25	100
Styrene	ND		10		ug/L			09/09/14 18:25	100
Bromoform	ND		10		ug/L			09/09/14 18:25	100
Isopropylbenzene	ND		10		ug/L			09/09/14 18:25	100
Bromobenzene	ND		10		ug/L			09/09/14 18:25	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-9
Date Collected: 08/28/14 16:47
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/09/14 18:25	100
1,2,3-Trichloropropane	ND		20		ug/L			09/09/14 18:25	100
N-Propylbenzene	ND	*	10		ug/L			09/09/14 18:25	100
2-Chlorotoluene	ND		10		ug/L			09/09/14 18:25	100
4-Chlorotoluene	ND		20		ug/L			09/09/14 18:25	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/09/14 18:25	100
tert-Butylbenzene	ND		10		ug/L			09/09/14 18:25	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/09/14 18:25	100
sec-Butylbenzene	ND		10		ug/L			09/09/14 18:25	100
4-Isopropyltoluene	ND		20		ug/L			09/09/14 18:25	100
1,3-Dichlorobenzene	ND		20		ug/L			09/09/14 18:25	100
1,4-Dichlorobenzene	ND		20		ug/L			09/09/14 18:25	100
n-Butylbenzene	ND		10		ug/L			09/09/14 18:25	100
1,2-Dichlorobenzene	ND		20		ug/L			09/09/14 18:25	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/09/14 18:25	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/09/14 18:25	100
Hexachlorobutadiene	ND		20		ug/L			09/09/14 18:25	100
Naphthalene	ND		40		ug/L			09/09/14 18:25	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/09/14 18:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*75 - 125*		*09/09/14 18:25*	*100*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/09/14 18:25*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/09/14 18:25*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/09/14 18:25*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**56**		0.50		ug/L			09/09/14 16:20	1
Ethane	ND		0.50		ug/L			09/09/14 16:20	1
Ethene	ND		0.50		ug/L			09/09/14 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*97*		*66 - 132*		*09/09/14 16:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44**		0.90		mg/L			08/29/14 16:53	1
Nitrate as N	ND		0.90		mg/L			08/29/14 16:53	1
Sulfate	ND		1.2		mg/L			08/29/14 16:53	1
Total Organic Carbon	**8.9**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-23
Date Collected: 08/28/14 17:34
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/04/14 21:20	1
Chloromethane	ND		0.10		ug/L			09/04/14 21:20	1
Vinyl chloride	ND		0.020		ug/L			09/04/14 21:20	1
Bromomethane	ND	*	0.10		ug/L			09/04/14 21:20	1
Chloroethane	ND		0.25		ug/L			09/04/14 21:20	1
Trichlorofluoromethane	ND		0.10		ug/L			09/04/14 21:20	1
1,1-Dichloroethene	ND		0.10		ug/L			09/04/14 21:20	1
Methylene Chloride	ND		0.50		ug/L			09/04/14 21:20	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/04/14 21:20	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 21:20	1
1,1-Dichloroethane	ND		0.10		ug/L			09/04/14 21:20	1
2,2-Dichloropropane	ND		0.10		ug/L			09/04/14 21:20	1
Chlorobromomethane	ND		0.10		ug/L			09/04/14 21:20	1
Chloroform	**2.5**		0.10		ug/L			09/04/14 21:20	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/04/14 21:20	1
Carbon tetrachloride	ND		0.10		ug/L			09/04/14 21:20	1
1,1-Dichloropropene	ND		0.10		ug/L			09/04/14 21:20	1
Benzene	ND		0.10		ug/L			09/04/14 21:20	1
1,2-Dichloroethane	ND		0.10		ug/L			09/04/14 21:20	1
Trichloroethene	**0.46**		0.10		ug/L			09/04/14 21:20	1
1,2-Dichloropropane	ND		0.10		ug/L			09/04/14 21:20	1
Dibromomethane	ND		0.10		ug/L			09/04/14 21:20	1
Dichlorobromomethane	ND		0.10		ug/L			09/04/14 21:20	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 21:20	1
Toluene	ND		0.10		ug/L			09/04/14 21:20	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 21:20	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/04/14 21:20	1
Tetrachloroethene	**4.6**		0.10		ug/L			09/04/14 21:20	1
1,3-Dichloropropane	ND		0.10		ug/L			09/04/14 21:20	1
Chlorodibromomethane	ND		0.10		ug/L			09/04/14 21:20	1
Ethylene Dibromide	ND		0.10		ug/L			09/04/14 21:20	1
Chlorobenzene	ND		0.10		ug/L			09/04/14 21:20	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 21:20	1
Ethylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/04/14 21:20	1
o-Xylene	ND		0.10		ug/L			09/04/14 21:20	1
Styrene	ND		0.10		ug/L			09/04/14 21:20	1
Bromoform	ND		0.10		ug/L			09/04/14 21:20	1
Isopropylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
Bromobenzene	ND		0.10		ug/L			09/04/14 21:20	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 21:20	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/04/14 21:20	1
N-Propylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
2-Chlorotoluene	ND		0.10		ug/L			09/04/14 21:20	1
4-Chlorotoluene	ND		0.20		ug/L			09/04/14 21:20	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
tert-Butylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
sec-Butylbenzene	ND		0.10		ug/L			09/04/14 21:20	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-23
Date Collected: 08/28/14 17:34
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			09/04/14 21:20	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:20	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:20	1
n-Butylbenzene	ND		0.10		ug/L			09/04/14 21:20	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:20	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/04/14 21:20	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/04/14 21:20	1
Hexachlorobutadiene	ND		0.20		ug/L			09/04/14 21:20	1
Naphthalene	ND		0.40		ug/L			09/04/14 21:20	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/04/14 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*09/04/14 21:20*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/04/14 21:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 21:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/04/14 21:20*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/04/14 21:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		100		ug/L			09/05/14 19:14	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*09/05/14 19:14*	*1000*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/05/14 19:14*	*1000*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/05/14 19:14*	*1000*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*09/05/14 19:14*	*1000*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/05/14 19:14*	*1000*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/09/14 16:32	1
Ethane	ND		0.50		ug/L			09/09/14 16:32	1
Ethene	ND		0.50		ug/L			09/09/14 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*97*		*66 - 132*		*09/09/14 16:32*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**		0.90		mg/L			08/29/14 17:07	1
Nitrate as N	**7.3**		0.90		mg/L			08/29/14 17:07	1
Sulfate	**13**		1.2		mg/L			08/29/14 17:07	1
Total Organic Carbon	**1.5**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-10
Date Collected: 08/28/14 18:47
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40		ug/L			09/04/14 20:56	100
Chloromethane	ND		10		ug/L			09/04/14 20:56	100
Vinyl chloride	ND		2.0		ug/L			09/04/14 20:56	100
Bromomethane	ND	*	10		ug/L			09/04/14 20:56	100
Chloroethane	ND		25		ug/L			09/04/14 20:56	100
Trichlorofluoromethane	ND		10		ug/L			09/04/14 20:56	100
1,1-Dichloroethene	ND		10		ug/L			09/04/14 20:56	100
Methylene Chloride	ND		50		ug/L			09/04/14 20:56	100
Methyl tert-butyl ether	ND		10		ug/L			09/04/14 20:56	100
trans-1,2-Dichloroethene	**83**		10		ug/L			09/04/14 20:56	100
1,1-Dichloroethane	ND		10		ug/L			09/04/14 20:56	100
2,2-Dichloropropane	ND		10		ug/L			09/04/14 20:56	100
cis-1,2-Dichloroethene	**5700**		10		ug/L			09/04/14 20:56	100
Chlorobromomethane	ND		10		ug/L			09/04/14 20:56	100
Chloroform	ND		10		ug/L			09/04/14 20:56	100
1,1,1-Trichloroethane	ND		10		ug/L			09/04/14 20:56	100
Carbon tetrachloride	ND		10		ug/L			09/04/14 20:56	100
1,1-Dichloropropene	ND		10		ug/L			09/04/14 20:56	100
Benzene	ND		10		ug/L			09/04/14 20:56	100
1,2-Dichloroethane	ND		10		ug/L			09/04/14 20:56	100
Trichloroethene	**5500**		10		ug/L			09/04/14 20:56	100
1,2-Dichloropropane	ND		10		ug/L			09/04/14 20:56	100
Dibromomethane	ND		10		ug/L			09/04/14 20:56	100
Dichlorobromomethane	ND		10		ug/L			09/04/14 20:56	100
cis-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:56	100
Toluene	ND		10		ug/L			09/04/14 20:56	100
trans-1,3-Dichloropropene	ND		10		ug/L			09/04/14 20:56	100
1,1,2-Trichloroethane	ND		10		ug/L			09/04/14 20:56	100
Tetrachloroethene	**3000**		10		ug/L			09/04/14 20:56	100
1,3-Dichloropropane	ND		10		ug/L			09/04/14 20:56	100
Chlorodibromomethane	ND		10		ug/L			09/04/14 20:56	100
Ethylene Dibromide	ND		10		ug/L			09/04/14 20:56	100
Chlorobenzene	ND		10		ug/L			09/04/14 20:56	100
1,1,1,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:56	100
Ethylbenzene	ND		10		ug/L			09/04/14 20:56	100
m-Xylene & p-Xylene	ND		20		ug/L			09/04/14 20:56	100
o-Xylene	ND		10		ug/L			09/04/14 20:56	100
Styrene	ND		10		ug/L			09/04/14 20:56	100
Bromoform	ND		10		ug/L			09/04/14 20:56	100
Isopropylbenzene	ND		10		ug/L			09/04/14 20:56	100
Bromobenzene	ND		10		ug/L			09/04/14 20:56	100
1,1,2,2-Tetrachloroethane	ND		10		ug/L			09/04/14 20:56	100
1,2,3-Trichloropropane	ND		20		ug/L			09/04/14 20:56	100
N-Propylbenzene	ND		10		ug/L			09/04/14 20:56	100
2-Chlorotoluene	ND		10		ug/L			09/04/14 20:56	100
4-Chlorotoluene	ND		20		ug/L			09/04/14 20:56	100
1,3,5-Trimethylbenzene	ND		10		ug/L			09/04/14 20:56	100
tert-Butylbenzene	ND		10		ug/L			09/04/14 20:56	100
1,2,4-Trimethylbenzene	ND		10		ug/L			09/04/14 20:56	100

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-10
Date Collected: 08/28/14 18:47
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10		ug/L			09/04/14 20:56	100
4-Isopropyltoluene	ND		20		ug/L			09/04/14 20:56	100
1,3-Dichlorobenzene	ND		20		ug/L			09/04/14 20:56	100
1,4-Dichlorobenzene	ND		20		ug/L			09/04/14 20:56	100
n-Butylbenzene	ND		10		ug/L			09/04/14 20:56	100
1,2-Dichlorobenzene	ND		20		ug/L			09/04/14 20:56	100
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			09/04/14 20:56	100
1,2,4-Trichlorobenzene	ND		20		ug/L			09/04/14 20:56	100
Hexachlorobutadiene	ND		20		ug/L			09/04/14 20:56	100
Naphthalene	ND		40		ug/L			09/04/14 20:56	100
1,2,3-Trichlorobenzene	ND		40		ug/L			09/04/14 20:56	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 20:56*	*100*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 20:56*	*100*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/04/14 20:56*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/04/14 20:56*	*100*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/04/14 20:56*	*100*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**5.2**		0.50		ug/L			09/09/14 16:44	1
Ethane	ND		0.50		ug/L			09/09/14 16:44	1
Ethene	ND		0.50		ug/L			09/09/14 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*97*		*66 - 132*		*09/09/14 16:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38**		0.90		mg/L			08/29/14 17:22	1
Nitrate as N	ND		0.90		mg/L			08/29/14 17:22	1
Sulfate	**8.2**		1.2		mg/L			08/29/14 17:22	1
Total Organic Carbon	**9.5**		1.0		mg/L			09/10/14 10:21	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-18
Date Collected: 08/28/14 19:48
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/04/14 21:45	1
Chloromethane	ND		0.10		ug/L			09/04/14 21:45	1
Vinyl chloride	ND		0.020		ug/L			09/04/14 21:45	1
Bromomethane	ND	*	0.10		ug/L			09/04/14 21:45	1
Chloroethane	ND		0.25		ug/L			09/04/14 21:45	1
Trichlorofluoromethane	ND		0.10		ug/L			09/04/14 21:45	1
1,1-Dichloroethene	ND		0.10		ug/L			09/04/14 21:45	1
Methylene Chloride	ND		0.50		ug/L			09/04/14 21:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/04/14 21:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 21:45	1
1,1-Dichloroethane	ND		0.10		ug/L			09/04/14 21:45	1
2,2-Dichloropropane	ND		0.10		ug/L			09/04/14 21:45	1
Chlorobromomethane	ND		0.10		ug/L			09/04/14 21:45	1
Chloroform	**0.21**		0.10		ug/L			09/04/14 21:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/04/14 21:45	1
Carbon tetrachloride	ND		0.10		ug/L			09/04/14 21:45	1
1,1-Dichloropropene	ND		0.10		ug/L			09/04/14 21:45	1
Benzene	ND		0.10		ug/L			09/04/14 21:45	1
1,2-Dichloroethane	ND		0.10		ug/L			09/04/14 21:45	1
Trichloroethene	**0.15**		0.10		ug/L			09/04/14 21:45	1
1,2-Dichloropropane	ND		0.10		ug/L			09/04/14 21:45	1
Dibromomethane	ND		0.10		ug/L			09/04/14 21:45	1
Dichlorobromomethane	ND		0.10		ug/L			09/04/14 21:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 21:45	1
Toluene	ND		0.10		ug/L			09/04/14 21:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 21:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/04/14 21:45	1
Tetrachloroethene	**0.34**		0.10		ug/L			09/04/14 21:45	1
1,3-Dichloropropane	ND		0.10		ug/L			09/04/14 21:45	1
Chlorodibromomethane	ND		0.10		ug/L			09/04/14 21:45	1
Ethylene Dibromide	ND		0.10		ug/L			09/04/14 21:45	1
Chlorobenzene	ND		0.10		ug/L			09/04/14 21:45	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 21:45	1
Ethylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/04/14 21:45	1
o-Xylene	ND		0.10		ug/L			09/04/14 21:45	1
Styrene	ND		0.10		ug/L			09/04/14 21:45	1
Bromoform	ND		0.10		ug/L			09/04/14 21:45	1
Isopropylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
Bromobenzene	ND		0.10		ug/L			09/04/14 21:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 21:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/04/14 21:45	1
N-Propylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
2-Chlorotoluene	ND		0.10		ug/L			09/04/14 21:45	1
4-Chlorotoluene	ND		0.20		ug/L			09/04/14 21:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
tert-Butylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
sec-Butylbenzene	ND		0.10		ug/L			09/04/14 21:45	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-18
Date Collected: 08/28/14 19:48
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			09/04/14 21:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:45	1
n-Butylbenzene	ND		0.10		ug/L			09/04/14 21:45	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/04/14 21:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/04/14 21:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/04/14 21:45	1
Hexachlorobutadiene	ND		0.20		ug/L			09/04/14 21:45	1
Naphthalene	ND		0.40		ug/L			09/04/14 21:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/04/14 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*09/04/14 21:45*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/04/14 21:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/04/14 21:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*09/04/14 21:45*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*09/04/14 21:45*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.11**		0.10		ug/L			09/05/14 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*113*		*80 - 127*		*09/05/14 14:52*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/05/14 14:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/05/14 14:52*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*09/05/14 14:52*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*09/05/14 14:52*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/09/14 16:56	1
Ethane	ND		0.50		ug/L			09/09/14 16:56	1
Ethene	ND		0.50		ug/L			09/09/14 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*98*		*66 - 132*		*09/09/14 16:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**		0.90		mg/L			08/29/14 18:19	1
Nitrate as N	**2.6**		0.90		mg/L			08/29/14 18:19	1
Sulfate	**10**		1.2		mg/L			08/29/14 18:19	1
Total Organic Carbon	ND		1.0		mg/L			09/11/14 10:23	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: Eq Blank #3
Date Collected: 08/28/14 20:00
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/04/14 22:09	1
Chloromethane	ND		0.10		ug/L			09/04/14 22:09	1
Vinyl chloride	ND		0.020		ug/L			09/04/14 22:09	1
Bromomethane	ND	*	0.10		ug/L			09/04/14 22:09	1
Chloroethane	ND		0.25		ug/L			09/04/14 22:09	1
Trichlorofluoromethane	ND		0.10		ug/L			09/04/14 22:09	1
1,1-Dichloroethene	ND		0.10		ug/L			09/04/14 22:09	1
Methylene Chloride	ND		0.50		ug/L			09/04/14 22:09	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/04/14 22:09	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 22:09	1
1,1-Dichloroethane	ND		0.10		ug/L			09/04/14 22:09	1
2,2-Dichloropropane	ND		0.10		ug/L			09/04/14 22:09	1
cis-1,2-Dichloroethene	**0.10**		0.10		ug/L			09/04/14 22:09	1
Chlorobromomethane	ND		0.10		ug/L			09/04/14 22:09	1
Chloroform	**0.28**		0.10		ug/L			09/04/14 22:09	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/04/14 22:09	1
Carbon tetrachloride	ND		0.10		ug/L			09/04/14 22:09	1
1,1-Dichloropropene	ND		0.10		ug/L			09/04/14 22:09	1
Benzene	ND		0.10		ug/L			09/04/14 22:09	1
1,2-Dichloroethane	ND		0.10		ug/L			09/04/14 22:09	1
Trichloroethene	ND		0.10		ug/L			09/04/14 22:09	1
1,2-Dichloropropane	ND		0.10		ug/L			09/04/14 22:09	1
Dibromomethane	ND		0.10		ug/L			09/04/14 22:09	1
Dichlorobromomethane	ND		0.10		ug/L			09/04/14 22:09	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 22:09	1
Toluene	ND		0.10		ug/L			09/04/14 22:09	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 22:09	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/04/14 22:09	1
Tetrachloroethene	ND		0.10		ug/L			09/04/14 22:09	1
1,3-Dichloropropane	ND		0.10		ug/L			09/04/14 22:09	1
Chlorodibromomethane	ND		0.10		ug/L			09/04/14 22:09	1
Ethylene Dibromide	ND		0.10		ug/L			09/04/14 22:09	1
Chlorobenzene	ND		0.10		ug/L			09/04/14 22:09	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 22:09	1
Ethylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/04/14 22:09	1
o-Xylene	ND		0.10		ug/L			09/04/14 22:09	1
Styrene	ND		0.10		ug/L			09/04/14 22:09	1
Bromoform	ND		0.10		ug/L			09/04/14 22:09	1
Isopropylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
Bromobenzene	ND		0.10		ug/L			09/04/14 22:09	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 22:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/04/14 22:09	1
N-Propylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
2-Chlorotoluene	ND		0.10		ug/L			09/04/14 22:09	1
4-Chlorotoluene	ND		0.20		ug/L			09/04/14 22:09	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
tert-Butylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/04/14 22:09	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: Eq Blank #3
Date Collected: 08/28/14 20:00
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
4-Isopropyltoluene	ND		0.20		ug/L			09/04/14 22:09	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:09	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:09	1
n-Butylbenzene	ND		0.10		ug/L			09/04/14 22:09	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:09	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/04/14 22:09	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/04/14 22:09	1
Hexachlorobutadiene	ND		0.20		ug/L			09/04/14 22:09	1
Naphthalene	ND		0.40		ug/L			09/04/14 22:09	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/04/14 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*09/04/14 22:09*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/04/14 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 22:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/04/14 22:09*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*09/04/14 22:09*	*1*

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-1
Date Collected: 08/29/14 07:40
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/04/14 22:33	1
Chloromethane	ND		0.10		ug/L			09/04/14 22:33	1
Vinyl chloride	**1.4**		0.020		ug/L			09/04/14 22:33	1
Bromomethane	ND	*	0.10		ug/L			09/04/14 22:33	1
Chloroethane	ND		0.25		ug/L			09/04/14 22:33	1
Trichlorofluoromethane	ND		0.10		ug/L			09/04/14 22:33	1
1,1-Dichloroethene	**0.44**		0.10		ug/L			09/04/14 22:33	1
Methylene Chloride	ND		0.50		ug/L			09/04/14 22:33	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/04/14 22:33	1
trans-1,2-Dichloroethene	**7.5**		0.10		ug/L			09/04/14 22:33	1
1,1-Dichloroethane	ND		0.10		ug/L			09/04/14 22:33	1
2,2-Dichloropropane	ND		0.10		ug/L			09/04/14 22:33	1
Chlorobromomethane	ND		0.10		ug/L			09/04/14 22:33	1
Chloroform	**4.0**		0.10		ug/L			09/04/14 22:33	1
1,1,1-Trichloroethane	**1.0**		0.10		ug/L			09/04/14 22:33	1
Carbon tetrachloride	ND		0.10		ug/L			09/04/14 22:33	1
1,1-Dichloropropene	ND		0.10		ug/L			09/04/14 22:33	1
Benzene	ND		0.10		ug/L			09/04/14 22:33	1
1,2-Dichloroethane	ND		0.10		ug/L			09/04/14 22:33	1
1,2-Dichloropropane	ND		0.10		ug/L			09/04/14 22:33	1
Dibromomethane	ND		0.10		ug/L			09/04/14 22:33	1
Dichlorobromomethane	ND		0.10		ug/L			09/04/14 22:33	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 22:33	1
Toluene	ND		0.10		ug/L			09/04/14 22:33	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 22:33	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/04/14 22:33	1
1,3-Dichloropropane	ND		0.10		ug/L			09/04/14 22:33	1
Chlorodibromomethane	ND		0.10		ug/L			09/04/14 22:33	1
Ethylene Dibromide	ND		0.10		ug/L			09/04/14 22:33	1
Chlorobenzene	ND		0.10		ug/L			09/04/14 22:33	1
1,1,1,2-Tetrachloroethane	**0.17**		0.10		ug/L			09/04/14 22:33	1
Ethylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/04/14 22:33	1
o-Xylene	ND		0.10		ug/L			09/04/14 22:33	1
Styrene	ND		0.10		ug/L			09/04/14 22:33	1
Bromoform	ND		0.10		ug/L			09/04/14 22:33	1
Isopropylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
Bromobenzene	ND		0.10		ug/L			09/04/14 22:33	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 22:33	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/04/14 22:33	1
N-Propylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
2-Chlorotoluene	ND		0.10		ug/L			09/04/14 22:33	1
4-Chlorotoluene	ND		0.20		ug/L			09/04/14 22:33	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
tert-Butylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
sec-Butylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
4-Isopropyltoluene	ND		0.20		ug/L			09/04/14 22:33	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:33	1

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: EXT-1
Date Collected: 08/29/14 07:40
Date Received: 08/29/14 12:05

Lab Sample ID: 580-45173-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:33	1
n-Butylbenzene	ND		0.10		ug/L			09/04/14 22:33	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/04/14 22:33	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/04/14 22:33	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/04/14 22:33	1
Hexachlorobutadiene	ND		0.20		ug/L			09/04/14 22:33	1
Naphthalene	ND		0.40		ug/L			09/04/14 22:33	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/04/14 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*09/04/14 22:33*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/04/14 22:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*09/04/14 22:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/04/14 22:33*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/04/14 22:33*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**580**		10		ug/L			09/05/14 19:39	100
Trichloroethene	**610**		10		ug/L			09/05/14 19:39	100
Tetrachloroethene	**570**		10		ug/L			09/05/14 19:39	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*96*		*80 - 127*		*09/05/14 19:39*	*100*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/05/14 19:39*	*100*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 128*		*09/05/14 19:39*	*100*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*09/05/14 19:39*	*100*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/05/14 19:39*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-168613/4
Matrix: Water
Analysis Batch: 168613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/14 08:23	1
1,1-Dichloropropene	ND		1.0		ug/L			09/03/14 08:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/03/14 08:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			09/03/14 08:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/14 08:23	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/14 08:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
1,3-Dichloropropane	ND		1.0		ug/L			09/03/14 08:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
2,2-Dichloropropane	ND		1.0		ug/L			09/03/14 08:23	1
2-Chlorotoluene	ND		1.0		ug/L			09/03/14 08:23	1
4-Chlorotoluene	ND		1.0		ug/L			09/03/14 08:23	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/14 08:23	1
Benzene	ND		1.0		ug/L			09/03/14 08:23	1
Bromobenzene	ND		1.0		ug/L			09/03/14 08:23	1
Bromoform	ND		1.0		ug/L			09/03/14 08:23	1
Bromomethane	ND		5.0		ug/L			09/03/14 08:23	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/14 08:23	1
Chlorobenzene	ND		1.0		ug/L			09/03/14 08:23	1
Chlorobromomethane	ND		1.0		ug/L			09/03/14 08:23	1
Chlorodibromomethane	ND		1.0		ug/L			09/03/14 08:23	1
Chloroethane	ND		5.0		ug/L			09/03/14 08:23	1
Chloroform	ND		1.0		ug/L			09/03/14 08:23	1
Chloromethane	ND		5.0		ug/L			09/03/14 08:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/14 08:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/14 08:23	1
Dibromomethane	ND		1.0		ug/L			09/03/14 08:23	1
Dichlorobromomethane	ND		1.0		ug/L			09/03/14 08:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/14 08:23	1
Ethylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
Ethylene Dibromide	ND		1.0		ug/L			09/03/14 08:23	1
Hexachlorobutadiene	ND		1.0		ug/L			09/03/14 08:23	1
Isopropylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/14 08:23	1
Methylene Chloride	ND		3.0		ug/L			09/03/14 08:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			09/03/14 08:23	1
Naphthalene	ND		3.0		ug/L			09/03/14 08:23	1
n-Butylbenzene	ND		2.0		ug/L			09/03/14 08:23	1

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

Lab Sample ID: MB 580-168613/4
Matrix: Water
Analysis Batch: 168613

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
o-Xylene	ND		1.0		ug/L			09/03/14 08:23	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
Styrene	ND		5.0		ug/L			09/03/14 08:23	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/14 08:23	1
Tetrachloroethene	ND		1.0		ug/L			09/03/14 08:23	1
Toluene	ND		1.0		ug/L			09/03/14 08:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/14 08:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/14 08:23	1
Trichloroethene	ND		1.0		ug/L			09/03/14 08:23	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/14 08:23	1
Vinyl chloride	ND		1.0		ug/L			09/03/14 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/03/14 08:23*	*1*
Toluene-d8 (Surr)	*98*		*85 - 120*		*09/03/14 08:23*	*1*
Trifluorotoluene (Surr)	*102*		*70 - 136*		*09/03/14 08:23*	*1*
Dibromofluoromethane (Surr)	*107*		*85 - 115*		*09/03/14 08:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 120*		*09/03/14 08:23*	*1*

Lab Sample ID: LCS 580-168613/5
Matrix: Water
Analysis Batch: 168613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	19.7		ug/L		99	80 - 130
1,1,1-Trichloroethane	20.0	22.9		ug/L		115	65 - 130
1,1,2,2-Tetrachloroethane	20.0	19.9		ug/L		99	65 - 130
1,1,2-Trichloroethane	20.0	17.8		ug/L		89	75 - 125
1,1-Dichloroethane	20.0	21.6		ug/L		108	70 - 135
1,1-Dichloroethene	20.0	21.9		ug/L		110	70 - 130
1,1-Dichloropropene	20.0	19.8		ug/L		99	75 - 130
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		101	55 - 140
1,2,3-Trichloropropane	20.0	18.1		ug/L		91	75 - 125
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	20.0	20.9		ug/L		105	75 - 130
1,2-Dibromo-3-Chloropropane	20.0	17.2		ug/L		86	50 - 130
1,2-Dichlorobenzene	20.0	19.7		ug/L		98	70 - 120
1,2-Dichloroethane	20.0	19.9		ug/L		100	70 - 130
1,2-Dichloropropane	20.0	19.6		ug/L		98	75 - 125
1,3,5-Trimethylbenzene	20.0	20.2		ug/L		101	75 - 130
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	75 - 125
1,3-Dichloropropane	20.0	17.5		ug/L		87	75 - 125
1,4-Dichlorobenzene	20.0	19.3		ug/L		97	75 - 125
2,2-Dichloropropane	20.0	23.4		ug/L		117	70 - 135
2-Chlorotoluene	20.0	19.4		ug/L		97	75 - 125
4-Chlorotoluene	20.0	19.9		ug/L		99	75 - 130
4-Isopropyltoluene	20.0	20.3		ug/L		102	75 - 130

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

Lab Sample ID: LCS 580-168613/5
Matrix: Water
Analysis Batch: 168613

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.5		ug/L		98	80 - 120
Bromobenzene	20.0	18.8		ug/L		94	75 - 125
Bromoform	20.0	17.2		ug/L		86	70 - 130
Bromomethane	20.0	22.6		ug/L		113	30 - 145
Carbon tetrachloride	20.0	23.1		ug/L		115	65 - 140
Chlorobenzene	20.0	18.6		ug/L		93	80 - 120
Chlorobromomethane	20.0	21.0		ug/L		105	65 - 130
Chlorodibromomethane	20.0	18.4		ug/L		92	60 - 135
Chloroethane	20.0	22.5		ug/L		112	60 - 135
Chloroform	20.0	22.1		ug/L		110	65 - 135
Chloromethane	20.0	21.7		ug/L		108	40 - 125
cis-1,2-Dichloroethene	20.0	21.5		ug/L		108	70 - 125
cis-1,3-Dichloropropene	20.0	16.5		ug/L		82	70 - 130
Dibromomethane	20.0	19.1		ug/L		95	75 - 125
Dichlorobromomethane	20.0	20.2		ug/L		101	75 - 120
Dichlorodifluoromethane	20.0	21.4		ug/L		107	30 - 155
Ethylbenzene	20.0	19.1		ug/L		96	75 - 125
Ethylene Dibromide	20.0	17.8		ug/L		89	80 - 120
Hexachlorobutadiene	20.0	20.1		ug/L		101	50 - 140
Isopropylbenzene	20.0	20.7		ug/L		103	75 - 125
Methyl tert-butyl ether	20.0	21.0		ug/L		105	65 - 125
Methylene Chloride	20.0	24.4		ug/L		122	55 - 140
m-Xylene & p-Xylene	20.0	19.8		ug/L		99	75 - 130
Naphthalene	20.0	18.8		ug/L		94	55 - 140
n-Butylbenzene	20.0	21.8		ug/L		109	70 - 135
N-Propylbenzene	20.0	19.7		ug/L		98	70 - 130
o-Xylene	20.0	20.1		ug/L		101	80 - 120
sec-Butylbenzene	20.0	20.4		ug/L		102	70 - 125
Styrene	20.0	19.5		ug/L		97	65 - 135
tert-Butylbenzene	20.0	17.7		ug/L		89	70 - 130
Tetrachloroethene	20.0	15.6		ug/L		78	45 - 150
Toluene	20.0	18.0		ug/L		90	75 - 120
trans-1,2-Dichloroethene	20.0	20.9		ug/L		104	60 - 140
trans-1,3-Dichloropropene	20.0	16.6		ug/L		83	55 - 140
Trichloroethene	20.0	18.5		ug/L		93	70 - 125
Trichlorofluoromethane	20.0	23.4		ug/L		117	60 - 145
Vinyl chloride	20.0	23.4		ug/L		117	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Toluene-d8 (Surr)	*94*		*85 - 120*
Trifluorotoluene (Surr)	*105*		*70 - 136*
Dibromofluoromethane (Surr)	*111*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*

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

Lab Sample ID: LCSD 580-168613/6
Matrix: Water
Analysis Batch: 168613

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
1,1,1,2-Tetrachloroethane	20.0	17.7		ug/L		89	80 - 130	11	30
1,1,1-Trichloroethane	20.0	18.6		ug/L		93	65 - 130	21	30
1,1,2,2-Tetrachloroethane	20.0	18.6		ug/L		93	65 - 130	6	30
1,1,2-Trichloroethane	20.0	18.5		ug/L		93	75 - 125	4	30
1,1-Dichloroethane	20.0	18.3		ug/L		91	70 - 135	16	30
1,1-Dichloroethene	20.0	17.1		ug/L		86	70 - 130	25	30
1,1-Dichloropropene	20.0	18.2		ug/L		91	75 - 130	8	30
1,2,3-Trichlorobenzene	20.0	18.5		ug/L		92	55 - 140	9	30
1,2,3-Trichloropropane	20.0	19.7		ug/L		99	75 - 125	8	30
1,2,4-Trichlorobenzene	20.0	18.2		ug/L		91	65 - 135	9	30
1,2,4-Trimethylbenzene	20.0	19.7		ug/L		98	75 - 130	6	30
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		86	50 - 130	1	30
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	70 - 120	5	30
1,2-Dichloroethane	20.0	19.5		ug/L		97	70 - 130	2	30
1,2-Dichloropropane	20.0	19.1		ug/L		96	75 - 125	3	30
1,3,5-Trimethylbenzene	20.0	19.4		ug/L		97	75 - 130	4	30
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	75 - 125	4	30
1,3-Dichloropropane	20.0	18.5		ug/L		93	75 - 125	6	30
1,4-Dichlorobenzene	20.0	18.7		ug/L		94	75 - 125	3	30
2,2-Dichloropropane	20.0	18.4		ug/L		92	70 - 135	24	30
2-Chlorotoluene	20.0	18.8		ug/L		94	75 - 125	3	30
4-Chlorotoluene	20.0	19.6		ug/L		98	75 - 130	1	30
4-Isopropyltoluene	20.0	19.2		ug/L		96	75 - 130	5	30
Benzene	20.0	18.1		ug/L		91	80 - 120	7	30
Bromobenzene	20.0	18.8		ug/L		94	75 - 125	0	30
Bromoform	20.0	18.4		ug/L		92	70 - 130	7	30
Bromomethane	20.0	17.4		ug/L		87	30 - 145	26	30
Carbon tetrachloride	20.0	18.5		ug/L		92	65 - 140	22	30
Chlorobenzene	20.0	18.0		ug/L		90	80 - 120	4	30
Chlorobromomethane	20.0	18.5		ug/L		92	65 - 130	13	30
Chlorodibromomethane	20.0	18.7		ug/L		93	60 - 135	2	30
Chloroethane	20.0	17.6		ug/L		88	60 - 135	24	30
Chloroform	20.0	19.0		ug/L		95	65 - 135	15	30
Chloromethane	20.0	17.0		ug/L		85	40 - 125	24	30
cis-1,2-Dichloroethene	20.0	18.2		ug/L		91	70 - 125	17	30
cis-1,3-Dichloropropene	20.0	18.3		ug/L		91	70 - 130	10	30
Dibromomethane	20.0	19.1		ug/L		95	75 - 125	0	30
Dichlorobromomethane	20.0	19.8		ug/L		99	75 - 120	2	30
Dichlorodifluoromethane	20.0	15.7	*	ug/L		79	30 - 155	31	30
Ethylbenzene	20.0	17.8		ug/L		89	75 - 125	7	30
Ethylene Dibromide	20.0	18.7		ug/L		94	80 - 120	5	30
Hexachlorobutadiene	20.0	19.4		ug/L		97	50 - 140	4	30
Isopropylbenzene	20.0	18.5		ug/L		92	75 - 125	11	30
Methyl tert-butyl ether	20.0	17.9		ug/L		90	65 - 125	16	30
Methylene Chloride	20.0	19.7		ug/L		98	55 - 140	22	30
m-Xylene & p-Xylene	20.0	18.5		ug/L		93	75 - 130	6	30
Naphthalene	20.0	18.0		ug/L		90	55 - 140	5	30
n-Butylbenzene	20.0	20.0		ug/L		100	70 - 135	9	30

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

Lab Sample ID: LCSD 580-168613/6
Matrix: Water
Analysis Batch: 168613

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
N-Propylbenzene			20.0	19.0		ug/L		95	70 - 130	3	30
o-Xylene			20.0	18.1		ug/L		91	80 - 120	11	30
sec-Butylbenzene			20.0	19.5		ug/L		97	70 - 125	5	30
Styrene			20.0	18.8		ug/L		94	65 - 135	4	30
tert-Butylbenzene			20.0	18.2		ug/L		91	70 - 130	3	30
Tetrachloroethene			20.0	16.2		ug/L		81	45 - 150	4	30
Toluene			20.0	17.7		ug/L		89	75 - 120	1	30
trans-1,2-Dichloroethene			20.0	17.0		ug/L		85	60 - 140	21	30
trans-1,3-Dichloropropene			20.0	18.9		ug/L		95	55 - 140	13	30
Trichloroethene			20.0	18.0		ug/L		90	70 - 125	3	30
Trichlorofluoromethane			20.0	18.3		ug/L		91	60 - 145	25	30
Vinyl chloride			20.0	17.6		ug/L		88	50 - 145	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Toluene-d8 (Surr)	*97*		*85 - 120*
Trifluorotoluene (Surr)	*98*		*70 - 136*
Dibromofluoromethane (Surr)	*102*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 120*

Lab Sample ID: MB 580-168655/6
Matrix: Water
Analysis Batch: 168655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/03/14 12:01	1
Chloromethane	ND		0.10		ug/L			09/03/14 12:01	1
Vinyl chloride	ND		0.020		ug/L			09/03/14 12:01	1
Bromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Chloroethane	ND		0.25		ug/L			09/03/14 12:01	1
Trichlorofluoromethane	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
Methylene Chloride	ND		0.50		ug/L			09/03/14 12:01	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/03/14 12:01	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
2,2-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
Chlorobromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Chloroform	ND		0.10		ug/L			09/03/14 12:01	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Carbon tetrachloride	ND		0.10		ug/L			09/03/14 12:01	1
1,1-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
Benzene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Trichloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
Dibromomethane	ND		0.10		ug/L			09/03/14 12:01	1

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

Lab Sample ID: MB 580-168655/6
Matrix: Water
Analysis Batch: 168655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			09/03/14 12:01	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
Toluene	ND		0.10		ug/L			09/03/14 12:01	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Tetrachloroethene	ND		0.10		ug/L			09/03/14 12:01	1
1,3-Dichloropropane	ND		0.10		ug/L			09/03/14 12:01	1
Chlorodibromomethane	ND		0.10		ug/L			09/03/14 12:01	1
Ethylene Dibromide	ND		0.10		ug/L			09/03/14 12:01	1
Chlorobenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 12:01	1
Ethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/03/14 12:01	1
o-Xylene	ND		0.10		ug/L			09/03/14 12:01	1
Styrene	ND		0.10		ug/L			09/03/14 12:01	1
Bromoform	ND		0.10		ug/L			09/03/14 12:01	1
Isopropylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
Bromobenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/03/14 12:01	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/03/14 12:01	1
N-Propylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
2-Chlorotoluene	ND		0.10		ug/L			09/03/14 12:01	1
4-Chlorotoluene	ND		0.20		ug/L			09/03/14 12:01	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
tert-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
sec-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
4-Isopropyltoluene	ND		0.20		ug/L			09/03/14 12:01	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
n-Butylbenzene	ND		0.10		ug/L			09/03/14 12:01	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/03/14 12:01	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/03/14 12:01	1
Hexachlorobutadiene	ND		0.20		ug/L			09/03/14 12:01	1
Naphthalene	ND		0.40		ug/L			09/03/14 12:01	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/03/14 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*09/03/14 12:01*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/03/14 12:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*09/03/14 12:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*09/03/14 12:01*	*1*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*09/03/14 12:01*	*1*

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

Lab Sample ID: LCS 580-168655/7
Matrix: Water
Analysis Batch: 168655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.03		ug/L		121	30 - 180
Chloromethane	5.00	6.41		ug/L		128	50 - 140
Vinyl chloride	5.00	6.01		ug/L		120	65 - 140
Bromomethane	5.00	6.69		ug/L		134	70 - 135
Chloroethane	5.00	6.24		ug/L		125	75 - 140
Trichlorofluoromethane	5.00	6.94		ug/L		139	30 - 180
1,1-Dichloroethene	5.00	6.10		ug/L		122	70 - 150
Methylene Chloride	5.00	6.25		ug/L		125	60 - 145
Methyl tert-butyl ether	5.00	5.68		ug/L		114	75 - 120
trans-1,2-Dichloroethene	5.00	5.95		ug/L		119	80 - 140
1,1-Dichloroethane	5.00	6.07		ug/L		121	75 - 135
2,2-Dichloropropane	5.00	6.31		ug/L		126	60 - 150
cis-1,2-Dichloroethene	5.00	5.78		ug/L		116	80 - 130
Chlorobromomethane	5.00	5.60		ug/L		112	80 - 125
Chloroform	5.00	6.01		ug/L		120	80 - 130
1,1,1-Trichloroethane	5.00	5.94		ug/L		119	80 - 140
Carbon tetrachloride	5.00	5.73		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.87		ug/L		117	80 - 130
Benzene	5.00	5.54		ug/L		111	80 - 120
1,2-Dichloroethane	5.00	5.61		ug/L		112	80 - 140
Trichloroethene	5.00	5.50		ug/L		110	80 - 130
1,2-Dichloropropane	5.00	5.32		ug/L		106	80 - 120
Dibromomethane	5.00	5.19		ug/L		104	80 - 130
Dichlorobromomethane	5.00	5.04		ug/L		101	80 - 125
cis-1,3-Dichloropropene	5.00	4.51		ug/L		90	70 - 120
Toluene	5.00	5.48		ug/L		110	80 - 120
trans-1,3-Dichloropropene	5.00	4.11		ug/L		82	60 - 140
1,1,2-Trichloroethane	5.00	5.16		ug/L		103	80 - 130
Tetrachloroethene	5.00	5.08		ug/L		102	40 - 180
1,3-Dichloropropane	5.00	5.19		ug/L		104	80 - 130
Chlorodibromomethane	5.00	4.36		ug/L		87	70 - 120
Ethylene Dibromide	5.00	5.47		ug/L		109	70 - 130
Chlorobenzene	5.00	5.54		ug/L		111	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.53		ug/L		111	75 - 125
Ethylbenzene	5.00	5.90		ug/L		118	80 - 125
m-Xylene & p-Xylene	5.00	5.79		ug/L		116	80 - 130
o-Xylene	5.00	5.69		ug/L		114	80 - 120
Styrene	5.00	5.19		ug/L		104	75 - 130
Bromoform	5.00	3.71		ug/L		74	65 - 130
Isopropylbenzene	5.00	5.54		ug/L		111	75 - 120
Bromobenzene	5.00	4.72		ug/L		94	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.52		ug/L		90	75 - 125
1,2,3-Trichloropropane	5.00	4.97		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.65		ug/L		113	80 - 120
2-Chlorotoluene	5.00	5.29		ug/L		106	75 - 130
4-Chlorotoluene	5.00	5.34		ug/L		107	75 - 130
1,3,5-Trimethylbenzene	5.00	4.99		ug/L		100	80 - 125
tert-Butylbenzene	5.00	4.44		ug/L		89	80 - 130

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

Lab Sample ID: LCS 580-168655/7
Matrix: Water
Analysis Batch: 168655

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	5.00	4.98		ug/L		100	80 - 125
sec-Butylbenzene	5.00	4.96		ug/L		99	80 - 125
4-Isopropyltoluene	5.00	4.91		ug/L		98	80 - 120
1,3-Dichlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	4.85		ug/L		97	80 - 120
n-Butylbenzene	5.00	4.59		ug/L		92	75 - 125
1,2-Dichlorobenzene	5.00	5.30		ug/L		106	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.34		ug/L		67	55 - 120
1,2,4-Trichlorobenzene	5.00	3.98		ug/L		80	60 - 125
Hexachlorobutadiene	5.00	4.98		ug/L		100	75 - 135
Naphthalene	5.00	3.27		ug/L		65	45 - 130
1,2,3-Trichlorobenzene	5.00	4.62		ug/L		92	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*97*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

Lab Sample ID: LCSD 580-168655/8
Matrix: Water
Analysis Batch: 168655

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
Dichlorodifluoromethane	5.00	5.72		ug/L		114	30 - 180	5	20
Chloromethane	5.00	6.28		ug/L		126	50 - 140	2	20
Vinyl chloride	5.00	5.98		ug/L		120	65 - 140	0	20
Bromomethane	5.00	6.86	*	ug/L		137	70 - 135	3	20
Chloroethane	5.00	6.36		ug/L		127	75 - 140	2	20
Trichlorofluoromethane	5.00	7.10		ug/L		142	30 - 180	2	20
1,1-Dichloroethene	5.00	5.61		ug/L		112	70 - 150	8	20
Methylene Chloride	5.00	6.00		ug/L		120	60 - 145	4	20
Methyl tert-butyl ether	5.00	5.44		ug/L		109	75 - 120	4	20
trans-1,2-Dichloroethene	5.00	5.78		ug/L		116	80 - 140	3	20
1,1-Dichloroethane	5.00	5.74		ug/L		115	75 - 135	6	20
2,2-Dichloropropane	5.00	6.21		ug/L		124	60 - 150	2	20
cis-1,2-Dichloroethene	5.00	5.49		ug/L		110	80 - 130	5	20
Chlorobromomethane	5.00	5.36		ug/L		107	80 - 125	5	20
Chloroform	5.00	5.71		ug/L		114	80 - 130	5	20
1,1,1-Trichloroethane	5.00	5.72		ug/L		114	80 - 140	4	20
Carbon tetrachloride	5.00	5.32		ug/L		106	75 - 140	7	20
1,1-Dichloropropene	5.00	5.60		ug/L		112	80 - 130	5	20
Benzene	5.00	5.33		ug/L		107	80 - 120	4	20
1,2-Dichloroethane	5.00	5.53		ug/L		111	80 - 140	1	20
Trichloroethene	5.00	5.28		ug/L		106	80 - 130	4	20
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 120	2	20
Dibromomethane	5.00	5.04		ug/L		101	80 - 130	3	20

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

Lab Sample ID: LCSD 580-168655/8
Matrix: Water
Analysis Batch: 168655

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
Dichlorobromomethane			5.00	5.07		ug/L		101	80 - 125	1	20
cis-1,3-Dichloropropene			5.00	4.27		ug/L		85	70 - 120	6	20
Toluene			5.00	5.33		ug/L		107	80 - 120	3	20
trans-1,3-Dichloropropene			5.00	3.92		ug/L		78	60 - 140	5	20
1,1,2-Trichloroethane			5.00	5.01		ug/L		100	80 - 130	3	20
Tetrachloroethene			5.00	5.19		ug/L		104	40 - 180	2	20
1,3-Dichloropropane			5.00	4.97		ug/L		99	80 - 130	4	20
Chlorodibromomethane			5.00	4.11		ug/L		82	70 - 120	6	20
Ethylene Dibromide			5.00	5.11		ug/L		102	70 - 130	7	20
Chlorobenzene			5.00	5.27		ug/L		105	80 - 120	5	20
1,1,1,2-Tetrachloroethane			5.00	5.34		ug/L		107	75 - 125	3	20
Ethylbenzene			5.00	5.67		ug/L		113	80 - 125	4	20
m-Xylene & p-Xylene			5.00	5.68		ug/L		114	80 - 130	2	20
o-Xylene			5.00	5.48		ug/L		110	80 - 120	4	20
Styrene			5.00	4.97		ug/L		99	75 - 130	4	20
Bromoform			5.00	3.71		ug/L		74	65 - 130	0	20
Isopropylbenzene			5.00	5.38		ug/L		108	75 - 120	3	20
Bromobenzene			5.00	4.73		ug/L		95	80 - 130	0	20
1,1,2,2-Tetrachloroethane			5.00	4.59		ug/L		92	75 - 125	1	20
1,2,3-Trichloropropane			5.00	5.03		ug/L		101	75 - 120	1	20
N-Propylbenzene			5.00	5.66		ug/L		113	80 - 120	0	20
2-Chlorotoluene			5.00	5.11		ug/L		102	75 - 130	3	20
4-Chlorotoluene			5.00	5.46		ug/L		109	75 - 130	2	20
1,3,5-Trimethylbenzene			5.00	5.12		ug/L		102	80 - 125	3	20
tert-Butylbenzene			5.00	4.72		ug/L		94	80 - 130	6	20
1,2,4-Trimethylbenzene			5.00	5.07		ug/L		101	80 - 125	2	20
sec-Butylbenzene			5.00	4.99		ug/L		100	80 - 125	1	20
4-Isopropyltoluene			5.00	4.89		ug/L		98	80 - 120	1	20
1,3-Dichlorobenzene			5.00	5.15		ug/L		103	80 - 120	1	20
1,4-Dichlorobenzene			5.00	4.84		ug/L		97	80 - 120	0	20
n-Butylbenzene			5.00	4.57		ug/L		91	75 - 125	0	20
1,2-Dichlorobenzene			5.00	5.20		ug/L		104	80 - 130	2	20
1,2-Dibromo-3-Chloropropane			5.00	3.45		ug/L		69	55 - 120	3	20
1,2,4-Trichlorobenzene			5.00	3.86		ug/L		77	60 - 125	3	20
Hexachlorobutadiene			5.00	5.03		ug/L		101	75 - 135	1	20
Naphthalene			5.00	3.34		ug/L		67	45 - 130	2	20
1,2,3-Trichlorobenzene			5.00	4.49		ug/L		90	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*100*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*

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

Lab Sample ID: MB 580-168799/14
Matrix: Water
Analysis Batch: 168799

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/04/14 14:27	1
Chloromethane	ND		0.10		ug/L			09/04/14 14:27	1
Vinyl chloride	ND		0.020		ug/L			09/04/14 14:27	1
Bromomethane	ND		0.10		ug/L			09/04/14 14:27	1
Chloroethane	ND		0.25		ug/L			09/04/14 14:27	1
Trichlorofluoromethane	ND		0.10		ug/L			09/04/14 14:27	1
1,1-Dichloroethene	ND		0.10		ug/L			09/04/14 14:27	1
Methylene Chloride	ND		0.50		ug/L			09/04/14 14:27	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/04/14 14:27	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 14:27	1
1,1-Dichloroethane	ND		0.10		ug/L			09/04/14 14:27	1
2,2-Dichloropropane	ND		0.10		ug/L			09/04/14 14:27	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/04/14 14:27	1
Chlorobromomethane	ND		0.10		ug/L			09/04/14 14:27	1
Chloroform	ND		0.10		ug/L			09/04/14 14:27	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/04/14 14:27	1
Carbon tetrachloride	ND		0.10		ug/L			09/04/14 14:27	1
1,1-Dichloropropene	ND		0.10		ug/L			09/04/14 14:27	1
Benzene	ND		0.10		ug/L			09/04/14 14:27	1
1,2-Dichloroethane	ND		0.10		ug/L			09/04/14 14:27	1
Trichloroethene	ND		0.10		ug/L			09/04/14 14:27	1
1,2-Dichloropropane	ND		0.10		ug/L			09/04/14 14:27	1
Dibromomethane	ND		0.10		ug/L			09/04/14 14:27	1
Dichlorobromomethane	ND		0.10		ug/L			09/04/14 14:27	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 14:27	1
Toluene	ND		0.10		ug/L			09/04/14 14:27	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/04/14 14:27	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/04/14 14:27	1
Tetrachloroethene	ND		0.10		ug/L			09/04/14 14:27	1
1,3-Dichloropropane	ND		0.10		ug/L			09/04/14 14:27	1
Chlorodibromomethane	ND		0.10		ug/L			09/04/14 14:27	1
Ethylene Dibromide	ND		0.10		ug/L			09/04/14 14:27	1
Chlorobenzene	ND		0.10		ug/L			09/04/14 14:27	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 14:27	1
Ethylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/04/14 14:27	1
o-Xylene	ND		0.10		ug/L			09/04/14 14:27	1
Styrene	ND		0.10		ug/L			09/04/14 14:27	1
Bromoform	ND		0.10		ug/L			09/04/14 14:27	1
Isopropylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
Bromobenzene	ND		0.10		ug/L			09/04/14 14:27	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/04/14 14:27	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/04/14 14:27	1
N-Propylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
2-Chlorotoluene	ND		0.10		ug/L			09/04/14 14:27	1
4-Chlorotoluene	ND		0.20		ug/L			09/04/14 14:27	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
tert-Butylbenzene	ND		0.10		ug/L			09/04/14 14:27	1

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

Lab Sample ID: MB 580-168799/14
Matrix: Water
Analysis Batch: 168799

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
sec-Butylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
4-Isopropyltoluene	ND		0.20		ug/L			09/04/14 14:27	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/04/14 14:27	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/04/14 14:27	1
n-Butylbenzene	ND		0.10		ug/L			09/04/14 14:27	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/04/14 14:27	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/04/14 14:27	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/04/14 14:27	1
Hexachlorobutadiene	ND		0.20		ug/L			09/04/14 14:27	1
Naphthalene	ND		0.40		ug/L			09/04/14 14:27	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/04/14 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*80 - 127*		*09/04/14 14:27*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/04/14 14:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/04/14 14:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*09/04/14 14:27*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*09/04/14 14:27*	*1*

Lab Sample ID: LCS 580-168799/8
Matrix: Water
Analysis Batch: 168799

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.81		ug/L		116	30 - 180
Chloromethane	5.00	6.46		ug/L		129	50 - 140
Vinyl chloride	5.00	5.96		ug/L		119	65 - 140
Bromomethane	5.00	7.06	*	ug/L		141	70 - 135
Chloroethane	5.00	6.31		ug/L		126	75 - 140
Trichlorofluoromethane	5.00	7.10		ug/L		142	30 - 180
1,1-Dichloroethene	5.00	5.72		ug/L		114	70 - 150
Methylene Chloride	5.00	6.82		ug/L		136	60 - 145
Methyl tert-butyl ether	5.00	5.50		ug/L		110	75 - 120
trans-1,2-Dichloroethene	5.00	5.85		ug/L		117	80 - 140
1,1-Dichloroethane	5.00	6.03		ug/L		121	75 - 135
2,2-Dichloropropane	5.00	6.14		ug/L		123	60 - 150
cis-1,2-Dichloroethene	5.00	5.57		ug/L		111	80 - 130
Chlorobromomethane	5.00	5.36		ug/L		107	80 - 125
Chloroform	5.00	5.74		ug/L		115	80 - 130
1,1,1-Trichloroethane	5.00	5.93		ug/L		119	80 - 140
Carbon tetrachloride	5.00	5.65		ug/L		113	75 - 140
1,1-Dichloropropene	5.00	5.76		ug/L		115	80 - 130
Benzene	5.00	5.48		ug/L		110	80 - 120
1,2-Dichloroethane	5.00	5.14		ug/L		103	80 - 140
Trichloroethene	5.00	5.42		ug/L		108	80 - 130
1,2-Dichloropropane	5.00	5.37		ug/L		107	80 - 120
Dibromomethane	5.00	5.18		ug/L		104	80 - 130

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

Lab Sample ID: LCS 580-168799/8
Matrix: Water
Analysis Batch: 168799

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.01		ug/L		100	80 - 125
cis-1,3-Dichloropropene	5.00	4.33		ug/L		87	70 - 120
Toluene	5.00	5.36		ug/L		107	80 - 120
trans-1,3-Dichloropropene	5.00	3.77		ug/L		75	60 - 140
1,1,2-Trichloroethane	5.00	4.92		ug/L		98	80 - 130
Tetrachloroethene	5.00	5.14		ug/L		103	40 - 180
1,3-Dichloropropane	5.00	5.00		ug/L		100	80 - 130
Chlorodibromomethane	5.00	4.12		ug/L		82	70 - 120
Ethylene Dibromide	5.00	5.06		ug/L		101	70 - 130
Chlorobenzene	5.00	5.16		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.47		ug/L		109	75 - 125
Ethylbenzene	5.00	5.63		ug/L		113	80 - 125
m-Xylene & p-Xylene	5.00	5.79		ug/L		116	80 - 130
o-Xylene	5.00	5.40		ug/L		108	80 - 120
Styrene	5.00	4.90		ug/L		98	75 - 130
Bromoform	5.00	3.69		ug/L		74	65 - 130
Isopropylbenzene	5.00	5.40		ug/L		108	75 - 120
Bromobenzene	5.00	4.70		ug/L		94	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.54		ug/L		91	75 - 125
1,2,3-Trichloropropane	5.00	4.61		ug/L		92	75 - 120
N-Propylbenzene	5.00	5.52		ug/L		110	80 - 120
2-Chlorotoluene	5.00	5.05		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.22		ug/L		104	75 - 130
1,3,5-Trimethylbenzene	5.00	5.08		ug/L		102	80 - 125
tert-Butylbenzene	5.00	4.26		ug/L		85	80 - 130
1,2,4-Trimethylbenzene	5.00	5.01		ug/L		100	80 - 125
sec-Butylbenzene	5.00	5.07		ug/L		101	80 - 125
4-Isopropyltoluene	5.00	4.89		ug/L		98	80 - 120
1,3-Dichlorobenzene	5.00	5.03		ug/L		101	80 - 120
1,4-Dichlorobenzene	5.00	4.80		ug/L		96	80 - 120
n-Butylbenzene	5.00	4.51		ug/L		90	75 - 125
1,2-Dichlorobenzene	5.00	5.15		ug/L		103	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.30		ug/L		66	55 - 120
1,2,4-Trichlorobenzene	5.00	3.97		ug/L		79	60 - 125
Hexachlorobutadiene	5.00	5.33		ug/L		107	75 - 135
Naphthalene	5.00	3.42		ug/L		68	45 - 130
1,2,3-Trichlorobenzene	5.00	4.96		ug/L		99	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*99*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

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

Lab Sample ID: LCSD 580-168799/9
Matrix: Water
Analysis Batch: 168799

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
Dichlorodifluoromethane	5.00	5.64		ug/L		113	30 - 180	3	20
Chloromethane	5.00	6.01		ug/L		120	50 - 140	7	20
Vinyl chloride	5.00	5.61		ug/L		112	65 - 140	6	20
Bromomethane	5.00	6.50		ug/L		130	70 - 135	8	20
Chloroethane	5.00	6.26		ug/L		125	75 - 140	1	20
Trichlorofluoromethane	5.00	6.55		ug/L		131	30 - 180	8	20
1,1-Dichloroethene	5.00	5.46		ug/L		109	70 - 150	5	20
Methylene Chloride	5.00	6.41		ug/L		128	60 - 145	6	20
Methyl tert-butyl ether	5.00	5.31		ug/L		106	75 - 120	4	20
trans-1,2-Dichloroethene	5.00	5.65		ug/L		113	80 - 140	4	20
1,1-Dichloroethane	5.00	5.56		ug/L		111	75 - 135	8	20
2,2-Dichloropropane	5.00	5.54		ug/L		111	60 - 150	10	20
cis-1,2-Dichloroethene	5.00	5.30		ug/L		106	80 - 130	5	20
Chlorobromomethane	5.00	5.04		ug/L		101	80 - 125	6	20
Chloroform	5.00	5.65		ug/L		113	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.53		ug/L		111	80 - 140	7	20
Carbon tetrachloride	5.00	5.30		ug/L		106	75 - 140	6	20
1,1-Dichloropropene	5.00	5.60		ug/L		112	80 - 130	3	20
Benzene	5.00	5.24		ug/L		105	80 - 120	4	20
1,2-Dichloroethane	5.00	5.41		ug/L		108	80 - 140	5	20
Trichloroethene	5.00	5.35		ug/L		107	80 - 130	1	20
1,2-Dichloropropane	5.00	5.42		ug/L		108	80 - 120	1	20
Dibromomethane	5.00	4.97		ug/L		99	80 - 130	4	20
Dichlorobromomethane	5.00	5.09		ug/L		102	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	4.29		ug/L		86	70 - 120	1	20
Toluene	5.00	5.20		ug/L		104	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	4.03		ug/L		81	60 - 140	7	20
1,1,2-Trichloroethane	5.00	4.81		ug/L		96	80 - 130	2	20
Tetrachloroethene	5.00	5.18		ug/L		104	40 - 180	1	20
1,3-Dichloropropane	5.00	5.10		ug/L		102	80 - 130	2	20
Chlorodibromomethane	5.00	4.12		ug/L		82	70 - 120	0	20
Ethylene Dibromide	5.00	5.15		ug/L		103	70 - 130	2	20
Chlorobenzene	5.00	5.14		ug/L		103	80 - 120	1	20
1,1,1,2-Tetrachloroethane	5.00	5.15		ug/L		103	75 - 125	6	20
Ethylbenzene	5.00	5.59		ug/L		112	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.52		ug/L		110	80 - 130	5	20
o-Xylene	5.00	5.31		ug/L		106	80 - 120	2	20
Styrene	5.00	4.86		ug/L		97	75 - 130	1	20
Bromoform	5.00	3.55		ug/L		71	65 - 130	4	20
Isopropylbenzene	5.00	5.17		ug/L		103	75 - 120	4	20
Bromobenzene	5.00	4.85		ug/L		97	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	4.55		ug/L		91	75 - 125	0	20
1,2,3-Trichloropropane	5.00	4.86		ug/L		97	75 - 120	5	20
N-Propylbenzene	5.00	5.77		ug/L		115	80 - 120	4	20
2-Chlorotoluene	5.00	5.31		ug/L		106	75 - 130	5	20
4-Chlorotoluene	5.00	5.49		ug/L		110	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.14		ug/L		103	80 - 125	1	20
tert-Butylbenzene	5.00	4.63		ug/L		93	80 - 130	8	20

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

Lab Sample ID: LCSD 580-168799/9
Matrix: Water
Analysis Batch: 168799

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
1,2,4-Trimethylbenzene			5.00	5.06		ug/L		101	80 - 125	1	20
sec-Butylbenzene			5.00	5.03		ug/L		101	80 - 125	1	20
4-Isopropyltoluene			5.00	4.97		ug/L		99	80 - 120	2	20
1,3-Dichlorobenzene			5.00	5.04		ug/L		101	80 - 120	0	20
1,4-Dichlorobenzene			5.00	4.88		ug/L		98	80 - 120	2	20
n-Butylbenzene			5.00	4.86		ug/L		97	75 - 125	7	20
1,2-Dichlorobenzene			5.00	5.16		ug/L		103	80 - 130	0	20
1,2-Dibromo-3-Chloropropane			5.00	3.53		ug/L		71	55 - 120	7	20
1,2,4-Trichlorobenzene			5.00	4.24		ug/L		85	60 - 125	7	20
Hexachlorobutadiene			5.00	5.43		ug/L		109	75 - 135	2	20
Naphthalene			5.00	3.69		ug/L		74	45 - 130	8	20
1,2,3-Trichlorobenzene			5.00	4.99		ug/L		100	60 - 125	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*101*		*80 - 127*
Toluene-d8 (Surr)	*99*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*103*		*85 - 115*

Lab Sample ID: MB 580-168915/12
Matrix: Water
Analysis Batch: 168915

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/05/14 13:54	1
Chloromethane	ND		0.10		ug/L			09/05/14 13:54	1
Vinyl chloride	ND		0.020		ug/L			09/05/14 13:54	1
Bromomethane	ND		0.10		ug/L			09/05/14 13:54	1
Chloroethane	ND		0.25		ug/L			09/05/14 13:54	1
Trichlorofluoromethane	ND		0.10		ug/L			09/05/14 13:54	1
1,1-Dichloroethene	ND		0.10		ug/L			09/05/14 13:54	1
Methylene Chloride	ND		0.50		ug/L			09/05/14 13:54	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/05/14 13:54	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/05/14 13:54	1
1,1-Dichloroethane	ND		0.10		ug/L			09/05/14 13:54	1
2,2-Dichloropropane	ND		0.10		ug/L			09/05/14 13:54	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/05/14 13:54	1
Chlorobromomethane	ND		0.10		ug/L			09/05/14 13:54	1
Chloroform	ND		0.10		ug/L			09/05/14 13:54	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/05/14 13:54	1
Carbon tetrachloride	ND		0.10		ug/L			09/05/14 13:54	1
1,1-Dichloropropene	ND		0.10		ug/L			09/05/14 13:54	1
Benzene	ND		0.10		ug/L			09/05/14 13:54	1
1,2-Dichloroethane	ND		0.10		ug/L			09/05/14 13:54	1
Trichloroethene	ND		0.10		ug/L			09/05/14 13:54	1
1,2-Dichloropropane	ND		0.10		ug/L			09/05/14 13:54	1
Dibromomethane	ND		0.10		ug/L			09/05/14 13:54	1

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

Lab Sample ID: MB 580-168915/12
Matrix: Water
Analysis Batch: 168915

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			09/05/14 13:54	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/05/14 13:54	1
Toluene	ND		0.10		ug/L			09/05/14 13:54	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/05/14 13:54	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/05/14 13:54	1
Tetrachloroethene	ND		0.10		ug/L			09/05/14 13:54	1
1,3-Dichloropropane	ND		0.10		ug/L			09/05/14 13:54	1
Chlorodibromomethane	ND		0.10		ug/L			09/05/14 13:54	1
Ethylene Dibromide	ND		0.10		ug/L			09/05/14 13:54	1
Chlorobenzene	ND		0.10		ug/L			09/05/14 13:54	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/05/14 13:54	1
Ethylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/05/14 13:54	1
o-Xylene	ND		0.10		ug/L			09/05/14 13:54	1
Styrene	ND		0.10		ug/L			09/05/14 13:54	1
Bromoform	ND		0.10		ug/L			09/05/14 13:54	1
Isopropylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
Bromobenzene	ND		0.10		ug/L			09/05/14 13:54	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/05/14 13:54	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/05/14 13:54	1
N-Propylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
2-Chlorotoluene	ND		0.10		ug/L			09/05/14 13:54	1
4-Chlorotoluene	ND		0.20		ug/L			09/05/14 13:54	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
tert-Butylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
sec-Butylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
4-Isopropyltoluene	ND		0.20		ug/L			09/05/14 13:54	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/05/14 13:54	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/05/14 13:54	1
n-Butylbenzene	ND		0.10		ug/L			09/05/14 13:54	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/05/14 13:54	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/05/14 13:54	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/05/14 13:54	1
Hexachlorobutadiene	ND		0.20		ug/L			09/05/14 13:54	1
Naphthalene	ND		0.40		ug/L			09/05/14 13:54	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/05/14 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*09/05/14 13:54*	*1*
Toluene-d8 (Surr)	*96*		*75 - 125*		*09/05/14 13:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*09/05/14 13:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*09/05/14 13:54*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*09/05/14 13:54*	*1*

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

Lab Sample ID: LCS 580-168915/8
Matrix: Water
Analysis Batch: 168915

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.15		ug/L		123	30 - 180
Chloromethane	5.00	6.28		ug/L		126	50 - 140
Vinyl chloride	5.00	5.81		ug/L		116	65 - 140
Bromomethane	5.00	7.10	*	ug/L		142	70 - 135
Chloroethane	5.00	6.76		ug/L		135	75 - 140
Trichlorofluoromethane	5.00	7.42		ug/L		148	30 - 180
1,1-Dichloroethene	5.00	5.90		ug/L		118	70 - 150
Methylene Chloride	5.00	6.07		ug/L		121	60 - 145
Methyl tert-butyl ether	5.00	5.63		ug/L		113	75 - 120
trans-1,2-Dichloroethene	5.00	6.15		ug/L		123	80 - 140
1,1-Dichloroethane	5.00	6.29		ug/L		126	75 - 135
2,2-Dichloropropane	5.00	6.14		ug/L		123	60 - 150
cis-1,2-Dichloroethene	5.00	5.63		ug/L		113	80 - 130
Chlorobromomethane	5.00	5.25		ug/L		105	80 - 125
Chloroform	5.00	5.73		ug/L		115	80 - 130
1,1,1-Trichloroethane	5.00	5.77		ug/L		115	80 - 140
Carbon tetrachloride	5.00	5.54		ug/L		111	75 - 140
1,1-Dichloropropene	5.00	5.73		ug/L		115	80 - 130
Benzene	5.00	5.22		ug/L		104	80 - 120
1,2-Dichloroethane	5.00	5.45		ug/L		109	80 - 140
Trichloroethene	5.00	4.98		ug/L		100	80 - 130
1,2-Dichloropropane	5.00	5.08		ug/L		102	80 - 120
Dibromomethane	5.00	4.83		ug/L		97	80 - 130
Dichlorobromomethane	5.00	4.81		ug/L		96	80 - 125
cis-1,3-Dichloropropene	5.00	3.97		ug/L		79	70 - 120
Toluene	5.00	5.02		ug/L		100	80 - 120
trans-1,3-Dichloropropene	5.00	3.63		ug/L		73	60 - 140
1,1,2-Trichloroethane	5.00	4.69		ug/L		94	80 - 130
Tetrachloroethene	5.00	4.36		ug/L		87	40 - 180
1,3-Dichloropropane	5.00	4.82		ug/L		96	80 - 130
Chlorodibromomethane	5.00	3.80		ug/L		76	70 - 120
Ethylene Dibromide	5.00	4.76		ug/L		95	70 - 130
Chlorobenzene	5.00	4.94		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.13		ug/L		103	75 - 125
Ethylbenzene	5.00	5.26		ug/L		105	80 - 125
m-Xylene & p-Xylene	5.00	5.29		ug/L		106	80 - 130
o-Xylene	5.00	5.24		ug/L		105	80 - 120
Styrene	5.00	4.64		ug/L		93	75 - 130
Bromoform	5.00	3.41		ug/L		68	65 - 130
Isopropylbenzene	5.00	5.14		ug/L		103	75 - 120
Bromobenzene	5.00	4.42		ug/L		88	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.43		ug/L		89	75 - 125
1,2,3-Trichloropropane	5.00	4.54		ug/L		91	75 - 120
N-Propylbenzene	5.00	5.23		ug/L		105	80 - 120
2-Chlorotoluene	5.00	4.87		ug/L		97	75 - 130
4-Chlorotoluene	5.00	4.82		ug/L		96	75 - 130
1,3,5-Trimethylbenzene	5.00	4.78		ug/L		96	80 - 125
tert-Butylbenzene	5.00	4.25		ug/L		85	80 - 130

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

Lab Sample ID: LCS 580-168915/8
Matrix: Water
Analysis Batch: 168915

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			5.00	4.69		ug/L		94	80 - 125		
sec-Butylbenzene			5.00	4.71		ug/L		94	80 - 125		
4-Isopropyltoluene			5.00	4.57		ug/L		91	80 - 120		
1,3-Dichlorobenzene			5.00	4.74		ug/L		95	80 - 120		
1,4-Dichlorobenzene			5.00	4.51		ug/L		90	80 - 120		
n-Butylbenzene			5.00	4.30		ug/L		86	75 - 125		
1,2-Dichlorobenzene			5.00	4.85		ug/L		97	80 - 130		
1,2-Dibromo-3-Chloropropane			5.00	3.31		ug/L		66	55 - 120		
1,2,4-Trichlorobenzene			5.00	3.74		ug/L		75	60 - 125		
Hexachlorobutadiene			5.00	4.90		ug/L		98	75 - 135		
Naphthalene			5.00	3.14		ug/L		63	45 - 130		
1,2,3-Trichlorobenzene			5.00	4.41		ug/L		88	60 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*
Dibromofluoromethane (Surr)	*109*		*85 - 115*

Lab Sample ID: LCSD 580-168915/9
Matrix: Water
Analysis Batch: 168915

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
Dichlorodifluoromethane			5.00	5.44		ug/L		109	30 - 180	12	20
Chloromethane			5.00	6.19		ug/L		124	50 - 140	1	20
Vinyl chloride			5.00	5.74		ug/L		115	65 - 140	1	20
Bromomethane			5.00	6.92	*	ug/L		138	70 - 135	3	20
Chloroethane			5.00	6.31		ug/L		126	75 - 140	7	20
Trichlorofluoromethane			5.00	6.64		ug/L		133	30 - 180	11	20
1,1-Dichloroethene			5.00	5.49		ug/L		110	70 - 150	7	20
Methylene Chloride			5.00	6.09		ug/L		122	60 - 145	0	20
Methyl tert-butyl ether			5.00	5.44		ug/L		109	75 - 120	3	20
trans-1,2-Dichloroethene			5.00	6.04		ug/L		121	80 - 140	2	20
1,1-Dichloroethane			5.00	6.01		ug/L		120	75 - 135	5	20
2,2-Dichloropropane			5.00	5.95		ug/L		119	60 - 150	3	20
cis-1,2-Dichloroethene			5.00	5.49		ug/L		110	80 - 130	3	20
Chlorobromomethane			5.00	5.32		ug/L		106	80 - 125	1	20
Chloroform			5.00	5.78		ug/L		116	80 - 130	1	20
1,1,1-Trichloroethane			5.00	5.51		ug/L		110	80 - 140	5	20
Carbon tetrachloride			5.00	5.33		ug/L		107	75 - 140	4	20
1,1-Dichloropropene			5.00	5.45		ug/L		109	80 - 130	5	20
Benzene			5.00	5.22		ug/L		104	80 - 120	0	20
1,2-Dichloroethane			5.00	5.20		ug/L		104	80 - 140	5	20
Trichloroethene			5.00	5.11		ug/L		102	80 - 130	3	20
1,2-Dichloropropane			5.00	5.21		ug/L		104	80 - 120	3	20
Dibromomethane			5.00	4.93		ug/L		99	80 - 130	2	20

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

Lab Sample ID: LCSD 580-168915/9
Matrix: Water
Analysis Batch: 168915

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
Dichlorobromomethane			5.00	4.72		ug/L		94	80 - 125	2	20
cis-1,3-Dichloropropene			5.00	4.11		ug/L		82	70 - 120	3	20
Toluene			5.00	5.18		ug/L		104	80 - 120	3	20
trans-1,3-Dichloropropene			5.00	3.76		ug/L		75	60 - 140	3	20
1,1,2-Trichloroethane			5.00	4.83		ug/L		97	80 - 130	3	20
Tetrachloroethene			5.00	4.53		ug/L		91	40 - 180	4	20
1,3-Dichloropropane			5.00	4.99		ug/L		100	80 - 130	4	20
Chlorodibromomethane			5.00	3.96		ug/L		79	70 - 120	4	20
Ethylene Dibromide			5.00	4.95		ug/L		99	70 - 130	4	20
Chlorobenzene			5.00	4.84		ug/L		97	80 - 120	2	20
1,1,1,2-Tetrachloroethane			5.00	5.12		ug/L		102	75 - 125	0	20
Ethylbenzene			5.00	5.35		ug/L		107	80 - 125	2	20
m-Xylene & p-Xylene			5.00	5.43		ug/L		109	80 - 130	3	20
o-Xylene			5.00	5.12		ug/L		102	80 - 120	2	20
Styrene			5.00	4.66		ug/L		93	75 - 130	0	20
Bromoform			5.00	3.40		ug/L		68	65 - 130	0	20
Isopropylbenzene			5.00	5.16		ug/L		103	75 - 120	0	20
Bromobenzene			5.00	4.59		ug/L		92	80 - 130	4	20
1,1,2,2-Tetrachloroethane			5.00	4.61		ug/L		92	75 - 125	4	20
1,2,3-Trichloropropane			5.00	4.68		ug/L		94	75 - 120	3	20
N-Propylbenzene			5.00	5.22		ug/L		104	80 - 120	0	20
2-Chlorotoluene			5.00	4.83		ug/L		97	75 - 130	1	20
4-Chlorotoluene			5.00	5.01		ug/L		100	75 - 130	4	20
1,3,5-Trimethylbenzene			5.00	4.86		ug/L		97	80 - 125	2	20
tert-Butylbenzene			5.00	4.02		ug/L		80	80 - 130	6	20
1,2,4-Trimethylbenzene			5.00	4.65		ug/L		93	80 - 125	1	20
sec-Butylbenzene			5.00	4.75		ug/L		95	80 - 125	1	20
4-Isopropyltoluene			5.00	4.61		ug/L		92	80 - 120	1	20
1,3-Dichlorobenzene			5.00	4.73		ug/L		95	80 - 120	0	20
1,4-Dichlorobenzene			5.00	4.51		ug/L		90	80 - 120	0	20
n-Butylbenzene			5.00	4.41		ug/L		88	75 - 125	3	20
1,2-Dichlorobenzene			5.00	4.84		ug/L		97	80 - 130	0	20
1,2-Dibromo-3-Chloropropane			5.00	3.16		ug/L		63	55 - 120	5	20
1,2,4-Trichlorobenzene			5.00	3.85		ug/L		77	60 - 125	3	20
Hexachlorobutadiene			5.00	5.01		ug/L		100	75 - 135	2	20
Naphthalene			5.00	3.31		ug/L		66	45 - 130	5	20
1,2,3-Trichlorobenzene			5.00	4.77		ug/L		95	60 - 125	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*92*		*80 - 127*
Toluene-d8 (Surr)	*99*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*

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

Lab Sample ID: MB 580-169196/7
Matrix: Water
Analysis Batch: 169196

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			09/09/14 13:33	1
Chloromethane	ND		0.10		ug/L			09/09/14 13:33	1
Vinyl chloride	ND		0.020		ug/L			09/09/14 13:33	1
Bromomethane	ND		0.10		ug/L			09/09/14 13:33	1
Chloroethane	ND		0.25		ug/L			09/09/14 13:33	1
Trichlorofluoromethane	ND		0.10		ug/L			09/09/14 13:33	1
1,1-Dichloroethene	ND		0.10		ug/L			09/09/14 13:33	1
Methylene Chloride	ND		0.50		ug/L			09/09/14 13:33	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/09/14 13:33	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/09/14 13:33	1
1,1-Dichloroethane	ND		0.10		ug/L			09/09/14 13:33	1
2,2-Dichloropropane	ND		0.10		ug/L			09/09/14 13:33	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/09/14 13:33	1
Chlorobromomethane	ND		0.10		ug/L			09/09/14 13:33	1
Chloroform	ND		0.10		ug/L			09/09/14 13:33	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/09/14 13:33	1
Carbon tetrachloride	ND		0.10		ug/L			09/09/14 13:33	1
1,1-Dichloropropene	ND		0.10		ug/L			09/09/14 13:33	1
Benzene	ND		0.10		ug/L			09/09/14 13:33	1
1,2-Dichloroethane	ND		0.10		ug/L			09/09/14 13:33	1
Trichloroethene	ND		0.10		ug/L			09/09/14 13:33	1
1,2-Dichloropropane	ND		0.10		ug/L			09/09/14 13:33	1
Dibromomethane	ND		0.10		ug/L			09/09/14 13:33	1
Dichlorobromomethane	ND		0.10		ug/L			09/09/14 13:33	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/09/14 13:33	1
Toluene	ND		0.10		ug/L			09/09/14 13:33	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/09/14 13:33	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/09/14 13:33	1
Tetrachloroethene	ND		0.10		ug/L			09/09/14 13:33	1
1,3-Dichloropropane	ND		0.10		ug/L			09/09/14 13:33	1
Chlorodibromomethane	ND		0.10		ug/L			09/09/14 13:33	1
Ethylene Dibromide	ND		0.10		ug/L			09/09/14 13:33	1
Chlorobenzene	ND		0.10		ug/L			09/09/14 13:33	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/09/14 13:33	1
Ethylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/09/14 13:33	1
o-Xylene	ND		0.10		ug/L			09/09/14 13:33	1
Styrene	ND		0.10		ug/L			09/09/14 13:33	1
Bromoform	ND		0.10		ug/L			09/09/14 13:33	1
Isopropylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
Bromobenzene	ND		0.10		ug/L			09/09/14 13:33	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/09/14 13:33	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/09/14 13:33	1
N-Propylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
2-Chlorotoluene	ND		0.10		ug/L			09/09/14 13:33	1
4-Chlorotoluene	ND		0.20		ug/L			09/09/14 13:33	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
tert-Butylbenzene	ND		0.10		ug/L			09/09/14 13:33	1

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

Lab Sample ID: MB 580-169196/7
Matrix: Water
Analysis Batch: 169196

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
sec-Butylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
4-Isopropyltoluene	ND		0.20		ug/L			09/09/14 13:33	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/09/14 13:33	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/09/14 13:33	1
n-Butylbenzene	ND		0.10		ug/L			09/09/14 13:33	1
1,2-Dichlorobenzene	ND		0.20		ug/L			09/09/14 13:33	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/09/14 13:33	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/09/14 13:33	1
Hexachlorobutadiene	ND		0.20		ug/L			09/09/14 13:33	1
Naphthalene	ND		0.40		ug/L			09/09/14 13:33	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/09/14 13:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*75 - 125*		*09/09/14 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*09/09/14 13:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*09/09/14 13:33*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*09/09/14 13:33*	*1*

Lab Sample ID: LCS 580-169196/8
Matrix: Water
Analysis Batch: 169196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.87		ug/L		117	30 - 180
Chloromethane	5.00	6.47		ug/L		129	50 - 140
Vinyl chloride	5.00	6.01		ug/L		120	65 - 140
Bromomethane	5.00	7.12	*	ug/L		142	70 - 135
Chloroethane	5.00	6.54		ug/L		131	75 - 140
Trichlorofluoromethane	5.00	7.70		ug/L		154	30 - 180
1,1-Dichloroethene	5.00	6.44		ug/L		129	70 - 150
Methylene Chloride	5.00	6.49		ug/L		130	60 - 145
Methyl tert-butyl ether	5.00	5.97		ug/L		119	75 - 120
trans-1,2-Dichloroethene	5.00	6.83		ug/L		137	80 - 140
1,1-Dichloroethane	5.00	6.50		ug/L		130	75 - 135
2,2-Dichloropropane	5.00	6.78		ug/L		136	60 - 150
cis-1,2-Dichloroethene	5.00	5.60		ug/L		112	80 - 130
Chlorobromomethane	5.00	5.31		ug/L		106	80 - 125
Chloroform	5.00	5.94		ug/L		119	80 - 130
1,1,1-Trichloroethane	5.00	6.15		ug/L		123	80 - 140
Carbon tetrachloride	5.00	5.80		ug/L		116	75 - 140
1,1-Dichloropropene	5.00	5.91		ug/L		118	80 - 130
Benzene	5.00	5.56		ug/L		111	80 - 120
1,2-Dichloroethane	5.00	5.85		ug/L		117	80 - 140
Trichloroethene	5.00	5.49		ug/L		110	80 - 130
1,2-Dichloropropane	5.00	5.25		ug/L		105	80 - 120
Dibromomethane	5.00	5.11		ug/L		102	80 - 130
Dichlorobromomethane	5.00	5.17		ug/L		103	80 - 125

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

Lab Sample ID: LCS 580-169196/8
Matrix: Water
Analysis Batch: 169196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.54		ug/L		91	70 - 120
Toluene	5.00	5.62		ug/L		112	80 - 120
trans-1,3-Dichloropropene	5.00	3.98		ug/L		80	60 - 140
1,1,2-Trichloroethane	5.00	5.32		ug/L		106	80 - 130
Tetrachloroethene	5.00	5.53		ug/L		111	40 - 180
1,3-Dichloropropane	5.00	5.29		ug/L		106	80 - 130
Chlorodibromomethane	5.00	4.25		ug/L		85	70 - 120
Ethylene Dibromide	5.00	5.31		ug/L		106	70 - 130
Chlorobenzene	5.00	5.65		ug/L		113	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.85		ug/L		117	75 - 125
Ethylbenzene	5.00	5.96		ug/L		119	80 - 125
m-Xylene & p-Xylene	5.00	6.17		ug/L		123	80 - 130
o-Xylene	5.00	6.03	*	ug/L		121	80 - 120
Styrene	5.00	5.26		ug/L		105	75 - 130
Bromoform	5.00	3.81		ug/L		76	65 - 130
Isopropylbenzene	5.00	5.80		ug/L		116	75 - 120
Bromobenzene	5.00	5.22		ug/L		104	80 - 130
1,1,2,2-Tetrachloroethane	5.00	5.03		ug/L		101	75 - 125
1,2,3-Trichloropropane	5.00	5.53		ug/L		111	75 - 120
N-Propylbenzene	5.00	6.35	*	ug/L		127	80 - 120
2-Chlorotoluene	5.00	5.66		ug/L		113	75 - 130
4-Chlorotoluene	5.00	5.80		ug/L		116	75 - 130
1,3,5-Trimethylbenzene	5.00	5.60		ug/L		112	80 - 125
tert-Butylbenzene	5.00	5.01		ug/L		100	80 - 130
1,2,4-Trimethylbenzene	5.00	5.44		ug/L		109	80 - 125
sec-Butylbenzene	5.00	5.52		ug/L		110	80 - 125
4-Isopropyltoluene	5.00	5.35		ug/L		107	80 - 120
1,3-Dichlorobenzene	5.00	5.58		ug/L		112	80 - 120
1,4-Dichlorobenzene	5.00	5.27		ug/L		105	80 - 120
n-Butylbenzene	5.00	5.02		ug/L		100	75 - 125
1,2-Dichlorobenzene	5.00	5.61		ug/L		112	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.60		ug/L		72	55 - 120
1,2,4-Trichlorobenzene	5.00	4.26		ug/L		85	60 - 125
Hexachlorobutadiene	5.00	5.64		ug/L		113	75 - 135
Naphthalene	5.00	3.59		ug/L		72	45 - 130
1,2,3-Trichlorobenzene	5.00	5.08		ug/L		102	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

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

Lab Sample ID: LCSD 580-169196/11
Matrix: Water
Analysis Batch: 169196

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
Dichlorodifluoromethane	5.00	5.75		ug/L		115	30 - 180	2	20
Chloromethane	5.00	6.08		ug/L		122	50 - 140	6	20
Vinyl chloride	5.00	5.58		ug/L		112	65 - 140	7	20
Bromomethane	5.00	6.44		ug/L		129	70 - 135	10	20
Chloroethane	5.00	5.72		ug/L		114	75 - 140	13	20
Trichlorofluoromethane	5.00	6.79		ug/L		136	30 - 180	13	20
1,1-Dichloroethene	5.00	6.30		ug/L		126	70 - 150	2	20
Methylene Chloride	5.00	6.42		ug/L		128	60 - 145	1	20
Methyl tert-butyl ether	5.00	5.73		ug/L		115	75 - 120	4	20
trans-1,2-Dichloroethene	5.00	6.34		ug/L		127	80 - 140	7	20
1,1-Dichloroethane	5.00	6.15		ug/L		123	75 - 135	6	20
2,2-Dichloropropane	5.00	5.92		ug/L		118	60 - 150	14	20
cis-1,2-Dichloroethene	5.00	5.51		ug/L		110	80 - 130	2	20
Chlorobromomethane	5.00	5.29		ug/L		106	80 - 125	0	20
Chloroform	5.00	5.71		ug/L		114	80 - 130	4	20
1,1,1-Trichloroethane	5.00	5.66		ug/L		113	80 - 140	8	20
Carbon tetrachloride	5.00	5.63		ug/L		113	75 - 140	3	20
1,1-Dichloropropene	5.00	5.60		ug/L		112	80 - 130	5	20
Benzene	5.00	5.29		ug/L		106	80 - 120	5	20
1,2-Dichloroethane	5.00	5.61		ug/L		112	80 - 140	4	20
Trichloroethene	5.00	5.21		ug/L		104	80 - 130	5	20
1,2-Dichloropropane	5.00	5.14		ug/L		103	80 - 120	2	20
Dibromomethane	5.00	4.88		ug/L		98	80 - 130	5	20
Dichlorobromomethane	5.00	4.95		ug/L		99	80 - 125	4	20
cis-1,3-Dichloropropene	5.00	4.49		ug/L		90	70 - 120	1	20
Toluene	5.00	5.70		ug/L		114	80 - 120	1	20
trans-1,3-Dichloropropene	5.00	3.93		ug/L		79	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.28		ug/L		106	80 - 130	1	20
Tetrachloroethene	5.00	5.61		ug/L		112	40 - 180	1	20
1,3-Dichloropropane	5.00	5.35		ug/L		107	80 - 130	1	20
Chlorodibromomethane	5.00	4.32		ug/L		86	70 - 120	2	20
Ethylene Dibromide	5.00	5.38		ug/L		108	70 - 130	1	20
Chlorobenzene	5.00	5.50		ug/L		110	80 - 120	3	20
1,1,1,2-Tetrachloroethane	5.00	5.62		ug/L		112	75 - 125	4	20
Ethylbenzene	5.00	5.88		ug/L		118	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.97		ug/L		119	80 - 130	3	20
o-Xylene	5.00	5.69		ug/L		114	80 - 120	6	20
Styrene	5.00	5.20		ug/L		104	75 - 130	1	20
Bromoform	5.00	3.60		ug/L		72	65 - 130	6	20
Isopropylbenzene	5.00	5.64		ug/L		113	75 - 120	3	20
Bromobenzene	5.00	5.09		ug/L		102	80 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	4.85		ug/L		97	75 - 125	4	20
1,2,3-Trichloropropane	5.00	5.36		ug/L		107	75 - 120	3	20
N-Propylbenzene	5.00	6.02		ug/L		120	80 - 120	5	20
2-Chlorotoluene	5.00	5.52		ug/L		110	75 - 130	2	20
4-Chlorotoluene	5.00	5.74		ug/L		115	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.45		ug/L		109	80 - 125	3	20
tert-Butylbenzene	5.00	4.95		ug/L		99	80 - 130	1	20

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

Lab Sample ID: LCSD 580-169196/11
Matrix: Water
Analysis Batch: 169196

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
1,2,4-Trimethylbenzene			5.00	5.36		ug/L		107	80 - 125	1	20
sec-Butylbenzene			5.00	5.35		ug/L		107	80 - 125	3	20
4-Isopropyltoluene			5.00	5.18		ug/L		104	80 - 120	3	20
1,3-Dichlorobenzene			5.00	5.40		ug/L		108	80 - 120	3	20
1,4-Dichlorobenzene			5.00	5.16		ug/L		103	80 - 120	2	20
n-Butylbenzene			5.00	4.85		ug/L		97	75 - 125	3	20
1,2-Dichlorobenzene			5.00	5.41		ug/L		108	80 - 130	4	20
1,2-Dibromo-3-Chloropropane			5.00	3.50		ug/L		70	55 - 120	3	20
1,2,4-Trichlorobenzene			5.00	4.23		ug/L		85	60 - 125	1	20
Hexachlorobutadiene			5.00	5.44		ug/L		109	75 - 135	4	20
Naphthalene			5.00	3.64		ug/L		73	45 - 130	1	20
1,2,3-Trichlorobenzene			5.00	5.09		ug/L		102	60 - 125	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-146102/25
Matrix: Water
Analysis Batch: 146102

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			09/09/14 15:06	1
Ethane	ND		0.50		ug/L			09/09/14 15:06	1
Ethene	ND		0.50		ug/L			09/09/14 15:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*98*		*66 - 132*		*09/09/14 15:06*	*1*

Lab Sample ID: LCS 240-146102/26
Matrix: Water
Analysis Batch: 146102

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane			116	93.4		ug/L		81	76 - 120
Ethane			218	195		ug/L		89	80 - 120
Ethene			203	175		ug/L		86	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*97*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-168471/1
Matrix: Water
Analysis Batch: 168471

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			08/29/14 14:58	1

Lab Sample ID: LCS 580-168471/2
Matrix: Water
Analysis Batch: 168471

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.80	1.81		mg/L		101	90 - 110		

Lab Sample ID: LCSD 580-168471/3
Matrix: Water
Analysis Batch: 168471

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
Nitrate as N			1.80	1.81		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-45173-19 MS
Matrix: Water
Analysis Batch: 168471

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND		1.80	1.81		mg/L		101	90 - 110		

Lab Sample ID: 580-45173-20 MS
Matrix: Water
Analysis Batch: 168471

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	2.6		1.80	4.41		mg/L		102	90 - 110		

Lab Sample ID: 580-45173-20 DU
Matrix: Water
Analysis Batch: 168471

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	2.6		2.57		mg/L		0	10

Lab Sample ID: MB 580-168472/1
Matrix: Water
Analysis Batch: 168472

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			08/29/14 14:58	1
Sulfate	ND		1.2		mg/L			08/29/14 14:58	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-168472/2
Matrix: Water
Analysis Batch: 168472

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.09		mg/L		101	90 - 110
Sulfate	12.0	12.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-168472/3
Matrix: Water
Analysis Batch: 168472

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
Chloride	9.00	9.10		mg/L		101	90 - 110	0	15
Sulfate	12.0	12.1		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-45173-19 MS
Matrix: Water
Analysis Batch: 168472

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	38		9.00	47.4	4	mg/L		100	90 - 110
Sulfate	8.2		12.0	20.3		mg/L		101	90 - 110

Lab Sample ID: 580-45173-20 MS
Matrix: Water
Analysis Batch: 168472

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.2		9.00	17.5		mg/L		103	90 - 110
Sulfate	10		12.0	22.6		mg/L		101	90 - 110

Lab Sample ID: 580-45173-20 DU
Matrix: Water
Analysis Batch: 168472

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	8.2		8.24		mg/L		0	10
Sulfate	10		10.4		mg/L		0.1	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-169386/1
Matrix: Water
Analysis Batch: 169386

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			09/10/14 10:21	1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 580-169386/2
Matrix: Water
Analysis Batch: 169386

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	15.0	14.2		mg/L		94	85 - 115

Lab Sample ID: MB 580-169513/3
Matrix: Water
Analysis Batch: 169513

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			09/11/14 10:23	1

Lab Sample ID: LCS 580-169513/4
Matrix: Water
Analysis Batch: 169513

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	15.0	16.1		mg/L		107	85 - 115

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-7

Lab Sample ID: 580-45173-1

Date Collected: 08/27/14 17:36

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 19:44	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 16:04	CJ	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 15:31	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 15:41	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 15:41	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: MW-6

Lab Sample ID: 580-45173-2

Date Collected: 08/27/14 18:39

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 18:07	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 16:28	CJ	TAL SEA

Client Sample ID: MW-2

Lab Sample ID: 580-45173-3

Date Collected: 08/27/14 19:26

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 18:30	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 16:47	AS	TAL SEA

Client Sample ID: Eq Blank #2

Lab Sample ID: 580-45173-4

Date Collected: 08/27/14 19:45

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 18:56	CJ	TAL SEA
Total/NA	Analysis	8260B	RA	1	168799	09/04/14 14:51	CJ	TAL SEA

Client Sample ID: MW-8

Lab Sample ID: 580-45173-5

Date Collected: 08/28/14 06:58

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 18:54	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 17:12	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 15:43	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 15:55	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 15:55	JLS	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-8

Lab Sample ID: 580-45173-5

Date Collected: 08/28/14 06:58

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5310B		10	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: SPW-15

Lab Sample ID: 580-45173-6

Date Collected: 08/28/14 07:42

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 19:19	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 17:36	AS	TAL SEA

Client Sample ID: SPW-14

Lab Sample ID: 580-45173-7

Date Collected: 08/28/14 08:49

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 19:43	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 18:01	AS	TAL SEA

Client Sample ID: MW-1

Lab Sample ID: 580-45173-8

Date Collected: 08/28/14 09:30

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 18:31	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 16:52	CJ	TAL SEA
Total/NA	Analysis	8260B		1	168799	09/04/14 22:57	CJ	TAL SEA
Total/NA	Analysis	8260B	DL2	1000	168915	09/05/14 15:58	AS	TAL SEA

Client Sample ID: SPW-12

Lab Sample ID: 580-45173-9

Date Collected: 08/28/14 10:30

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 20:07	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 18:26	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 15:55	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 16:10	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 16:10	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		10	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: SPW-13

Lab Sample ID: 580-45173-10

Date Collected: 08/28/14 11:08

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 20:32	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168915	09/05/14 18:50	AS	TAL SEA

Client Sample ID: SPW-13-DUP

Lab Sample ID: 580-45173-11

Date Collected: 08/28/14 11:08

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 19:20	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 17:16	CJ	TAL SEA
Total/NA	Analysis	8260B	DL2	1000	168915	09/05/14 16:22	AS	TAL SEA

Client Sample ID: MW-17

Lab Sample ID: 580-45173-12

Date Collected: 08/28/14 13:11

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 20:08	CJ	TAL SEA
Total/NA	Analysis	8260B	RA	1	168799	09/04/14 15:15	CJ	TAL SEA

Client Sample ID: MW-3

Lab Sample ID: 580-45173-13

Date Collected: 08/28/14 14:31

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 20:33	CJ	TAL SEA
Total/NA	Analysis	8260B	RA	1	168799	09/04/14 15:39	CJ	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 16:07	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 16:24	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 16:24	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: EXT-2

Lab Sample ID: 580-45173-14

Date Collected: 08/28/14 15:37

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168613	09/03/14 10:23	A1C	TAL SEA
Total/NA	Analysis	8260B	DL	1000	168613	09/03/14 15:55	A1C	TAL SEA
Total/NA	Analysis	300.0		1	168471	08/29/14 16:38	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 16:38	JLS	TAL SEA

Client Sample ID: EXT-2

Lab Sample ID: 580-45173-14

Date Collected: 08/28/14 15:37

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: EXT-3

Lab Sample ID: 580-45173-15

Date Collected: 08/28/14 15:48

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 20:57	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 17:41	CJ	TAL SEA

Client Sample ID: EXT-4

Lab Sample ID: 580-45173-16

Date Collected: 08/28/14 16:00

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168655	09/03/14 21:21	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168799	09/04/14 18:05	CJ	TAL SEA

Client Sample ID: MW-9

Lab Sample ID: 580-45173-17

Date Collected: 08/28/14 16:47

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	1000	169196	09/09/14 18:00	CJ	TAL SEA
Total/NA	Analysis	8260B	DL2	100	169196	09/09/14 18:25	CJ	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 16:20	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 16:53	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 16:53	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: MW-23

Lab Sample ID: 580-45173-18

Date Collected: 08/28/14 17:34

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168799	09/04/14 21:20	CJ	TAL SEA
Total/NA	Analysis	8260B	RA	1000	168915	09/05/14 19:14	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 16:32	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 17:07	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 17:07	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Client Sample ID: MW-10

Lab Sample ID: 580-45173-19

Date Collected: 08/28/14 18:47

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	168799	09/04/14 20:56	CJ	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 16:44	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 17:22	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 17:22	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169386	09/10/14 10:21	RSB	TAL SEA

Client Sample ID: MW-18

Lab Sample ID: 580-45173-20

Date Collected: 08/28/14 19:48

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168799	09/04/14 21:45	CJ	TAL SEA
Total/NA	Analysis	8260B	RA	1	168915	09/05/14 14:52	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	146102	09/09/14 16:56	BPM	TAL CAN
Total/NA	Analysis	300.0		1	168471	08/29/14 18:19	JLS	TAL SEA
Total/NA	Analysis	300.0		1	168472	08/29/14 18:19	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	169513	09/11/14 10:23	RSB	TAL SEA

Client Sample ID: Eq Blank #3

Lab Sample ID: 580-45173-21

Date Collected: 08/28/14 20:00

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168799	09/04/14 22:09	CJ	TAL SEA

Client Sample ID: EXT-1

Lab Sample ID: 580-45173-22

Date Collected: 08/29/14 07:40

Matrix: Water

Date Received: 08/29/14 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	168799	09/04/14 22:33	CJ	TAL SEA
Total/NA	Analysis	8260B	DL	100	168915	09/05/14 19:39	AS	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-113	07-25-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14 *
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14 *

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Yakima/Frank Site

TestAmerica Job ID: 580-45173-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-45173-1	MW-7	Water	08/27/14 17:36	08/29/14 12:05
580-45173-2	MW-6	Water	08/27/14 18:39	08/29/14 12:05
580-45173-3	MW-2	Water	08/27/14 19:26	08/29/14 12:05
580-45173-4	Eq Blank #2	Water	08/27/14 19:45	08/29/14 12:05
580-45173-5	MW-8	Water	08/28/14 06:58	08/29/14 12:05
580-45173-6	SPW-15	Water	08/28/14 07:42	08/29/14 12:05
580-45173-7	SPW-14	Water	08/28/14 08:49	08/29/14 12:05
580-45173-8	MW-1	Water	08/28/14 09:30	08/29/14 12:05
580-45173-9	SPW-12	Water	08/28/14 10:30	08/29/14 12:05
580-45173-10	SPW-13	Water	08/28/14 11:08	08/29/14 12:05
580-45173-11	SPW-13-DUP	Water	08/28/14 11:08	08/29/14 12:05
580-45173-12	MW-17	Water	08/28/14 13:11	08/29/14 12:05
580-45173-13	MW-3	Water	08/28/14 14:31	08/29/14 12:05
580-45173-14	EXT-2	Water	08/28/14 15:37	08/29/14 12:05
580-45173-15	EXT-3	Water	08/28/14 15:48	08/29/14 12:05
580-45173-16	EXT-4	Water	08/28/14 16:00	08/29/14 12:05
580-45173-17	MW-9	Water	08/28/14 16:47	08/29/14 12:05
580-45173-18	MW-23	Water	08/28/14 17:34	08/29/14 12:05
580-45173-19	MW-10	Water	08/28/14 18:47	08/29/14 12:05
580-45173-20	MW-18	Water	08/28/14 19:48	08/29/14 12:05
580-45173-21	Eq Blank #3	Water	08/28/14 20:00	08/29/14 12:05
580-45173-22	EXT-1	Water	08/29/14 07:40	08/29/14 12:05

Sample Custody Record

Samples Shipped to: Test America - Seattle

5755 8th Street E
Tacoma, WA 98424
Tel. 253-922-2310

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • Fax 503.620.6918

9/15/2014

JOB 17800-23 LAB NUMBER

PROJECT NAME FRANK WEAR SITE

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY:

REQUESTED ANALYSIS

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate/Sulfate Cl- 300.0	TOC SM 5310B	RSK-175 (Ethene, Ethane, Methane)	NO. OF CONTAINERS
-1	MW-7		8/27/14	17:36	Water	8	X	X	X	X	
-2	MW-6			18:39		3	X				
-3	MW-2			19:26		3	X				
-4	Eq Blank F2			19:45		3	X				
-5	MW-8		8/28/14	6:58		8	X	X	X	X	
-6	SPW-15			7:42		3	X				
-7	SPW-14			8:49		3	X				
-8	MW-1			9:30		3	X				
-9	SPW-12			10:30		8	X	X	X	X	
-10	SPW-13			11:08		3	X				
-11	~~SPW-DD~~	SPW-13-DUP		11:08		3	X				
-12	MW-17			13:11		3	X				

41 45173

OBSERVATIONS/COMMENTS/
COMPOSITING INSTRUCTIONS

580-45173 Chain of Custody

Cooler TB Dig/IR cor 5.6 unc 6.0
Cooler Dsc by BI/Wh @ Lab
Wet Packs Packing Bubble
w/ ice Client D/O

Page 82 of 84

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Kaylan Smyth	8/29/14		8/29/14
SIGNATURE		SIGNATURE	
Kaylan Smyth	TIME	Melissa Amos	TIME
PRINT NAME	11:45	PRINT NAME	1205
Hart Crowser		TA SEA	
COMPANY		COMPANY	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:
Results can be emailed to:
Jill.Kiernan@hartcrowser.com
Kaylan.Smyth@hartcrowser.com

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____
for Other Contract Requirements

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE _____
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Sample Custody Record

Samples ~~Shipped~~ Delivered to: Test America - Seattle

Tacoma, WA 98424
Tel. 253-922-2310

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • **Fax** 503.620.6918

JOB 17800-23 LAB NUMBER

PROJECT NAME FRANK WEAR SITE

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY:

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate/Sulfate, Cl	TOC SM 5310B	RSK-175 (ethene, ethane methane)	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
-13	MW-3		8/28/14	14:31	Water	8	X	X	X	X		45173
-14	Ext-2			15:37		5	X	X	X			
-15	Ext-3			15:48		3	X					
-16	Ext-4			16:00		3	X					
-17	MW-9			16:47		8	X	X	X	X		
-18	MW-23			17:34		8	X	X	X	X		
-19	MW-10			18:47		8	X	X	X	X		
-20	MW-18			19:48		8	X	X	X	X		
-21	Eq Blank	#3	↓	20:00		3	X					
-22	Ext-1		8/29/14	7:40		3	X					
-23	Trip Blank	~~Bianka~~										

REQUESTED ANALYSIS

9/15/2014

Page 83 of 84

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Kaylan Smyth SIGNATURE	8/29/14	SIGNATURE	8/29/14
Kaylan Smyth PRINT NAME	TIME	Melissa Ames PRINT NAME	TIME
Hart Crowser COMPANY	11:45	TA-SEA COMPANY	1205
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:
Results can be emailed to:
Jill.Kiernan@hartcrowser.com
Kaylan.Smyth@hartcrowser.com

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE _____
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____ for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☒STANDARD
☐72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-45173-1

Login Number: 45173

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	False	The COC is filled out with pencil.
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	no
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	True	One sample going out the day of receipt.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-21700-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Vanessa Berry

Authorized for release by:
10/8/2014 3:11:11 PM

Vanessa Berry, Project Manager II
(503)906-9233
vanessa.berry@testamericainc.com

Table of Contents

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-21700-1	Ext-2	Water	09/29/14 10:52	09/29/14 15:30
250-21700-2	Trip Blank	Water	09/29/14 00:00	09/29/14 15:30

Job ID: 250-21700-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-21700-1

Comments
No additional comments.

Receipt
The samples were received on 9/29/2014 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

Except:

Headspace in trip blank. Trip Blank (250-21700-2)

GC/MS VOA
Method(s) 8260B: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: Ext-2 (250-21700-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following volatile sample(s) was analyzed with headspace in the sample vial(s) due to multiple injections. Only (1) TB vial provided by client: Trip Blank (250-21700-2).

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.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Ext-2
Date Collected: 09/29/14 10:52
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500		ug/L			10/02/14 16:35	100
Benzene	ND		20		ug/L			10/02/14 16:35	100
Bromobenzene	ND		50		ug/L			10/02/14 16:35	100
Bromochloromethane	ND		50		ug/L			10/02/14 16:35	100
Bromodichloromethane	ND		50		ug/L			10/02/14 16:35	100
Bromoform	ND		100		ug/L			10/02/14 16:35	100
Bromomethane	ND		500		ug/L			10/02/14 16:35	100
2-Butanone (MEK)	ND		1000		ug/L			10/02/14 16:35	100
n-Butylbenzene	ND		500		ug/L			10/02/14 16:35	100
sec-Butylbenzene	ND		50		ug/L			10/02/14 16:35	100
tert-Butylbenzene	ND		100		ug/L			10/02/14 16:35	100
Carbon disulfide	ND		1000		ug/L			10/07/14 16:33	100
Carbon tetrachloride	ND		50		ug/L			10/02/14 16:35	100
Chlorobenzene	ND		50		ug/L			10/02/14 16:35	100
Chloroethane	ND		50		ug/L			10/02/14 16:35	100
Chloroform	ND		50		ug/L			10/02/14 16:35	100
Chloromethane	ND		500		ug/L			10/02/14 16:35	100
2-Chlorotoluene	ND		50		ug/L			10/02/14 16:35	100
4-Chlorotoluene	ND		50		ug/L			10/02/14 16:35	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			10/02/14 16:35	100
Dibromochloromethane	ND		100		ug/L			10/02/14 16:35	100
1,2-Dibromoethane	ND		50		ug/L			10/02/14 16:35	100
Dibromomethane	ND		50		ug/L			10/02/14 16:35	100
1,2-Dichloroethane	ND		50		ug/L			10/02/14 16:35	100
1,3-Dichlorobenzene	ND		50		ug/L			10/02/14 16:35	100
1,4-Dichlorobenzene	ND		50		ug/L			10/02/14 16:35	100
Dichlorodifluoromethane	ND		500		ug/L			10/02/14 16:35	100
1,1-Dichloroethane	ND		50		ug/L			10/02/14 16:35	100
1,1-Dichloroethene	ND		50		ug/L			10/02/14 16:35	100
cis-1,2-Dichloroethene	**1300**		50		ug/L			10/02/14 16:35	100
trans-1,2-Dichloroethene	ND		50		ug/L			10/02/14 16:35	100
1,2-Dichloropropane	ND		50		ug/L			10/02/14 16:35	100
1,3-Dichloropropane	ND		50		ug/L			10/02/14 16:35	100
2,2-Dichloropropane	ND		50		ug/L			10/02/14 16:35	100
1,1-Dichloropropene	ND		100		ug/L			10/02/14 16:35	100
cis-1,3-Dichloropropene	ND		50		ug/L			10/02/14 16:35	100
trans-1,3-Dichloropropene	ND		50		ug/L			10/02/14 16:35	100
Ethylbenzene	ND		50		ug/L			10/02/14 16:35	100
Hexachlorobutadiene	ND		400		ug/L			10/02/14 16:35	100
2-Hexanone	ND		1000		ug/L			10/02/14 16:35	100
Isopropylbenzene	ND		200		ug/L			10/02/14 16:35	100
p-Isopropyltoluene	ND		200		ug/L			10/02/14 16:35	100
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			10/02/14 16:35	100
Methyl tert-butyl ether	ND		100		ug/L			10/02/14 16:35	100
Methylene Chloride	ND		500		ug/L			10/02/14 16:35	100
Naphthalene	ND		200		ug/L			10/02/14 16:35	100
N-Propylbenzene	ND		50		ug/L			10/02/14 16:35	100
Styrene	ND		50		ug/L			10/02/14 16:35	100
1,1,1,2-Tetrachloroethane	ND		50		ug/L			10/02/14 16:35	100

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

Client Sample ID: Ext-2
Date Collected: 09/29/14 10:52
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		50		ug/L			10/02/14 16:35	100
Tetrachloroethene	**14000**		50		ug/L			10/02/14 16:35	100
Toluene	ND		50		ug/L			10/02/14 16:35	100
1,2,3-Trichlorobenzene	ND		100		ug/L			10/02/14 16:35	100
1,2,4-Trichlorobenzene	ND		100		ug/L			10/02/14 16:35	100
1,1,1-Trichloroethane	ND		50		ug/L			10/02/14 16:35	100
1,1,2-Trichloroethane	ND		50		ug/L			10/02/14 16:35	100
Trichloroethene	**130**		50		ug/L			10/02/14 16:35	100
Trichlorofluoromethane	ND		50		ug/L			10/02/14 16:35	100
1,2,3-Trichloropropane	ND		50		ug/L			10/02/14 16:35	100
1,2,4-Trimethylbenzene	ND		100		ug/L			10/02/14 16:35	100
1,3,5-Trimethylbenzene	ND		50		ug/L			10/02/14 16:35	100
Vinyl chloride	ND		50		ug/L			10/02/14 16:35	100
m,p-Xylene	ND		100		ug/L			10/02/14 16:35	100
o-Xylene	ND		50		ug/L			10/02/14 16:35	100
1,2-Dichlorobenzene	ND		50		ug/L			10/02/14 16:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*10/02/14 16:35*	*100*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*10/07/14 16:33*	*100*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*10/02/14 16:35*	*100*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/07/14 16:33*	*100*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*10/02/14 16:35*	*100*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*10/07/14 16:33*	*100*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/02/14 16:35*	*100*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/07/14 16:33*	*100*

Client Sample ID: Trip Blank
Date Collected: 09/29/14 00:00
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/02/14 13:50	1
Benzene	ND		0.20		ug/L			10/02/14 13:50	1
Bromobenzene	ND		0.50		ug/L			10/02/14 13:50	1
Bromochloromethane	ND		0.50		ug/L			10/02/14 13:50	1
Bromodichloromethane	ND		0.50		ug/L			10/02/14 13:50	1
Bromoform	ND		1.0		ug/L			10/02/14 13:50	1
Bromomethane	ND		5.0		ug/L			10/02/14 13:50	1
2-Butanone (MEK)	ND		10		ug/L			10/02/14 13:50	1
n-Butylbenzene	ND		5.0		ug/L			10/02/14 13:50	1
sec-Butylbenzene	ND		0.50		ug/L			10/02/14 13:50	1
tert-Butylbenzene	ND		1.0		ug/L			10/02/14 13:50	1
Carbon disulfide	ND		10		ug/L			10/07/14 16:59	1
Carbon tetrachloride	ND		0.50		ug/L			10/02/14 13:50	1
Chlorobenzene	ND		0.50		ug/L			10/02/14 13:50	1
Chloroethane	ND		0.50		ug/L			10/02/14 13:50	1
Chloroform	ND		0.50		ug/L			10/02/14 13:50	1
Chloromethane	ND		5.0		ug/L			10/02/14 13:50	1
2-Chlorotoluene	ND		0.50		ug/L			10/02/14 13:50	1
4-Chlorotoluene	ND		0.50		ug/L			10/02/14 13:50	1

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

Client Sample ID: Trip Blank
Date Collected: 09/29/14 00:00
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/02/14 13:50	1
Dibromochloromethane	ND		1.0		ug/L			10/02/14 13:50	1
1,2-Dibromoethane	ND		0.50		ug/L			10/02/14 13:50	1
Dibromomethane	ND		0.50		ug/L			10/02/14 13:50	1
1,2-Dichloroethane	ND		0.50		ug/L			10/02/14 13:50	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/02/14 13:50	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/02/14 13:50	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/02/14 13:50	1
1,1-Dichloroethane	ND		0.50		ug/L			10/02/14 13:50	1
1,1-Dichloroethene	ND		0.50		ug/L			10/02/14 13:50	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/02/14 13:50	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/02/14 13:50	1
1,2-Dichloropropane	ND		0.50		ug/L			10/02/14 13:50	1
1,3-Dichloropropane	ND		0.50		ug/L			10/02/14 13:50	1
2,2-Dichloropropane	ND		0.50		ug/L			10/02/14 13:50	1
1,1-Dichloropropene	ND		1.0		ug/L			10/02/14 13:50	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/02/14 13:50	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/02/14 13:50	1
Ethylbenzene	ND		0.50		ug/L			10/02/14 13:50	1
Hexachlorobutadiene	ND		4.0		ug/L			10/02/14 13:50	1
2-Hexanone	ND		10		ug/L			10/02/14 13:50	1
Isopropylbenzene	ND		2.0		ug/L			10/02/14 13:50	1
p-Isopropyltoluene	ND		2.0		ug/L			10/02/14 13:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/02/14 13:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/02/14 13:50	1
Methylene Chloride	ND		5.0		ug/L			10/02/14 13:50	1
Naphthalene	ND		2.0		ug/L			10/02/14 13:50	1
N-Propylbenzene	ND		0.50		ug/L			10/02/14 13:50	1
Styrene	ND		0.50		ug/L			10/02/14 13:50	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/02/14 13:50	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/02/14 13:50	1
Tetrachloroethene	ND		0.50		ug/L			10/02/14 13:50	1
Toluene	ND		0.50		ug/L			10/02/14 13:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/02/14 13:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/02/14 13:50	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/02/14 13:50	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/02/14 13:50	1
Trichloroethene	ND		0.50		ug/L			10/02/14 13:50	1
Trichlorofluoromethane	ND		0.50		ug/L			10/02/14 13:50	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/02/14 13:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/02/14 13:50	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/02/14 13:50	1
Vinyl chloride	ND		0.50		ug/L			10/02/14 13:50	1
m,p-Xylene	ND		1.0		ug/L			10/02/14 13:50	1
o-Xylene	ND		0.50		ug/L			10/02/14 13:50	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/02/14 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*10/02/14 13:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*10/07/14 16:59*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

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

Client Sample ID: Trip Blank
Date Collected: 09/29/14 00:00
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		10/02/14 13:50	1
4-Bromofluorobenzene (Surr)	104		80 - 120		10/07/14 16:59	1
Dibromofluoromethane (Surr)	101		80 - 120		10/02/14 13:50	1
Dibromofluoromethane (Surr)	99		80 - 120		10/07/14 16:59	1
Toluene-d8 (Surr)	100		80 - 120		10/02/14 13:50	1
Toluene-d8 (Surr)	100		80 - 120		10/07/14 16:59	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

General Chemistry

Client Sample ID: Ext-2
Date Collected: 09/29/14 10:52
Date Received: 09/29/14 15:30

Lab Sample ID: 250-21700-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.6		1.0		mg/L			10/02/14 09:22	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 250-30955/7
Matrix: Water
Analysis Batch: 30955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/02/14 11:36	1
Benzene	ND		0.20		ug/L			10/02/14 11:36	1
Bromobenzene	ND		0.50		ug/L			10/02/14 11:36	1
Bromochloromethane	ND		0.50		ug/L			10/02/14 11:36	1
Bromodichloromethane	ND		0.50		ug/L			10/02/14 11:36	1
Bromoform	ND		1.0		ug/L			10/02/14 11:36	1
Bromomethane	ND		5.0		ug/L			10/02/14 11:36	1
2-Butanone (MEK)	ND		10		ug/L			10/02/14 11:36	1
n-Butylbenzene	ND		5.0		ug/L			10/02/14 11:36	1
sec-Butylbenzene	ND		0.50		ug/L			10/02/14 11:36	1
tert-Butylbenzene	ND		1.0		ug/L			10/02/14 11:36	1
Carbon tetrachloride	ND		0.50		ug/L			10/02/14 11:36	1
Chlorobenzene	ND		0.50		ug/L			10/02/14 11:36	1
Chloroethane	ND		0.50		ug/L			10/02/14 11:36	1
Chloroform	ND		0.50		ug/L			10/02/14 11:36	1
Chloromethane	ND		5.0		ug/L			10/02/14 11:36	1
2-Chlorotoluene	ND		0.50		ug/L			10/02/14 11:36	1
4-Chlorotoluene	ND		0.50		ug/L			10/02/14 11:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/02/14 11:36	1
Dibromochloromethane	ND		1.0		ug/L			10/02/14 11:36	1
1,2-Dibromoethane	ND		0.50		ug/L			10/02/14 11:36	1
Dibromomethane	ND		0.50		ug/L			10/02/14 11:36	1
1,2-Dichloroethane	ND		0.50		ug/L			10/02/14 11:36	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/02/14 11:36	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/02/14 11:36	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/02/14 11:36	1
1,1-Dichloroethane	ND		0.50		ug/L			10/02/14 11:36	1
1,1-Dichloroethene	ND		0.50		ug/L			10/02/14 11:36	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/02/14 11:36	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/02/14 11:36	1
1,2-Dichloropropane	ND		0.50		ug/L			10/02/14 11:36	1
1,3-Dichloropropane	ND		0.50		ug/L			10/02/14 11:36	1
2,2-Dichloropropane	ND		0.50		ug/L			10/02/14 11:36	1
1,1-Dichloropropene	ND		1.0		ug/L			10/02/14 11:36	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/02/14 11:36	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/02/14 11:36	1
Ethylbenzene	ND		0.50		ug/L			10/02/14 11:36	1
Hexachlorobutadiene	ND		4.0		ug/L			10/02/14 11:36	1
2-Hexanone	ND		10		ug/L			10/02/14 11:36	1
Isopropylbenzene	ND		2.0		ug/L			10/02/14 11:36	1
p-Isopropyltoluene	ND		2.0		ug/L			10/02/14 11:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/02/14 11:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/02/14 11:36	1
Methylene Chloride	ND		5.0		ug/L			10/02/14 11:36	1
Naphthalene	ND		2.0		ug/L			10/02/14 11:36	1
N-Propylbenzene	ND		0.50		ug/L			10/02/14 11:36	1
Styrene	ND		0.50		ug/L			10/02/14 11:36	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/02/14 11:36	1

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

Lab Sample ID: MB 250-30955/7
Matrix: Water
Analysis Batch: 30955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/02/14 11:36	1
Tetrachloroethene	ND		0.50		ug/L			10/02/14 11:36	1
Toluene	ND		0.50		ug/L			10/02/14 11:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/02/14 11:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/02/14 11:36	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/02/14 11:36	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/02/14 11:36	1
Trichloroethene	ND		0.50		ug/L			10/02/14 11:36	1
Trichlorofluoromethane	ND		0.50		ug/L			10/02/14 11:36	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/02/14 11:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/02/14 11:36	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/02/14 11:36	1
Vinyl chloride	ND		0.50		ug/L			10/02/14 11:36	1
m,p-Xylene	ND		1.0		ug/L			10/02/14 11:36	1
o-Xylene	ND		0.50		ug/L			10/02/14 11:36	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/02/14 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*10/02/14 11:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/02/14 11:36*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*10/02/14 11:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/02/14 11:36*	*1*

Lab Sample ID: LCS 250-30955/4
Matrix: Water
Analysis Batch: 30955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	110		ug/L		110	55 - 145
Benzene	20.0	19.2		ug/L		96	80 - 120
Bromobenzene	20.0	19.2		ug/L		96	75 - 120
Bromochloromethane	20.0	20.5		ug/L		102	75 - 125
Bromodichloromethane	20.0	20.1		ug/L		101	80 - 130
Bromoform	20.0	18.9		ug/L		95	55 - 135
Bromomethane	20.0	19.8		ug/L		99	35 - 150
2-Butanone (MEK)	100	106		ug/L		106	70 - 140
n-Butylbenzene	20.0	19.8		ug/L		99	75 - 130
sec-Butylbenzene	20.0	19.9		ug/L		99	60 - 130
tert-Butylbenzene	20.0	19.3		ug/L		97	70 - 130
Carbon tetrachloride	20.0	20.5		ug/L		102	70 - 135
Chlorobenzene	20.0	19.5		ug/L		97	80 - 125
Chloroethane	20.0	20.3		ug/L		101	75 - 125
Chloroform	20.0	20.0		ug/L		100	80 - 120
Chloromethane	20.0	18.6		ug/L		93	45 - 150
2-Chlorotoluene	20.0	19.7		ug/L		98	70 - 125
4-Chlorotoluene	20.0	19.4		ug/L		97	75 - 125
1,2-Dibromo-3-Chloropropane	20.0	19.4		ug/L		97	70 - 135
Dibromochloromethane	20.0	20.1		ug/L		100	65 - 140

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

Lab Sample ID: LCS 250-30955/4
Matrix: Water
Analysis Batch: 30955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	20.0	20.3		ug/L		101	80 - 125
Dibromomethane	20.0	19.6		ug/L		98	80 - 120
1,2-Dichloroethane	20.0	19.8		ug/L		99	75 - 125
1,3-Dichlorobenzene	20.0	19.4		ug/L		97	75 - 125
1,4-Dichlorobenzene	20.0	19.1		ug/L		95	70 - 120
Dichlorodifluoromethane	20.0	19.5		ug/L		97	45 - 140
1,1-Dichloroethane	20.0	19.1		ug/L		96	80 - 120
1,1-Dichloroethene	20.0	19.6		ug/L		98	75 - 120
cis-1,2-Dichloroethene	20.0	19.1		ug/L		95	80 - 120
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
1,2-Dichloropropane	20.0	19.3		ug/L		97	80 - 130
1,3-Dichloropropane	20.0	19.6		ug/L		98	80 - 120
2,2-Dichloropropane	20.0	19.3		ug/L		97	60 - 145
1,1-Dichloropropene	20.0	19.8		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	80 - 125
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	80 - 130
Ethylbenzene	20.0	19.4		ug/L		97	80 - 120
Hexachlorobutadiene	20.0	20.3		ug/L		102	60 - 150
2-Hexanone	100	100		ug/L		100	70 - 140
Isopropylbenzene	20.0	19.4		ug/L		97	75 - 125
p-Isopropyltoluene	20.0	19.1		ug/L		95	65 - 130
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	70 - 135
Methyl tert-butyl ether	20.0	20.6		ug/L		103	80 - 130
Methylene Chloride	20.0	18.8		ug/L		94	80 - 120
Naphthalene	20.0	19.9		ug/L		100	70 - 150
N-Propylbenzene	20.0	19.9		ug/L		99	75 - 130
Styrene	20.0	19.7		ug/L		99	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.8		ug/L		99	65 - 140
1,1,2,2-Tetrachloroethane	20.0	19.0		ug/L		95	75 - 130
Tetrachloroethene	20.0	19.9		ug/L		100	80 - 125
Toluene	20.0	19.2		ug/L		96	80 - 125
1,2,3-Trichlorobenzene	20.0	19.4		ug/L		97	65 - 140
1,2,4-Trichlorobenzene	20.0	19.4		ug/L		97	75 - 130
1,1,1-Trichloroethane	20.0	20.1		ug/L		100	75 - 135
1,1,2-Trichloroethane	20.0	19.6		ug/L		98	80 - 125
Trichloroethene	20.0	19.9		ug/L		99	80 - 135
Trichlorofluoromethane	20.0	20.7		ug/L		103	75 - 140
1,2,3-Trichloropropane	20.0	19.3		ug/L		96	75 - 125
1,2,4-Trimethylbenzene	20.0	19.9		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	20.0	19.8		ug/L		99	75 - 135
Vinyl chloride	20.0	19.4		ug/L		97	75 - 135
m,p-Xylene	40.0	38.4		ug/L		96	70 - 130
o-Xylene	20.0	19.4		ug/L		97	75 - 125
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

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

Lab Sample ID: LCS 250-30955/4
Matrix: Water
Analysis Batch: 30955

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 250-30955/5
Matrix: Water
Analysis Batch: 30955

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
Acetone	100	120		ug/L		120	55 - 145	9	25
Benzene	20.0	18.6		ug/L		93	80 - 120	3	25
Bromobenzene	20.0	18.4		ug/L		92	75 - 120	4	25
Bromochloromethane	20.0	19.3		ug/L		97	75 - 125	6	25
Bromodichloromethane	20.0	19.1		ug/L		96	80 - 130	5	25
Bromoform	20.0	18.6		ug/L		93	55 - 135	2	25
Bromomethane	20.0	19.4		ug/L		97	35 - 150	2	25
2-Butanone (MEK)	100	107		ug/L		107	70 - 140	2	25
n-Butylbenzene	20.0	18.7		ug/L		93	75 - 130	6	25
sec-Butylbenzene	20.0	19.0		ug/L		95	60 - 130	4	25
tert-Butylbenzene	20.0	18.9		ug/L		94	70 - 130	2	25
Carbon tetrachloride	20.0	19.4		ug/L		97	70 - 135	6	25
Chlorobenzene	20.0	18.8		ug/L		94	80 - 125	4	25
Chloroethane	20.0	19.3		ug/L		97	75 - 125	5	25
Chloroform	20.0	19.1		ug/L		95	80 - 120	5	25
Chloromethane	20.0	17.8		ug/L		89	45 - 150	5	25
2-Chlorotoluene	20.0	18.6		ug/L		93	70 - 125	6	25
4-Chlorotoluene	20.0	18.8		ug/L		94	75 - 125	3	25
1,2-Dibromo-3-Chloropropane	20.0	19.7		ug/L		98	70 - 135	1	25
Dibromochloromethane	20.0	19.3		ug/L		96	65 - 140	4	25
1,2-Dibromoethane	20.0	19.7		ug/L		98	80 - 125	3	
Dibromomethane	20.0	19.3		ug/L		96	80 - 120	1	25
1,2-Dichloroethane	20.0	19.5		ug/L		97	75 - 125	2	25
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	75 - 125	4	25
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	70 - 120	3	25
Dichlorodifluoromethane	20.0	18.2		ug/L		91	45 - 140	7	25
1,1-Dichloroethane	20.0	18.5		ug/L		93	80 - 120	3	25
1,1-Dichloroethene	20.0	18.6		ug/L		93	75 - 120	6	25
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	80 - 120	2	25
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	80 - 120	4	25
1,2-Dichloropropane	20.0	18.8		ug/L		94	80 - 130	3	25
1,3-Dichloropropane	20.0	19.1		ug/L		96	80 - 120	3	25
2,2-Dichloropropane	20.0	18.7		ug/L		93	60 - 145	3	25
1,1-Dichloropropene	20.0	18.9		ug/L		95	80 - 120	4	25
cis-1,3-Dichloropropene	20.0	19.7		ug/L		98	80 - 125	1	25
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	80 - 130	1	25
Ethylbenzene	20.0	18.7		ug/L		94	80 - 120	4	25
Hexachlorobutadiene	20.0	19.2		ug/L		96	60 - 150	5	25
2-Hexanone	100	101		ug/L		101	70 - 140	0	25
Isopropylbenzene	20.0	18.6		ug/L		93	75 - 125	4	25

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

Lab Sample ID: LCSD 250-30955/5
Matrix: Water
Analysis Batch: 30955

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
p-Isopropyltoluene			20.0	18.5		ug/L		92	65 - 130	3	25
4-Methyl-2-pentanone (MIBK)			100	102		ug/L		102	70 - 135	2	25
Methyl tert-butyl ether			20.0	20.8		ug/L		104	80 - 130	1	25
Methylene Chloride			20.0	18.2		ug/L		91	80 - 120	4	25
Naphthalene			20.0	19.8		ug/L		99	70 - 150	1	25
N-Propylbenzene			20.0	18.9		ug/L		95	75 - 130	5	25
Styrene			20.0	18.9		ug/L		95	70 - 130	4	25
1,1,1,2-Tetrachloroethane			20.0	19.5		ug/L		98	65 - 140	1	25
1,1,2,2-Tetrachloroethane			20.0	19.1		ug/L		95	75 - 130	0	25
Tetrachloroethene			20.0	19.2		ug/L		96	80 - 125	4	25
Toluene			20.0	18.6		ug/L		93	80 - 125	3	25
1,2,3-Trichlorobenzene			20.0	19.0		ug/L		95	65 - 140	2	25
1,2,4-Trichlorobenzene			20.0	18.8		ug/L		94	75 - 130	3	25
1,1,1-Trichloroethane			20.0	19.1		ug/L		95	75 - 135	5	25
1,1,2-Trichloroethane			20.0	19.2		ug/L		96	80 - 125	2	25
Trichloroethene			20.0	18.8		ug/L		94	80 - 135	5	25
Trichlorofluoromethane			20.0	19.7		ug/L		99	75 - 140	5	25
1,2,3-Trichloropropane			20.0	18.7		ug/L		94	75 - 125	3	25
1,2,4-Trimethylbenzene			20.0	19.1		ug/L		95	70 - 130	4	25
1,3,5-Trimethylbenzene			20.0	19.0		ug/L		95	75 - 135	4	25
Vinyl chloride			20.0	18.2		ug/L		91	75 - 135	6	25
m,p-Xylene			40.0	37.0		ug/L		93	70 - 130	3	25
o-Xylene			20.0	18.9		ug/L		94	75 - 125	3	25
1,2-Dichlorobenzene			20.0	18.6		ug/L		93	80 - 120	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 30955

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		10000	10400		ug/L		104	55 - 125
Benzene	ND		2000	1720		ug/L		86	80 - 125
Bromobenzene	ND		2000	1690		ug/L		84	80 - 125
Bromochloromethane	ND		2000	1840		ug/L		92	80 - 130
Bromodichloromethane	ND		2000	1760		ug/L		88	80 - 135
Bromoform	ND		2000	1670		ug/L		84	65 - 150
Bromomethane	ND		2000	1900		ug/L		95	30 - 150
2-Butanone (MEK)	ND		10000	10500		ug/L		105	70 - 145
n-Butylbenzene	ND		2000	1700		ug/L		85	70 - 140
sec-Butylbenzene	ND		2000	1760		ug/L		88	70 - 135
tert-Butylbenzene	ND		2000	1760		ug/L		88	70 - 135
Carbon tetrachloride	ND		2000	1740		ug/L		87	75 - 130

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

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 30955

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	ND		2000	1710		ug/L		85	70 - 135
Chloroethane	ND		2000	1950		ug/L		97	75 - 130
Chloroform	ND		2000	1790		ug/L		90	80 - 125
Chloromethane	ND		2000	1690		ug/L		85	40 - 150
2-Chlorotoluene	ND		2000	1720		ug/L		86	80 - 120
4-Chlorotoluene	ND		2000	1720		ug/L		86	80 - 125
1,2-Dibromo-3-Chloropropane	ND		2000	1810		ug/L		91	55 - 145
Dibromochloromethane	ND		2000	1730		ug/L		87	80 - 130
1,2-Dibromoethane	ND		2000	1860		ug/L		93	80 - 130
Dibromomethane	ND		2000	1800		ug/L		90	75 - 135
1,2-Dichloroethane	ND		2000	1810		ug/L		90	80 - 125
1,3-Dichlorobenzene	ND		2000	1710		ug/L		85	80 - 125
1,4-Dichlorobenzene	ND		2000	1700		ug/L		85	80 - 120
Dichlorodifluoromethane	ND		2000	1930		ug/L		97	60 - 135
1,1-Dichloroethane	ND		2000	1730		ug/L		87	80 - 125
1,1-Dichloroethene	ND		2000	1710		ug/L		85	75 - 130
cis-1,2-Dichloroethene	1300		2000	2960		ug/L		83	75 - 140
trans-1,2-Dichloroethene	ND		2000	1720		ug/L		86	80 - 120
1,2-Dichloropropane	ND		2000	1760		ug/L		88	80 - 120
1,3-Dichloropropane	ND		2000	1760		ug/L		88	80 - 135
2,2-Dichloropropane	ND		2000	1550		ug/L		77	70 - 145
1,1-Dichloropropene	ND		2000	1730		ug/L		86	80 - 125
cis-1,3-Dichloropropene	ND		2000	1720		ug/L		86	80 - 130
trans-1,3-Dichloropropene	ND		2000	1790		ug/L		89	80 - 135
Ethylbenzene	ND		2000	1740		ug/L		87	80 - 125
Hexachlorobutadiene	ND		2000	1700		ug/L		85	45 - 150
2-Hexanone	ND		10000	10200		ug/L		102	60 - 150
Isopropylbenzene	ND		2000	1740		ug/L		87	80 - 130
p-Isopropyltoluene	ND		2000	1730		ug/L		86	70 - 140
4-Methyl-2-pentanone (MIBK)	ND		10000	10400		ug/L		104	55 - 150
Methyl tert-butyl ether	ND		2000	2070		ug/L		104	80 - 130
Methylene Chloride	ND		2000	1680		ug/L		84	80 - 120
Naphthalene	ND		2000	1670		ug/L		84	65 - 150
N-Propylbenzene	ND		2000	1780		ug/L		89	70 - 135
Styrene	ND		2000	1750		ug/L		87	45 - 150
1,1,1,2-Tetrachloroethane	ND		2000	1740		ug/L		87	80 - 130
1,1,2,2-Tetrachloroethane	ND		2000	1790		ug/L		89	75 - 150
Tetrachloroethene	14000		2000	15000	4	ug/L		74	80 - 125
Toluene	ND		2000	1710		ug/L		85	75 - 135
1,2,3-Trichlorobenzene	ND		2000	1630		ug/L		82	70 - 150
1,2,4-Trichlorobenzene	ND		2000	1620		ug/L		81	70 - 150
1,1,1-Trichloroethane	ND		2000	1780		ug/L		89	80 - 130
1,1,2-Trichloroethane	ND		2000	1820		ug/L		91	80 - 130
Trichloroethene	130		2000	1850		ug/L		86	65 - 130
Trichlorofluoromethane	ND		2000	2000		ug/L		100	75 - 130
1,2,3-Trichloropropane	ND		2000	1800		ug/L		90	80 - 135
1,2,4-Trimethylbenzene	ND		2000	1760		ug/L		88	80 - 140
1,3,5-Trimethylbenzene	ND		2000	1770		ug/L		88	70 - 145

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

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 30955

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		2000	1760		ug/L		88	70 - 135
m,p-Xylene	ND		4000	3460		ug/L		86	75 - 135
o-Xylene	ND		2000	1750		ug/L		88	80 - 125
1,2-Dichlorobenzene	ND		2000	1680		ug/L		84	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 250-21700-1 MSD
Matrix: Water
Analysis Batch: 30955

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		10000	10900		ug/L		109	55 - 125	5	25
Benzene	ND		2000	1960		ug/L		98	80 - 125	13	25
Bromobenzene	ND		2000	1930		ug/L		96	80 - 125	13	25
Bromochloromethane	ND		2000	2070		ug/L		104	80 - 130	12	25
Bromodichloromethane	ND		2000	2020		ug/L		101	80 - 135	14	25
Bromoform	ND		2000	1920		ug/L		96	65 - 150	14	25
Bromomethane	ND		2000	1970		ug/L		99	30 - 150	4	25
2-Butanone (MEK)	ND		10000	11000		ug/L		110	70 - 145	4	25
n-Butylbenzene	ND		2000	1940		ug/L		97	70 - 140	13	25
sec-Butylbenzene	ND		2000	1970		ug/L		99	70 - 135	11	25
tert-Butylbenzene	ND		2000	1940		ug/L		97	70 - 135	10	25
Carbon tetrachloride	ND		2000	1990		ug/L		99	75 - 130	13	25
Chlorobenzene	ND		2000	1990		ug/L		100	70 - 135	15	25
Chloroethane	ND		2000	1980		ug/L		99	75 - 130	2	25
Chloroform	ND		2000	2050		ug/L		103	80 - 125	14	25
Chloromethane	ND		2000	1740		ug/L		87	40 - 150	2	25
2-Chlorotoluene	ND		2000	1920		ug/L		96	80 - 120	11	25
4-Chlorotoluene	ND		2000	1960		ug/L		98	80 - 125	13	25
1,2-Dibromo-3-Chloropropane	ND		2000	2090		ug/L		105	55 - 145	14	25
Dibromochloromethane	ND		2000	2030		ug/L		101	80 - 130	16	25
1,2-Dibromoethane	ND		2000	2090		ug/L		105	80 - 130	11	
Dibromomethane	ND		2000	2070		ug/L		104	75 - 135	14	25
1,2-Dichloroethane	ND		2000	2060		ug/L		103	80 - 125	13	25
1,3-Dichlorobenzene	ND		2000	1960		ug/L		98	80 - 125	14	25
1,4-Dichlorobenzene	ND		2000	1900		ug/L		95	80 - 120	11	25
Dichlorodifluoromethane	ND		2000	1890		ug/L		94	60 - 135	2	25
1,1-Dichloroethane	ND		2000	1950		ug/L		98	80 - 125	12	25
1,1-Dichloroethene	ND		2000	1990		ug/L		100	75 - 130	15	25
cis-1,2-Dichloroethene	1300		2000	3260		ug/L		98	75 - 140	10	25
trans-1,2-Dichloroethene	ND		2000	2000		ug/L		100	80 - 120	15	25
1,2-Dichloropropane	ND		2000	2050		ug/L		102	80 - 120	15	25
1,3-Dichloropropane	ND		2000	2020		ug/L		101	80 - 135	14	25

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

Lab Sample ID: 250-21700-1 MSD
Matrix: Water
Analysis Batch: 30955

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane	ND		2000	1820		ug/L		91	70 - 145	16	25
1,1-Dichloropropene	ND		2000	2010		ug/L		100	80 - 125	15	25
cis-1,3-Dichloropropene	ND		2000	2000		ug/L		100	80 - 130	15	25
trans-1,3-Dichloropropene	ND		2000	2080		ug/L		104	80 - 135	15	25
Ethylbenzene	ND		2000	1960		ug/L		98	80 - 125	12	25
Hexachlorobutadiene	ND		2000	2000		ug/L		100	45 - 150	16	25
2-Hexanone	ND		10000	10500		ug/L		105	60 - 150	3	25
Isopropylbenzene	ND		2000	1940		ug/L		97	80 - 130	11	25
p-Isopropyltoluene	ND		2000	1890		ug/L		95	70 - 140	9	25
4-Methyl-2-pentanone (MIBK)	ND		10000	10600		ug/L		106	55 - 150	2	25
Methyl tert-butyl ether	ND		2000	2110		ug/L		105	80 - 130	2	25
Methylene Chloride	ND		2000	1960		ug/L		98	80 - 120	16	25
Naphthalene	ND		2000	2090		ug/L		105	65 - 150	22	25
N-Propylbenzene	ND		2000	1980		ug/L		99	70 - 135	11	25
Styrene	ND		2000	1990		ug/L		100	45 - 150	13	25
1,1,1,2-Tetrachloroethane	ND		2000	2000		ug/L		100	80 - 130	14	25
1,1,2,2-Tetrachloroethane	ND		2000	2020		ug/L		101	75 - 150	12	25
Tetrachloroethene	14000		2000	15600	4	ug/L		104	80 - 125	4	25
Toluene	ND		2000	1950		ug/L		98	75 - 135	13	25
1,2,3-Trichlorobenzene	ND		2000	2010		ug/L		100	70 - 150	20	25
1,2,4-Trichlorobenzene	ND		2000	1910		ug/L		95	70 - 150	16	25
1,1,1-Trichloroethane	ND		2000	2050		ug/L		102	80 - 130	14	25
1,1,2-Trichloroethane	ND		2000	2060		ug/L		103	80 - 130	13	25
Trichloroethene	130		2000	2110		ug/L		99	65 - 130	13	25
Trichlorofluoromethane	ND		2000	2040		ug/L		102	75 - 130	2	25
1,2,3-Trichloropropane	ND		2000	2040		ug/L		102	80 - 135	12	25
1,2,4-Trimethylbenzene	ND		2000	1970		ug/L		98	80 - 140	11	25
1,3,5-Trimethylbenzene	ND		2000	1980		ug/L		99	70 - 145	11	25
Vinyl chloride	ND		2000	1850		ug/L		93	70 - 135	5	25
m,p-Xylene	ND		4000	3840		ug/L		96	75 - 135	10	25
o-Xylene	ND		2000	1970		ug/L		99	80 - 125	12	25
1,2-Dichlorobenzene	ND		2000	1980		ug/L		99	80 - 120	16	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 250-31094/7
Matrix: Water
Analysis Batch: 31094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/07/14 15:17	1
Benzene	ND		0.20		ug/L			10/07/14 15:17	1
Bromobenzene	ND		0.50		ug/L			10/07/14 15:17	1
Bromochloromethane	ND		0.50		ug/L			10/07/14 15:17	1

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

Lab Sample ID: MB 250-31094/7
Matrix: Water
Analysis Batch: 31094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		0.50		ug/L			10/07/14 15:17	1
Bromoform	ND		1.0		ug/L			10/07/14 15:17	1
Bromomethane	ND		5.0		ug/L			10/07/14 15:17	1
2-Butanone (MEK)	ND		10		ug/L			10/07/14 15:17	1
n-Butylbenzene	ND		5.0		ug/L			10/07/14 15:17	1
sec-Butylbenzene	ND		0.50		ug/L			10/07/14 15:17	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/14 15:17	1
Carbon disulfide	ND		10		ug/L			10/07/14 15:17	1
Carbon tetrachloride	ND		0.50		ug/L			10/07/14 15:17	1
Chlorobenzene	ND		0.50		ug/L			10/07/14 15:17	1
Chloroethane	ND		0.50		ug/L			10/07/14 15:17	1
Chloroform	ND		0.50		ug/L			10/07/14 15:17	1
Chloromethane	ND		5.0		ug/L			10/07/14 15:17	1
2-Chlorotoluene	ND		0.50		ug/L			10/07/14 15:17	1
4-Chlorotoluene	ND		0.50		ug/L			10/07/14 15:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/14 15:17	1
Dibromochloromethane	ND		1.0		ug/L			10/07/14 15:17	1
1,2-Dibromoethane	ND		0.50		ug/L			10/07/14 15:17	1
Dibromomethane	ND		0.50		ug/L			10/07/14 15:17	1
1,2-Dichloroethane	ND		0.50		ug/L			10/07/14 15:17	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/07/14 15:17	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/07/14 15:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/07/14 15:17	1
1,1-Dichloroethane	ND		0.50		ug/L			10/07/14 15:17	1
1,1-Dichloroethene	ND		0.50		ug/L			10/07/14 15:17	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/07/14 15:17	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/07/14 15:17	1
1,2-Dichloropropane	ND		0.50		ug/L			10/07/14 15:17	1
1,3-Dichloropropane	ND		0.50		ug/L			10/07/14 15:17	1
2,2-Dichloropropane	ND		0.50		ug/L			10/07/14 15:17	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/14 15:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/07/14 15:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/07/14 15:17	1
Ethylbenzene	ND		0.50		ug/L			10/07/14 15:17	1
Hexachlorobutadiene	ND		4.0		ug/L			10/07/14 15:17	1
2-Hexanone	ND		10		ug/L			10/07/14 15:17	1
Isopropylbenzene	ND		2.0		ug/L			10/07/14 15:17	1
p-Isopropyltoluene	ND		2.0		ug/L			10/07/14 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/07/14 15:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/14 15:17	1
Methylene Chloride	ND		5.0		ug/L			10/07/14 15:17	1
Naphthalene	ND		2.0		ug/L			10/07/14 15:17	1
N-Propylbenzene	ND		0.50		ug/L			10/07/14 15:17	1
Styrene	ND		0.50		ug/L			10/07/14 15:17	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/07/14 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/14 15:17	1
Tetrachloroethene	ND		0.50		ug/L			10/07/14 15:17	1
Toluene	ND		0.50		ug/L			10/07/14 15:17	1

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

Lab Sample ID: MB 250-31094/7
Matrix: Water
Analysis Batch: 31094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/14 15:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/14 15:17	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/07/14 15:17	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/07/14 15:17	1
Trichloroethene	ND		0.50		ug/L			10/07/14 15:17	1
Trichlorofluoromethane	ND		0.50		ug/L			10/07/14 15:17	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/07/14 15:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/14 15:17	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/07/14 15:17	1
Vinyl chloride	ND		0.50		ug/L			10/07/14 15:17	1
m,p-Xylene	ND		1.0		ug/L			10/07/14 15:17	1
o-Xylene	ND		0.50		ug/L			10/07/14 15:17	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/07/14 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*10/07/14 15:17*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/07/14 15:17*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*10/07/14 15:17*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/07/14 15:17*	*1*

Lab Sample ID: LCS 250-31094/4
Matrix: Water
Analysis Batch: 31094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	115		ug/L		115	55 - 145
Benzene	20.0	19.5		ug/L		97	80 - 120
Bromobenzene	20.0	21.7		ug/L		109	75 - 120
Bromochloromethane	20.0	19.4		ug/L		97	75 - 125
Bromodichloromethane	20.0	19.1		ug/L		96	80 - 130
Bromoform	20.0	20.1		ug/L		100	55 - 135
Bromomethane	20.0	17.8		ug/L		89	35 - 150
2-Butanone (MEK)	100	111		ug/L		111	70 - 140
n-Butylbenzene	20.0	20.0		ug/L		100	75 - 130
sec-Butylbenzene	20.0	22.8		ug/L		114	60 - 130
tert-Butylbenzene	20.0	21.4		ug/L		107	70 - 130
Carbon disulfide	40.0	35.4		ug/L		88	60 - 120
Carbon tetrachloride	20.0	19.0		ug/L		95	70 - 135
Chlorobenzene	20.0	19.8		ug/L		99	80 - 125
Chloroethane	20.0	19.1		ug/L		95	75 - 125
Chloroform	20.0	19.5		ug/L		97	80 - 120
Chloromethane	20.0	18.6		ug/L		93	45 - 150
2-Chlorotoluene	20.0	21.1		ug/L		105	70 - 125
4-Chlorotoluene	20.0	21.1		ug/L		105	75 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	70 - 135
Dibromochloromethane	20.0	19.8		ug/L		99	65 - 140
1,2-Dibromoethane	20.0	21.0		ug/L		105	80 - 125
Dibromomethane	20.0	19.9		ug/L		100	80 - 120

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

Lab Sample ID: LCS 250-31094/4
Matrix: Water
Analysis Batch: 31094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	20.0	19.1		ug/L		96	75 - 125
1,3-Dichlorobenzene	20.0	21.4		ug/L		107	75 - 125
1,4-Dichlorobenzene	20.0	21.3		ug/L		107	70 - 120
Dichlorodifluoromethane	20.0	19.4		ug/L		97	45 - 140
1,1-Dichloroethane	20.0	19.3		ug/L		97	80 - 120
1,1-Dichloroethene	20.0	19.0		ug/L		95	75 - 120
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
1,2-Dichloropropane	20.0	19.5		ug/L		98	80 - 130
1,3-Dichloropropane	20.0	19.9		ug/L		99	80 - 120
2,2-Dichloropropane	20.0	20.0		ug/L		100	60 - 145
1,1-Dichloropropene	20.0	19.7		ug/L		98	80 - 120
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	80 - 125
trans-1,3-Dichloropropene	20.0	19.8		ug/L		99	80 - 130
Ethylbenzene	20.0	21.0		ug/L		105	80 - 120
Hexachlorobutadiene	20.0	20.3		ug/L		102	60 - 150
2-Hexanone	100	119		ug/L		119	70 - 140
Isopropylbenzene	20.0	21.3		ug/L		106	75 - 125
p-Isopropyltoluene	20.0	22.6		ug/L		113	65 - 130
4-Methyl-2-pentanone (MIBK)	100	113		ug/L		113	70 - 135
Methyl tert-butyl ether	20.0	19.7		ug/L		99	80 - 130
Methylene Chloride	20.0	19.3		ug/L		97	80 - 120
Naphthalene	20.0	22.7		ug/L		114	70 - 150
N-Propylbenzene	20.0	21.7		ug/L		109	75 - 130
Styrene	20.0	21.7		ug/L		108	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.8		ug/L		99	65 - 140
1,1,2,2-Tetrachloroethane	20.0	21.2		ug/L		106	75 - 130
Tetrachloroethene	20.0	20.0		ug/L		100	80 - 125
Toluene	20.0	19.5		ug/L		97	80 - 125
1,2,3-Trichlorobenzene	20.0	22.0		ug/L		110	65 - 140
1,2,4-Trichlorobenzene	20.0	22.1		ug/L		110	75 - 130
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	75 - 135
1,1,2-Trichloroethane	20.0	20.1		ug/L		100	80 - 125
Trichloroethene	20.0	19.5		ug/L		98	80 - 135
Trichlorofluoromethane	20.0	19.5		ug/L		97	75 - 140
1,2,3-Trichloropropane	20.0	21.0		ug/L		105	75 - 125
1,2,4-Trimethylbenzene	20.0	22.8		ug/L		114	70 - 130
1,3,5-Trimethylbenzene	20.0	22.2		ug/L		111	75 - 135
Vinyl chloride	20.0	19.0		ug/L		95	75 - 135
m,p-Xylene	40.0	42.4		ug/L		106	70 - 130
o-Xylene	20.0	20.9		ug/L		104	75 - 125
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: LCSD 250-31094/5
Matrix: Water
Analysis Batch: 31094

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
Acetone	100	132		ug/L		132	55 - 145	14	25
Benzene	20.0	19.8		ug/L		99	80 - 120	2	25
Bromobenzene	20.0	21.6		ug/L		108	75 - 120	1	25
Bromochloromethane	20.0	20.8		ug/L		104	75 - 125	7	25
Bromodichloromethane	20.0	20.4		ug/L		102	80 - 130	6	25
Bromoform	20.0	22.3		ug/L		112	55 - 135	11	25
Bromomethane	20.0	17.9		ug/L		89	35 - 150	1	25
2-Butanone (MEK)	100	125		ug/L		125	70 - 140	12	25
n-Butylbenzene	20.0	20.4		ug/L		102	75 - 130	2	25
sec-Butylbenzene	20.0	22.7		ug/L		114	60 - 130	0	25
tert-Butylbenzene	20.0	21.5		ug/L		107	70 - 130	0	25
Carbon disulfide	40.0	37.3		ug/L		93	60 - 120	5	25
Carbon tetrachloride	20.0	20.3		ug/L		101	70 - 135	6	25
Chlorobenzene	20.0	18.9		ug/L		94	80 - 125	5	25
Chloroethane	20.0	20.8		ug/L		104	75 - 125	9	25
Chloroform	20.0	20.2		ug/L		101	80 - 120	4	25
Chloromethane	20.0	19.6		ug/L		98	45 - 150	5	25
2-Chlorotoluene	20.0	21.0		ug/L		105	70 - 125	0	25
4-Chlorotoluene	20.0	21.4		ug/L		107	75 - 125	1	25
1,2-Dibromo-3-Chloropropane	20.0	21.4		ug/L		107	70 - 135	13	25
Dibromochloromethane	20.0	20.4		ug/L		102	65 - 140	3	25
1,2-Dibromoethane	20.0	21.9		ug/L		110	80 - 125	4	
Dibromomethane	20.0	20.8		ug/L		104	80 - 120	4	25
1,2-Dichloroethane	20.0	20.4		ug/L		102	75 - 125	6	25
1,3-Dichlorobenzene	20.0	21.5		ug/L		107	75 - 125	0	25
1,4-Dichlorobenzene	20.0	20.9		ug/L		104	70 - 120	2	25
Dichlorodifluoromethane	20.0	19.7		ug/L		98	45 - 140	2	25
1,1-Dichloroethane	20.0	19.9		ug/L		100	80 - 120	3	25
1,1-Dichloroethene	20.0	20.0		ug/L		100	75 - 120	5	25
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	80 - 120	2	25
trans-1,2-Dichloroethene	20.0	20.1		ug/L		100	80 - 120	5	25
1,2-Dichloropropane	20.0	20.5		ug/L		102	80 - 130	5	25
1,3-Dichloropropane	20.0	20.9		ug/L		104	80 - 120	5	25
2,2-Dichloropropane	20.0	20.6		ug/L		103	60 - 145	3	25
1,1-Dichloropropene	20.0	20.1		ug/L		100	80 - 120	2	25
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	80 - 125	6	25
trans-1,3-Dichloropropene	20.0	21.1		ug/L		106	80 - 130	7	25
Ethylbenzene	20.0	21.0		ug/L		105	80 - 120	0	25
Hexachlorobutadiene	20.0	20.7		ug/L		103	60 - 150	2	25
2-Hexanone	100	124		ug/L		124	70 - 140	4	25
Isopropylbenzene	20.0	21.4		ug/L		107	75 - 125	1	25
p-Isopropyltoluene	20.0	22.0		ug/L		110	65 - 130	3	25
4-Methyl-2-pentanone (MIBK)	100	120		ug/L		120	70 - 135	6	25
Methyl tert-butyl ether	20.0	21.5		ug/L		107	80 - 130	8	25
Methylene Chloride	20.0	20.2		ug/L		101	80 - 120	5	25
Naphthalene	20.0	23.5		ug/L		118	70 - 150	3	25
N-Propylbenzene	20.0	21.7		ug/L		109	75 - 130	0	25
Styrene	20.0	21.7		ug/L		109	70 - 130	0	25

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

Lab Sample ID: LCSD 250-31094/5
Matrix: Water
Analysis Batch: 31094

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
1,1,1,2-Tetrachloroethane			20.0	20.1		ug/L		100	65 - 140	2	25
1,1,2,2-Tetrachloroethane			20.0	22.6		ug/L		113	75 - 130	6	25
Tetrachloroethene			20.0	19.5		ug/L		97	80 - 125	2	25
Toluene			20.0	18.8		ug/L		94	80 - 125	4	25
1,2,3-Trichlorobenzene			20.0	22.6		ug/L		113	65 - 140	3	25
1,2,4-Trichlorobenzene			20.0	22.6		ug/L		113	75 - 130	2	25
1,1,1-Trichloroethane			20.0	20.3		ug/L		101	75 - 135	4	25
1,1,2-Trichloroethane			20.0	21.6		ug/L		108	80 - 125	7	25
Trichloroethene			20.0	20.5		ug/L		103	80 - 135	5	25
Trichlorofluoromethane			20.0	21.4		ug/L		107	75 - 140	9	25
1,2,3-Trichloropropane			20.0	23.3		ug/L		116	75 - 125	10	25
1,2,4-Trimethylbenzene			20.0	22.4		ug/L		112	70 - 130	2	25
1,3,5-Trimethylbenzene			20.0	21.9		ug/L		110	75 - 135	1	25
Vinyl chloride			20.0	19.9		ug/L		100	75 - 135	5	25
m,p-Xylene			40.0	42.1		ug/L		105	70 - 130	1	25
o-Xylene			20.0	20.8		ug/L		104	75 - 125	0	25
1,2-Dichlorobenzene			20.0	20.0		ug/L		100	80 - 120	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 31094

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		10000	10300		ug/L		103	55 - 125
Benzene	ND		2000	1870		ug/L		93	80 - 125
Bromobenzene	ND		2000	2140		ug/L		107	80 - 125
Bromochloromethane	ND		2000	1930		ug/L		97	80 - 130
Bromodichloromethane	ND		2000	1880		ug/L		94	80 - 135
Bromoform	ND		2000	2030		ug/L		102	65 - 150
Bromomethane	ND		2000	1790		ug/L		89	30 - 150
2-Butanone (MEK)	ND		10000	11000		ug/L		110	70 - 145
n-Butylbenzene	ND		2000	1880		ug/L		94	70 - 140
sec-Butylbenzene	ND		2000	2150		ug/L		107	70 - 135
tert-Butylbenzene	ND		2000	2060		ug/L		103	70 - 135
Carbon disulfide	ND		4000	3610		ug/L		90	40 - 150
Carbon tetrachloride	ND		2000	1870		ug/L		93	75 - 130
Chlorobenzene	ND		2000	1870		ug/L		94	70 - 135
Chloroethane	ND		2000	1990		ug/L		100	75 - 130
Chloroform	ND		2000	1870		ug/L		93	80 - 125
Chloromethane	ND		2000	1910		ug/L		96	40 - 150
2-Chlorotoluene	ND		2000	2050		ug/L		102	80 - 120
4-Chlorotoluene	ND		2000	2080		ug/L		104	80 - 125

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

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 31094

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		2000	1890		ug/L		94	55 - 145
Dibromochloromethane	ND		2000	1910		ug/L		96	80 - 130
1,2-Dibromoethane	ND		2000	2040		ug/L		102	80 - 130
Dibromomethane	ND		2000	1950		ug/L		97	75 - 135
1,2-Dichloroethane	ND		2000	1850		ug/L		92	80 - 125
1,3-Dichlorobenzene	ND		2000	2060		ug/L		103	80 - 125
1,4-Dichlorobenzene	ND		2000	2080		ug/L		104	80 - 120
Dichlorodifluoromethane	ND		2000	2000		ug/L		100	60 - 135
1,1-Dichloroethane	ND		2000	1850		ug/L		92	80 - 125
1,1-Dichloroethene	ND		2000	1860		ug/L		93	75 - 130
cis-1,2-Dichloroethene	1200		2000	3040		ug/L		91	75 - 140
trans-1,2-Dichloroethene	ND		2000	1860		ug/L		92	80 - 120
1,2-Dichloropropane	ND		2000	1860		ug/L		93	80 - 120
1,3-Dichloropropane	ND		2000	1900		ug/L		95	80 - 135
2,2-Dichloropropane	ND		2000	1960		ug/L		98	70 - 145
1,1-Dichloropropene	ND		2000	1890		ug/L		94	80 - 125
cis-1,3-Dichloropropene	ND		2000	1900		ug/L		95	80 - 130
trans-1,3-Dichloropropene	ND		2000	1940		ug/L		97	80 - 135
Ethylbenzene	ND		2000	2020		ug/L		101	80 - 125
Hexachlorobutadiene	ND		2000	1830		ug/L		91	45 - 150
2-Hexanone	ND		10000	11600		ug/L		116	60 - 150
Isopropylbenzene	ND		2000	2070		ug/L		103	80 - 130
p-Isopropyltoluene	ND		2000	2180		ug/L		109	70 - 140
4-Methyl-2-pentanone (MIBK)	ND		10000	11400		ug/L		114	55 - 150
Methyl tert-butyl ether	ND		2000	2030		ug/L		101	80 - 130
Methylene Chloride	ND		2000	1870		ug/L		93	80 - 120
Naphthalene	ND		2000	2150		ug/L		108	65 - 150
N-Propylbenzene	ND		2000	2090		ug/L		105	70 - 135
Styrene	ND		2000	2100		ug/L		105	45 - 150
1,1,1,2-Tetrachloroethane	ND		2000	1930		ug/L		97	80 - 130
1,1,2,2-Tetrachloroethane	ND		2000	2160		ug/L		108	75 - 150
Tetrachloroethene	13000		2000	14600	4	ug/L		70	80 - 125
Toluene	ND		2000	1870		ug/L		93	75 - 135
1,2,3-Trichlorobenzene	ND		2000	2080		ug/L		104	70 - 150
1,2,4-Trichlorobenzene	ND		2000	2040		ug/L		102	70 - 150
1,1,1-Trichloroethane	ND		2000	1880		ug/L		94	80 - 130
1,1,2-Trichloroethane	ND		2000	1990		ug/L		100	80 - 130
Trichloroethene	120		2000	1970		ug/L		92	65 - 130
Trichlorofluoromethane	ND		2000	2020		ug/L		101	75 - 130
1,2,3-Trichloropropane	ND		2000	2150		ug/L		107	80 - 135
1,2,4-Trimethylbenzene	ND		2000	2200		ug/L		110	80 - 140
1,3,5-Trimethylbenzene	ND		2000	2140		ug/L		107	70 - 145
Vinyl chloride	ND		2000	1940		ug/L		97	70 - 135
m,p-Xylene	ND		4000	4100		ug/L		102	75 - 135
o-Xylene	ND		2000	2030		ug/L		102	80 - 125
1,2-Dichlorobenzene	ND		2000	1870		ug/L		94	80 - 120

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

Lab Sample ID: 250-21700-1 MS
Matrix: Water
Analysis Batch: 31094

Client Sample ID: Ext-2
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 250-21700-1 MSD
Matrix: Water
Analysis Batch: 31094

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		10000	10500		ug/L		105	55 - 125	3	25
Benzene	ND		2000	1850		ug/L		93	80 - 125	1	25
Bromobenzene	ND		2000	2000		ug/L		100	80 - 125	7	25
Bromochloromethane	ND		2000	1960		ug/L		98	80 - 130	1	25
Bromodichloromethane	ND		2000	1890		ug/L		95	80 - 135	1	25
Bromoform	ND		2000	1990		ug/L		99	65 - 150	2	25
Bromomethane	ND		2000	1880		ug/L		94	30 - 150	5	25
2-Butanone (MEK)	ND		10000	11000		ug/L		110	70 - 145	0	25
n-Butylbenzene	ND		2000	1920		ug/L		96	70 - 140	2	25
sec-Butylbenzene	ND		2000	2090		ug/L		104	70 - 135	3	25
tert-Butylbenzene	ND		2000	1980		ug/L		99	70 - 135	4	25
Carbon disulfide	ND		4000	3240		ug/L		81	40 - 150	11	25
Carbon tetrachloride	ND		2000	1850		ug/L		93	75 - 130	1	25
Chlorobenzene	ND		2000	1870		ug/L		94	70 - 135	0	25
Chloroethane	ND		2000	2040		ug/L		102	75 - 130	2	25
Chloroform	ND		2000	1890		ug/L		95	80 - 125	1	25
Chloromethane	ND		2000	1940		ug/L		97	40 - 150	1	25
2-Chlorotoluene	ND		2000	1950		ug/L		97	80 - 120	5	25
4-Chlorotoluene	ND		2000	1980		ug/L		99	80 - 125	5	25
1,2-Dibromo-3-Chloropropane	ND		2000	2010		ug/L		100	55 - 145	6	25
Dibromochloromethane	ND		2000	1970		ug/L		98	80 - 130	3	25
1,2-Dibromoethane	ND		2000	2090		ug/L		104	80 - 130	2	
Dibromomethane	ND		2000	1960		ug/L		98	75 - 135	1	25
1,2-Dichloroethane	ND		2000	1900		ug/L		95	80 - 125	3	25
1,3-Dichlorobenzene	ND		2000	2010		ug/L		101	80 - 125	3	25
1,4-Dichlorobenzene	ND		2000	2010		ug/L		100	80 - 120	3	25
Dichlorodifluoromethane	ND		2000	2070		ug/L		104	60 - 135	4	25
1,1-Dichloroethane	ND		2000	1850		ug/L		92	80 - 125	0	25
1,1-Dichloroethene	ND		2000	1870		ug/L		93	75 - 130	0	25
cis-1,2-Dichloroethene	1200		2000	3030		ug/L		90	75 - 140	1	25
trans-1,2-Dichloroethene	ND		2000	1830		ug/L		91	80 - 120	2	25
1,2-Dichloropropane	ND		2000	1860		ug/L		93	80 - 120	0	25
1,3-Dichloropropane	ND		2000	2010		ug/L		100	80 - 135	5	25
2,2-Dichloropropane	ND		2000	1950		ug/L		98	70 - 145	0	25
1,1-Dichloropropene	ND		2000	1850		ug/L		93	80 - 125	2	25
cis-1,3-Dichloropropene	ND		2000	1950		ug/L		98	80 - 130	3	25
trans-1,3-Dichloropropene	ND		2000	2000		ug/L		100	80 - 135	3	25
Ethylbenzene	ND		2000	1900		ug/L		95	80 - 125	6	25

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

Lab Sample ID: 250-21700-1 MSD
Matrix: Water
Analysis Batch: 31094

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		2000	1930		ug/L		96	45 - 150	5	25
2-Hexanone	ND		10000	11400		ug/L		114	60 - 150	1	25
Isopropylbenzene	ND		2000	1920		ug/L		96	80 - 130	7	25
p-Isopropyltoluene	ND		2000	2080		ug/L		104	70 - 140	5	25
4-Methyl-2-pentanone (MIBK)	ND		10000	11000		ug/L		110	55 - 150	4	25
Methyl tert-butyl ether	ND		2000	1930		ug/L		96	80 - 130	5	25
Methylene Chloride	ND		2000	1870		ug/L		94	80 - 120	0	25
Naphthalene	ND		2000	2360		ug/L		118	65 - 150	9	25
N-Propylbenzene	ND		2000	2030		ug/L		101	70 - 135	3	25
Styrene	ND		2000	2050		ug/L		102	45 - 150	3	25
1,1,1,2-Tetrachloroethane	ND		2000	1910		ug/L		95	80 - 130	1	25
1,1,2,2-Tetrachloroethane	ND		2000	2040		ug/L		102	75 - 150	5	25
Tetrachloroethene	13000		2000	14400	4	ug/L		63	80 - 125	1	25
Toluene	ND		2000	1880		ug/L		94	75 - 135	1	25
1,2,3-Trichlorobenzene	ND		2000	2230		ug/L		112	70 - 150	7	25
1,2,4-Trichlorobenzene	ND		2000	2200		ug/L		110	70 - 150	8	25
1,1,1-Trichloroethane	ND		2000	1890		ug/L		94	80 - 130	0	25
1,1,2-Trichloroethane	ND		2000	2030		ug/L		101	80 - 130	2	25
Trichloroethene	120		2000	1980		ug/L		93	65 - 130	1	25
Trichlorofluoromethane	ND		2000	2060		ug/L		103	75 - 130	2	25
1,2,3-Trichloropropane	ND		2000	2080		ug/L		104	80 - 135	3	25
1,2,4-Trimethylbenzene	ND		2000	2140		ug/L		107	80 - 140	3	25
1,3,5-Trimethylbenzene	ND		2000	2080		ug/L		104	70 - 145	3	25
Vinyl chloride	ND		2000	1960		ug/L		98	70 - 135	1	25
m,p-Xylene	ND		4000	3900		ug/L		98	75 - 135	5	25
o-Xylene	ND		2000	1920		ug/L		96	80 - 125	6	25
1,2-Dichlorobenzene	ND		2000	1900		ug/L		95	80 - 120	2	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 415.1 - TOC

Lab Sample ID: MB 580-171589/3
Matrix: Water
Analysis Batch: 171589

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			10/02/14 09:22	1

Method: 415.1 - TOC (Continued)

Lab Sample ID: LCS 580-171589/4
Matrix: Water
Analysis Batch: 171589

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	15.0	15.6		mg/L		104	85 - 115

Lab Sample ID: 580-45576-D-1 MS
Matrix: Water
Analysis Batch: 171589

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.1		10.0	11.5		mg/L		104	85 - 115

Lab Sample ID: 580-45576-D-1 MSD
Matrix: Water
Analysis Batch: 171589

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.1		10.0	11.5		mg/L		104	85 - 115	0	20

Lab Sample ID: 580-45545-E-1 DU
Matrix: Water
Analysis Batch: 171589

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	ND		ND		mg/L		NC	20

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13 *
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-113	07-25-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-21700-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
415.1	TOC	MCAWW	TAL SEA

Protocol References:

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 PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

250-21700 Chain of Custody

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

Client Contact Jill Kiernan	**Project Manager:** Jill Kiernan	**Site Contact:** Chris M.	**Date:** 9/29/14	COC No: 1 of 1 COCs
Your Company Name here Hart Crowser	**Tel/Fax:**	**Lab Contact:**	**Carrier:**	
Address 8910 SW Gemini Dr.	**Analysis Turnaround Time** ☒ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:** Walk-in Client:
City/State/Zip Beaverton, OR 97008	TAT if different from Below			Lab Sampling:
(xxx) xxx-xxxx Phone	☒ 2 weeks			
(xxx) xxx-xxxx FAX	☐ 1 week			Job / SDG No.:
Project Name: Frank Wear	☐ 2 days			
Site:	☐ 1 day			Sampler: Chris Martin
PO# 17800-23				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260B	TPC	Sample Specific Notes:
Ext-2	9/29/14	1052	G	W	4	N	Y	X	X	
Trip Blank				W	1			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:
* TB accidentally opened during sampling

dig: -1/L

4.5°C

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:
Chris Martin	Hart Crowser	9/29/14 1530	Clara A Lehman	TA	9/29/14 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

10/8/2014

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-21700-1

Login Number: 21700

List Source: TestAmerica Portland

List Number: 1

Creator: Krause, Thomas A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace in trip blank.
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-21700-1

Login Number: 21700
List Number: 2
Creator: Blankinship, Tom X

List Source: TestAmerica Seattle
List Creation: 10/01/14 11:25 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8° & 3.0°C
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?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Verified at TA-POR
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-22146-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Vanessa Berry

Authorized for release by:
10/27/2014 4:58:02 PM

Vanessa Berry, Project Manager II
(503)906-9233
vanessa.berry@testamericainc.com

Table of Contents

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-22146-1	Ext-2	Water	10/16/14 13:45	10/20/14 08:26
250-22146-2	Trip Blank #357	Water	10/16/14 00:00	10/20/14 08:26

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Job ID: 250-22146-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-22146-1

Comments
No additional comments.

Receipt
The samples were received on 10/20/2014 8:26 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
Method(s) 8260B: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: Dichlorodifluoromethane in the CCV was above the SOP limits +31.6% vs +/- 30.0%. LCS/LCSD recoveries were compliant and all samples were non-detect.

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.

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

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Ext-2
Date Collected: 10/16/14 13:45
Date Received: 10/20/14 08:26

Lab Sample ID: 250-22146-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000		ug/L			10/21/14 17:14	500
Benzene	ND		100		ug/L			10/21/14 17:14	500
Bromobenzene	ND		250		ug/L			10/21/14 17:14	500
Bromochloromethane	ND		250		ug/L			10/21/14 17:14	500
Bromodichloromethane	ND		250		ug/L			10/21/14 17:14	500
Bromoform	ND		500		ug/L			10/21/14 17:14	500
Bromomethane	ND		2500		ug/L			10/21/14 17:14	500
2-Butanone (MEK)	ND		5000		ug/L			10/21/14 17:14	500
n-Butylbenzene	ND		2500		ug/L			10/21/14 17:14	500
sec-Butylbenzene	ND		250		ug/L			10/21/14 17:14	500
tert-Butylbenzene	ND		500		ug/L			10/21/14 17:14	500
Carbon disulfide	ND		5000		ug/L			10/21/14 17:14	500
Carbon tetrachloride	ND		250		ug/L			10/21/14 17:14	500
Chlorobenzene	ND		250		ug/L			10/21/14 17:14	500
Chloroethane	ND		250		ug/L			10/21/14 17:14	500
Chloroform	ND		250		ug/L			10/21/14 17:14	500
Chloromethane	ND		2500		ug/L			10/21/14 17:14	500
2-Chlorotoluene	ND		250		ug/L			10/21/14 17:14	500
4-Chlorotoluene	ND		250		ug/L			10/21/14 17:14	500
1,2-Dibromo-3-Chloropropane	ND		2500		ug/L			10/21/14 17:14	500
Dibromochloromethane	ND		500		ug/L			10/21/14 17:14	500
1,2-Dibromoethane	ND		250		ug/L			10/21/14 17:14	500
Dibromomethane	ND		250		ug/L			10/21/14 17:14	500
1,2-Dichloroethane	ND		250		ug/L			10/21/14 17:14	500
1,3-Dichlorobenzene	ND		250		ug/L			10/21/14 17:14	500
1,4-Dichlorobenzene	ND		250		ug/L			10/21/14 17:14	500
Dichlorodifluoromethane	ND		2500		ug/L			10/21/14 17:14	500
1,1-Dichloroethane	ND		250		ug/L			10/21/14 17:14	500
1,1-Dichloroethene	ND		250		ug/L			10/21/14 17:14	500
cis-1,2-Dichloroethene	**1800**		250		ug/L			10/21/14 17:14	500
trans-1,2-Dichloroethene	ND		250		ug/L			10/21/14 17:14	500
1,2-Dichloropropane	ND		250		ug/L			10/21/14 17:14	500
1,3-Dichloropropane	ND		250		ug/L			10/21/14 17:14	500
2,2-Dichloropropane	ND		250		ug/L			10/21/14 17:14	500
1,1-Dichloropropene	ND		500		ug/L			10/21/14 17:14	500
cis-1,3-Dichloropropene	ND		250		ug/L			10/21/14 17:14	500
trans-1,3-Dichloropropene	ND		250		ug/L			10/21/14 17:14	500
Ethylbenzene	ND		250		ug/L			10/21/14 17:14	500
Hexachlorobutadiene	ND		2000		ug/L			10/21/14 17:14	500
2-Hexanone	ND		5000		ug/L			10/21/14 17:14	500
Isopropylbenzene	ND		1000		ug/L			10/21/14 17:14	500
p-Isopropyltoluene	ND		1000		ug/L			10/21/14 17:14	500
4-Methyl-2-pentanone (MIBK)	ND		2500		ug/L			10/21/14 17:14	500
Methyl tert-butyl ether	ND		500		ug/L			10/21/14 17:14	500
Methylene Chloride	ND		2500		ug/L			10/21/14 17:14	500
Naphthalene	ND		1000		ug/L			10/21/14 17:14	500
N-Propylbenzene	ND		250		ug/L			10/21/14 17:14	500
Styrene	ND		250		ug/L			10/21/14 17:14	500
1,1,1,2-Tetrachloroethane	ND		250		ug/L			10/21/14 17:14	500

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

Client Sample ID: Ext-2
Date Collected: 10/16/14 13:45
Date Received: 10/20/14 08:26

Lab Sample ID: 250-22146-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		250		ug/L			10/21/14 17:14	500
Tetrachloroethene	**53000**		250		ug/L			10/21/14 17:14	500
Toluene	ND		250		ug/L			10/21/14 17:14	500
1,2,3-Trichlorobenzene	ND		500		ug/L			10/21/14 17:14	500
1,2,4-Trichlorobenzene	ND		500		ug/L			10/21/14 17:14	500
1,1,1-Trichloroethane	ND		250		ug/L			10/21/14 17:14	500
1,1,2-Trichloroethane	ND		250		ug/L			10/21/14 17:14	500
Trichloroethene	**500**		250		ug/L			10/21/14 17:14	500
Trichlorofluoromethane	ND		250		ug/L			10/21/14 17:14	500
1,2,3-Trichloropropane	ND		250		ug/L			10/21/14 17:14	500
1,2,4-Trimethylbenzene	ND		500		ug/L			10/21/14 17:14	500
1,3,5-Trimethylbenzene	ND		250		ug/L			10/21/14 17:14	500
Vinyl chloride	ND		250		ug/L			10/21/14 17:14	500
m,p-Xylene	ND		500		ug/L			10/21/14 17:14	500
o-Xylene	ND		250		ug/L			10/21/14 17:14	500
1,2-Dichlorobenzene	ND		250		ug/L			10/21/14 17:14	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*80 - 120*		*10/21/14 17:14*	*500*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*10/21/14 17:14*	*500*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*10/21/14 17:14*	*500*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/21/14 17:14*	*500*

Client Sample ID: Trip Blank #357
Date Collected: 10/16/14 00:00
Date Received: 10/20/14 08:26

Lab Sample ID: 250-22146-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/21/14 15:56	1
Benzene	ND		0.20		ug/L			10/21/14 15:56	1
Bromobenzene	ND		0.50		ug/L			10/21/14 15:56	1
Bromochloromethane	ND		0.50		ug/L			10/21/14 15:56	1
Bromodichloromethane	ND		0.50		ug/L			10/21/14 15:56	1
Bromoform	ND		1.0		ug/L			10/21/14 15:56	1
Bromomethane	ND		5.0		ug/L			10/21/14 15:56	1
2-Butanone (MEK)	ND		10		ug/L			10/21/14 15:56	1
n-Butylbenzene	ND		5.0		ug/L			10/21/14 15:56	1
sec-Butylbenzene	ND		0.50		ug/L			10/21/14 15:56	1
tert-Butylbenzene	ND		1.0		ug/L			10/21/14 15:56	1
Carbon disulfide	ND		10		ug/L			10/21/14 15:56	1
Carbon tetrachloride	ND		0.50		ug/L			10/21/14 15:56	1
Chlorobenzene	ND		0.50		ug/L			10/21/14 15:56	1
Chloroethane	ND		0.50		ug/L			10/21/14 15:56	1
Chloroform	ND		0.50		ug/L			10/21/14 15:56	1
Chloromethane	ND		5.0		ug/L			10/21/14 15:56	1
2-Chlorotoluene	ND		0.50		ug/L			10/21/14 15:56	1
4-Chlorotoluene	ND		0.50		ug/L			10/21/14 15:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/21/14 15:56	1
Dibromochloromethane	ND		1.0		ug/L			10/21/14 15:56	1
1,2-Dibromoethane	ND		0.50		ug/L			10/21/14 15:56	1
Dibromomethane	ND		0.50		ug/L			10/21/14 15:56	1

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

Client Sample ID: Trip Blank #357
Date Collected: 10/16/14 00:00
Date Received: 10/20/14 08:26

Lab Sample ID: 250-22146-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50		ug/L			10/21/14 15:56	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/21/14 15:56	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/21/14 15:56	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/21/14 15:56	1
1,1-Dichloroethane	ND		0.50		ug/L			10/21/14 15:56	1
1,1-Dichloroethene	ND		0.50		ug/L			10/21/14 15:56	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/21/14 15:56	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/21/14 15:56	1
1,2-Dichloropropane	ND		0.50		ug/L			10/21/14 15:56	1
1,3-Dichloropropane	ND		0.50		ug/L			10/21/14 15:56	1
2,2-Dichloropropane	ND		0.50		ug/L			10/21/14 15:56	1
1,1-Dichloropropene	ND		1.0		ug/L			10/21/14 15:56	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/21/14 15:56	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/21/14 15:56	1
Ethylbenzene	ND		0.50		ug/L			10/21/14 15:56	1
Hexachlorobutadiene	ND		4.0		ug/L			10/21/14 15:56	1
2-Hexanone	ND		10		ug/L			10/21/14 15:56	1
Isopropylbenzene	ND		2.0		ug/L			10/21/14 15:56	1
p-Isopropyltoluene	ND		2.0		ug/L			10/21/14 15:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/21/14 15:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/21/14 15:56	1
Methylene Chloride	ND		5.0		ug/L			10/21/14 15:56	1
Naphthalene	ND		2.0		ug/L			10/21/14 15:56	1
N-Propylbenzene	ND		0.50		ug/L			10/21/14 15:56	1
Styrene	ND		0.50		ug/L			10/21/14 15:56	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/21/14 15:56	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/21/14 15:56	1
Tetrachloroethene	ND		0.50		ug/L			10/21/14 15:56	1
Toluene	ND		0.50		ug/L			10/21/14 15:56	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/21/14 15:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/21/14 15:56	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/21/14 15:56	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/21/14 15:56	1
Trichloroethene	ND		0.50		ug/L			10/21/14 15:56	1
Trichlorofluoromethane	ND		0.50		ug/L			10/21/14 15:56	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/21/14 15:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/21/14 15:56	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/21/14 15:56	1
Vinyl chloride	ND		0.50		ug/L			10/21/14 15:56	1
m,p-Xylene	ND		1.0		ug/L			10/21/14 15:56	1
o-Xylene	ND		0.50		ug/L			10/21/14 15:56	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/21/14 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*10/21/14 15:56*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/21/14 15:56*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*10/21/14 15:56*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/21/14 15:56*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

General Chemistry

Client Sample ID: Ext-2
Date Collected: 10/16/14 13:45
Date Received: 10/20/14 08:26

Lab Sample ID: 250-22146-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.8		1.0		mg/L			10/23/14 15:33	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 250-31514/7
Matrix: Water
Analysis Batch: 31514

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/21/14 12:53	1
Benzene	ND		0.20		ug/L			10/21/14 12:53	1
Bromobenzene	ND		0.50		ug/L			10/21/14 12:53	1
Bromochloromethane	ND		0.50		ug/L			10/21/14 12:53	1
Bromodichloromethane	ND		0.50		ug/L			10/21/14 12:53	1
Bromoform	ND		1.0		ug/L			10/21/14 12:53	1
Bromomethane	ND		5.0		ug/L			10/21/14 12:53	1
2-Butanone (MEK)	ND		10		ug/L			10/21/14 12:53	1
n-Butylbenzene	ND		5.0		ug/L			10/21/14 12:53	1
sec-Butylbenzene	ND		0.50		ug/L			10/21/14 12:53	1
tert-Butylbenzene	ND		1.0		ug/L			10/21/14 12:53	1
Carbon disulfide	ND		10		ug/L			10/21/14 12:53	1
Carbon tetrachloride	ND		0.50		ug/L			10/21/14 12:53	1
Chlorobenzene	ND		0.50		ug/L			10/21/14 12:53	1
Chloroethane	ND		0.50		ug/L			10/21/14 12:53	1
Chloroform	ND		0.50		ug/L			10/21/14 12:53	1
Chloromethane	ND		5.0		ug/L			10/21/14 12:53	1
2-Chlorotoluene	ND		0.50		ug/L			10/21/14 12:53	1
4-Chlorotoluene	ND		0.50		ug/L			10/21/14 12:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/21/14 12:53	1
Dibromochloromethane	ND		1.0		ug/L			10/21/14 12:53	1
1,2-Dibromoethane	ND		0.50		ug/L			10/21/14 12:53	1
Dibromomethane	ND		0.50		ug/L			10/21/14 12:53	1
1,2-Dichloroethane	ND		0.50		ug/L			10/21/14 12:53	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/21/14 12:53	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/21/14 12:53	1
Dichlorodifluoromethane	ND		5.0		ug/L			10/21/14 12:53	1
1,1-Dichloroethane	ND		0.50		ug/L			10/21/14 12:53	1
1,1-Dichloroethene	ND		0.50		ug/L			10/21/14 12:53	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/21/14 12:53	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/21/14 12:53	1
1,2-Dichloropropane	ND		0.50		ug/L			10/21/14 12:53	1
1,3-Dichloropropane	ND		0.50		ug/L			10/21/14 12:53	1
2,2-Dichloropropane	ND		0.50		ug/L			10/21/14 12:53	1
1,1-Dichloropropene	ND		1.0		ug/L			10/21/14 12:53	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/21/14 12:53	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/21/14 12:53	1
Ethylbenzene	ND		0.50		ug/L			10/21/14 12:53	1
Hexachlorobutadiene	ND		4.0		ug/L			10/21/14 12:53	1
2-Hexanone	ND		10		ug/L			10/21/14 12:53	1
Isopropylbenzene	ND		2.0		ug/L			10/21/14 12:53	1
p-Isopropyltoluene	ND		2.0		ug/L			10/21/14 12:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/21/14 12:53	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/21/14 12:53	1
Methylene Chloride	ND		5.0		ug/L			10/21/14 12:53	1
Naphthalene	ND		2.0		ug/L			10/21/14 12:53	1
N-Propylbenzene	ND		0.50		ug/L			10/21/14 12:53	1
Styrene	ND		0.50		ug/L			10/21/14 12:53	1

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

Lab Sample ID: MB 250-31514/7
Matrix: Water
Analysis Batch: 31514

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/21/14 12:53	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/21/14 12:53	1
Tetrachloroethene	ND		0.50		ug/L			10/21/14 12:53	1
Toluene	ND		0.50		ug/L			10/21/14 12:53	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/21/14 12:53	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/21/14 12:53	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/21/14 12:53	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/21/14 12:53	1
Trichloroethene	ND		0.50		ug/L			10/21/14 12:53	1
Trichlorofluoromethane	ND		0.50		ug/L			10/21/14 12:53	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/21/14 12:53	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/21/14 12:53	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/21/14 12:53	1
Vinyl chloride	ND		0.50		ug/L			10/21/14 12:53	1
m,p-Xylene	ND		1.0		ug/L			10/21/14 12:53	1
o-Xylene	ND		0.50		ug/L			10/21/14 12:53	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/21/14 12:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*10/21/14 12:53*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/21/14 12:53*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*10/21/14 12:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/21/14 12:53*	*1*

Lab Sample ID: LCS 250-31514/4
Matrix: Water
Analysis Batch: 31514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	95.2		ug/L		95	55 - 145
Benzene	20.0	17.7		ug/L		89	80 - 120
Bromobenzene	20.0	19.0		ug/L		95	75 - 120
Bromochloromethane	20.0	19.0		ug/L		95	75 - 125
Bromodichloromethane	20.0	19.4		ug/L		97	80 - 130
Bromoform	20.0	17.5		ug/L		87	55 - 135
Bromomethane	20.0	19.6		ug/L		98	35 - 150
2-Butanone (MEK)	100	94.5		ug/L		95	70 - 140
n-Butylbenzene	20.0	21.0		ug/L		105	75 - 130
sec-Butylbenzene	20.0	22.2		ug/L		111	60 - 130
tert-Butylbenzene	20.0	20.6		ug/L		103	70 - 130
Carbon disulfide	40.0	41.4		ug/L		104	60 - 120
Carbon tetrachloride	20.0	19.2		ug/L		96	70 - 135
Chlorobenzene	20.0	19.3		ug/L		97	80 - 125
Chloroethane	20.0	20.8		ug/L		104	75 - 125
Chloroform	20.0	19.2		ug/L		96	80 - 120
Chloromethane	20.0	21.5		ug/L		107	45 - 150
2-Chlorotoluene	20.0	19.8		ug/L		99	70 - 125
4-Chlorotoluene	20.0	20.2		ug/L		101	75 - 125

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

Lab Sample ID: LCS 250-31514/4
Matrix: Water
Analysis Batch: 31514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	20.0	15.4		ug/L		77	70 - 135
Dibromochloromethane	20.0	19.4		ug/L		97	65 - 140
1,2-Dibromoethane	20.0	19.7		ug/L		98	80 - 125
Dibromomethane	20.0	18.8		ug/L		94	80 - 120
1,2-Dichloroethane	20.0	18.9		ug/L		94	75 - 125
1,3-Dichlorobenzene	20.0	19.9		ug/L		100	75 - 125
1,4-Dichlorobenzene	20.0	19.8		ug/L		99	70 - 120
Dichlorodifluoromethane	20.0	23.5		ug/L		117	45 - 140
1,1-Dichloroethane	20.0	18.9		ug/L		95	80 - 120
1,1-Dichloroethene	20.0	18.3		ug/L		91	75 - 120
cis-1,2-Dichloroethene	20.0	18.6		ug/L		93	80 - 120
trans-1,2-Dichloroethene	20.0	18.2		ug/L		91	80 - 120
1,2-Dichloropropane	20.0	18.5		ug/L		92	80 - 130
1,3-Dichloropropane	20.0	18.5		ug/L		92	80 - 120
2,2-Dichloropropane	20.0	19.5		ug/L		98	60 - 145
1,1-Dichloropropene	20.0	18.5		ug/L		93	80 - 120
cis-1,3-Dichloropropene	20.0	19.4		ug/L		97	80 - 125
trans-1,3-Dichloropropene	20.0	19.5		ug/L		97	80 - 130
Ethylbenzene	20.0	19.4		ug/L		97	80 - 120
Hexachlorobutadiene	20.0	19.5		ug/L		97	60 - 150
2-Hexanone	100	110		ug/L		110	70 - 140
Isopropylbenzene	20.0	19.5		ug/L		97	75 - 125
p-Isopropyltoluene	20.0	22.6		ug/L		113	65 - 130
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	70 - 135
Methyl tert-butyl ether	20.0	18.8		ug/L		94	80 - 130
Methylene Chloride	20.0	18.8		ug/L		94	80 - 120
Naphthalene	20.0	19.4		ug/L		97	70 - 150
N-Propylbenzene	20.0	20.9		ug/L		104	75 - 130
Styrene	20.0	20.3		ug/L		101	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.5		ug/L		98	65 - 140
1,1,2,2-Tetrachloroethane	20.0	17.7		ug/L		88	75 - 130
Tetrachloroethene	20.0	19.1		ug/L		96	80 - 125
Toluene	20.0	19.3		ug/L		96	80 - 125
1,2,3-Trichlorobenzene	20.0	19.6		ug/L		98	65 - 140
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	75 - 130
1,1,1-Trichloroethane	20.0	18.8		ug/L		94	75 - 135
1,1,2-Trichloroethane	20.0	19.1		ug/L		95	80 - 125
Trichloroethene	20.0	18.4		ug/L		92	80 - 135
Trichlorofluoromethane	20.0	20.6		ug/L		103	75 - 140
1,2,3-Trichloropropane	20.0	17.1		ug/L		85	75 - 125
1,2,4-Trimethylbenzene	20.0	22.7		ug/L		113	70 - 130
1,3,5-Trimethylbenzene	20.0	21.4		ug/L		107	75 - 135
Vinyl chloride	20.0	21.7		ug/L		108	75 - 135
m,p-Xylene	40.0	38.9		ug/L		97	70 - 130
o-Xylene	20.0	19.6		ug/L		98	75 - 125
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	80 - 120

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

Lab Sample ID: LCS 250-31514/4
Matrix: Water
Analysis Batch: 31514

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCSD 250-31514/5
Matrix: Water
Analysis Batch: 31514

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
Acetone			100	97.6		ug/L		98	55 - 145	3	25
Benzene			20.0	18.5		ug/L		93	80 - 120	5	25
Bromobenzene			20.0	20.5		ug/L		103	75 - 120	8	25
Bromochloromethane			20.0	20.1		ug/L		100	75 - 125	6	25
Bromodichloromethane			20.0	20.3		ug/L		102	80 - 130	5	25
Bromoform			20.0	19.2		ug/L		96	55 - 135	10	25
Bromomethane			20.0	19.9		ug/L		99	35 - 150	2	25
2-Butanone (MEK)			100	99.5		ug/L		99	70 - 140	5	25
n-Butylbenzene			20.0	21.5		ug/L		107	75 - 130	3	25
sec-Butylbenzene			20.0	23.0		ug/L		115	60 - 130	3	25
tert-Butylbenzene			20.0	21.4		ug/L		107	70 - 130	4	25
Carbon disulfide			40.0	40.7		ug/L		102	60 - 120	2	25
Carbon tetrachloride			20.0	19.7		ug/L		99	70 - 135	3	25
Chlorobenzene			20.0	19.3		ug/L		97	80 - 125	0	25
Chloroethane			20.0	22.0		ug/L		110	75 - 125	6	25
Chloroform			20.0	19.7		ug/L		98	80 - 120	2	25
Chloromethane			20.0	21.8		ug/L		109	45 - 150	2	25
2-Chlorotoluene			20.0	20.4		ug/L		102	70 - 125	3	25
4-Chlorotoluene			20.0	21.2		ug/L		106	75 - 125	5	25
1,2-Dibromo-3-Chloropropane			20.0	16.9		ug/L		84	70 - 135	9	25
Dibromochloromethane			20.0	20.0		ug/L		100	65 - 140	3	25
1,2-Dibromoethane			20.0	19.9		ug/L		100	80 - 125	1	
Dibromomethane			20.0	19.2		ug/L		96	80 - 120	2	25
1,2-Dichloroethane			20.0	19.3		ug/L		96	75 - 125	2	25
1,3-Dichlorobenzene			20.0	21.0		ug/L		105	75 - 125	5	25
1,4-Dichlorobenzene			20.0	20.4		ug/L		102	70 - 120	3	25
Dichlorodifluoromethane			20.0	23.6		ug/L		118	45 - 140	0	25
1,1-Dichloroethane			20.0	19.3		ug/L		97	80 - 120	2	25
1,1-Dichloroethene			20.0	18.9		ug/L		95	75 - 120	4	25
cis-1,2-Dichloroethene			20.0	19.1		ug/L		95	80 - 120	2	25
trans-1,2-Dichloroethene			20.0	18.8		ug/L		94	80 - 120	3	25
1,2-Dichloropropane			20.0	19.4		ug/L		97	80 - 130	5	25
1,3-Dichloropropane			20.0	19.2		ug/L		96	80 - 120	4	25
2,2-Dichloropropane			20.0	20.3		ug/L		102	60 - 145	4	25
1,1-Dichloropropene			20.0	19.3		ug/L		97	80 - 120	4	25
cis-1,3-Dichloropropene			20.0	20.3		ug/L		102	80 - 125	5	25
trans-1,3-Dichloropropene			20.0	20.4		ug/L		102	80 - 130	5	25
Ethylbenzene			20.0	20.0		ug/L		100	80 - 120	3	25

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

Lab Sample ID: LCSD 250-31514/5
Matrix: Water
Analysis Batch: 31514

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
Hexachlorobutadiene	20.0	19.1		ug/L		96	60 - 150	2	25
2-Hexanone	100	117		ug/L		117	70 - 140	6	25
Isopropylbenzene	20.0	20.8		ug/L		104	75 - 125	7	25
p-Isopropyltoluene	20.0	23.2		ug/L		116	65 - 130	3	25
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	70 - 135	6	25
Methyl tert-butyl ether	20.0	19.4		ug/L		97	80 - 130	3	25
Methylene Chloride	20.0	19.9		ug/L		100	80 - 120	6	25
Naphthalene	20.0	20.3		ug/L		101	70 - 150	5	25
N-Propylbenzene	20.0	22.1		ug/L		110	75 - 130	5	25
Styrene	20.0	20.8		ug/L		104	70 - 130	2	25
1,1,1,2-Tetrachloroethane	20.0	20.2		ug/L		101	65 - 140	4	25
1,1,2,2-Tetrachloroethane	20.0	18.4		ug/L		92	75 - 130	4	25
Tetrachloroethene	20.0	19.1		ug/L		96	80 - 125	0	25
Toluene	20.0	19.4		ug/L		97	80 - 125	1	25
1,2,3-Trichlorobenzene	20.0	20.8		ug/L		104	65 - 140	6	25
1,2,4-Trichlorobenzene	20.0	21.9		ug/L		110	75 - 130	6	25
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	75 - 135	5	25
1,1,2-Trichloroethane	20.0	19.7		ug/L		99	80 - 125	3	25
Trichloroethene	20.0	19.3		ug/L		96	80 - 135	5	25
Trichlorofluoromethane	20.0	22.1		ug/L		111	75 - 140	7	25
1,2,3-Trichloropropane	20.0	18.4		ug/L		92	75 - 125	8	25
1,2,4-Trimethylbenzene	20.0	23.2		ug/L		116	70 - 130	2	25
1,3,5-Trimethylbenzene	20.0	22.7		ug/L		113	75 - 135	6	25
Vinyl chloride	20.0	22.1		ug/L		111	75 - 135	2	25
m,p-Xylene	40.0	40.8		ug/L		102	70 - 130	5	25
o-Xylene	20.0	20.4		ug/L		102	75 - 125	4	25
1,2-Dichlorobenzene	20.0	17.7		ug/L		89	80 - 120	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 250-22146-1 MS
Matrix: Water
Analysis Batch: 31514

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50000	42800		ug/L		86	55 - 125
Benzene	ND		10000	7710	F1	ug/L		77	80 - 125
Bromobenzene	ND		10000	8440		ug/L		84	80 - 125
Bromochloromethane	ND		10000	8820		ug/L		88	80 - 130
Bromodichloromethane	ND		10000	8660		ug/L		87	80 - 135
Bromoform	ND		10000	7820		ug/L		78	65 - 150
Bromomethane	ND		10000	9610		ug/L		96	30 - 150
2-Butanone (MEK)	ND		50000	46700		ug/L		93	70 - 145
n-Butylbenzene	ND		10000	9040		ug/L		90	70 - 140

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

Lab Sample ID: 250-22146-1 MS
Matrix: Water
Analysis Batch: 31514

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	ND		10000	9360		ug/L		94	70 - 135
tert-Butylbenzene	ND		10000	8920		ug/L		89	70 - 135
Carbon disulfide	ND		20000	20500		ug/L		103	40 - 150
Carbon tetrachloride	ND		10000	8040		ug/L		80	75 - 130
Chlorobenzene	ND		10000	8650		ug/L		87	70 - 135
Chloroethane	ND		10000	10900		ug/L		109	75 - 130
Chloroform	ND		10000	8630		ug/L		86	80 - 125
Chloromethane	ND		10000	11000		ug/L		110	40 - 150
2-Chlorotoluene	ND		10000	8600		ug/L		86	80 - 120
4-Chlorotoluene	ND		10000	8830		ug/L		88	80 - 125
1,2-Dibromo-3-Chloropropane	ND		10000	7430		ug/L		74	55 - 145
Dibromochloromethane	ND		10000	8790		ug/L		88	80 - 130
1,2-Dibromoethane	ND		10000	8770		ug/L		88	80 - 130
Dibromomethane	ND		10000	8710		ug/L		87	75 - 135
1,2-Dichloroethane	ND		10000	8710		ug/L		87	80 - 125
1,3-Dichlorobenzene	ND		10000	8670		ug/L		87	80 - 125
1,4-Dichlorobenzene	ND		10000	8600		ug/L		86	80 - 120
Dichlorodifluoromethane	ND		10000	11800		ug/L		118	60 - 135
1,1-Dichloroethane	ND		10000	8480		ug/L		85	80 - 125
1,1-Dichloroethene	ND		10000	7950		ug/L		80	75 - 130
cis-1,2-Dichloroethene	1800		10000	10100		ug/L		83	75 - 140
trans-1,2-Dichloroethene	ND		10000	8000		ug/L		80	80 - 120
1,2-Dichloropropane	ND		10000	8310		ug/L		83	80 - 120
1,3-Dichloropropane	ND		10000	8460		ug/L		85	80 - 135
2,2-Dichloropropane	ND		10000	8570		ug/L		86	70 - 145
1,1-Dichloropropene	ND		10000	8000		ug/L		80	80 - 125
cis-1,3-Dichloropropene	ND		10000	8730		ug/L		87	80 - 130
trans-1,3-Dichloropropene	ND		10000	8830		ug/L		88	80 - 135
Ethylbenzene	ND		10000	8150		ug/L		81	80 - 125
Hexachlorobutadiene	ND		10000	8170		ug/L		82	45 - 150
2-Hexanone	ND		50000	51500		ug/L		103	60 - 150
Isopropylbenzene	ND		10000	8410		ug/L		84	80 - 130
p-Isopropyltoluene	ND		10000	9560		ug/L		96	70 - 140
4-Methyl-2-pentanone (MIBK)	ND		50000	50200		ug/L		100	55 - 150
Methyl tert-butyl ether	ND		10000	9490		ug/L		95	80 - 130
Methylene Chloride	ND		10000	8620		ug/L		86	80 - 120
Naphthalene	ND		10000	8890		ug/L		89	65 - 150
N-Propylbenzene	ND		10000	8890		ug/L		89	70 - 135
Styrene	ND		10000	8650		ug/L		86	45 - 150
1,1,1,2-Tetrachloroethane	ND		10000	8680		ug/L		87	80 - 130
1,1,2,2-Tetrachloroethane	ND		10000	7980		ug/L		80	75 - 150
Tetrachloroethene	53000		10000	61200	4	ug/L		81	80 - 125
Toluene	ND		10000	8290		ug/L		83	75 - 135
1,2,3-Trichlorobenzene	ND		10000	8580		ug/L		86	70 - 150
1,2,4-Trichlorobenzene	ND		10000	8910		ug/L		89	70 - 150
1,1,1-Trichloroethane	ND		10000	8270		ug/L		83	80 - 130
1,1,2-Trichloroethane	ND		10000	8700		ug/L		87	80 - 130
Trichloroethene	500		10000	8420		ug/L		79	65 - 130

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

Lab Sample ID: 250-22146-1 MS
Matrix: Water
Analysis Batch: 31514

Client Sample ID: Ext-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		10000	11000		ug/L		110	75 - 130
1,2,3-Trichloropropane	ND		10000	8090		ug/L		81	80 - 135
1,2,4-Trimethylbenzene	ND		10000	9660		ug/L		97	80 - 140
1,3,5-Trimethylbenzene	ND		10000	9240		ug/L		92	70 - 145
Vinyl chloride	ND		10000	11100		ug/L		111	70 - 135
m,p-Xylene	ND		20000	16500		ug/L		82	75 - 135
o-Xylene	ND		10000	8320		ug/L		83	80 - 125
1,2-Dichlorobenzene	ND		10000	8080		ug/L		81	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 250-22146-C-1 MSD
Matrix: Water
Analysis Batch: 31514

Client Sample ID: 250-22146-C-1 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50000	41900		ug/L		84	55 - 125	2	25
Benzene	ND		10000	8320		ug/L		83	80 - 125	8	25
Bromobenzene	ND		10000	9570		ug/L		96	80 - 125	13	25
Bromochloromethane	ND		10000	9130		ug/L		91	80 - 130	3	25
Bromodichloromethane	ND		10000	9400		ug/L		94	80 - 135	8	25
Bromoform	ND		10000	8440		ug/L		84	65 - 150	8	25
Bromomethane	ND		10000	10300		ug/L		103	30 - 150	7	25
2-Butanone (MEK)	ND		50000	44600		ug/L		89	70 - 145	5	25
n-Butylbenzene	ND		10000	9730		ug/L		97	70 - 140	7	25
sec-Butylbenzene	ND		10000	10400		ug/L		104	70 - 135	10	25
tert-Butylbenzene	ND		10000	10200		ug/L		102	70 - 135	13	25
Carbon disulfide	ND		20000	19100		ug/L		95	40 - 150	7	25
Carbon tetrachloride	ND		10000	8990		ug/L		90	75 - 130	11	25
Chlorobenzene	ND		10000	9330		ug/L		93	70 - 135	8	25
Chloroethane	ND		10000	10900		ug/L		109	75 - 130	0	25
Chloroform	ND		10000	9280		ug/L		93	80 - 125	7	25
Chloromethane	ND		10000	11000		ug/L		110	40 - 150	0	25
2-Chlorotoluene	ND		10000	9430		ug/L		94	80 - 120	9	25
4-Chlorotoluene	ND		10000	9700		ug/L		97	80 - 125	9	25
1,2-Dibromo-3-Chloropropane	ND		10000	7890		ug/L		79	55 - 145	6	25
Dibromochloromethane	ND		10000	9340		ug/L		93	80 - 130	6	25
1,2-Dibromoethane	ND		10000	9160		ug/L		92	80 - 130	4	
Dibromomethane	ND		10000	9290		ug/L		93	75 - 135	6	25
1,2-Dichloroethane	ND		10000	9200		ug/L		92	80 - 125	5	25
1,3-Dichlorobenzene	ND		10000	9490		ug/L		95	80 - 125	9	25
1,4-Dichlorobenzene	ND		10000	9370		ug/L		94	80 - 120	8	25
Dichlorodifluoromethane	ND		10000	11800		ug/L		118	60 - 135	0	25
1,1-Dichloroethane	ND		10000	9120		ug/L		91	80 - 125	7	25

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

Lab Sample ID: 250-22146-C-1 MSD
Matrix: Water
Analysis Batch: 31514

Client Sample ID: 250-22146-C-1 MSD
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-Dichloroethene	ND		10000	8190		ug/L		82	75 - 130	3	25
cis-1,2-Dichloroethene	1800		10000	10400		ug/L		87	75 - 140	2	25
trans-1,2-Dichloroethene	ND		10000	8590		ug/L		86	80 - 120	7	25
1,2-Dichloropropane	ND		10000	8780		ug/L		88	80 - 120	6	25
1,3-Dichloropropane	ND		10000	8950		ug/L		90	80 - 135	6	25
2,2-Dichloropropane	ND		10000	9240		ug/L		92	70 - 145	8	25
1,1-Dichloropropene	ND		10000	8640		ug/L		86	80 - 125	8	25
cis-1,3-Dichloropropene	ND		10000	9300		ug/L		93	80 - 130	6	25
trans-1,3-Dichloropropene	ND		10000	9200		ug/L		92	80 - 135	4	25
Ethylbenzene	ND		10000	9040		ug/L		90	80 - 125	10	25
Hexachlorobutadiene	ND		10000	8530		ug/L		85	45 - 150	4	25
2-Hexanone	ND		50000	50800		ug/L		102	60 - 150	1	25
Isopropylbenzene	ND		10000	9360		ug/L		94	80 - 130	11	25
p-Isopropyltoluene	ND		10000	10600		ug/L		106	70 - 140	10	25
4-Methyl-2-pentanone (MIBK)	ND		50000	48600		ug/L		97	55 - 150	3	25
Methyl tert-butyl ether	ND		10000	8960		ug/L		90	80 - 130	6	25
Methylene Chloride	ND		10000	9060		ug/L		91	80 - 120	5	25
Naphthalene	ND		10000	9040		ug/L		90	65 - 150	2	25
N-Propylbenzene	ND		10000	10100		ug/L		101	70 - 135	13	25
Styrene	ND		10000	9720		ug/L		97	45 - 150	12	25
1,1,1,2-Tetrachloroethane	ND		10000	9540		ug/L		95	80 - 130	9	25
1,1,2,2-Tetrachloroethane	ND		10000	8550		ug/L		85	75 - 150	7	25
Tetrachloroethene	53000		10000	60700	4	ug/L		70	80 - 125	1	25
Toluene	ND		10000	9310		ug/L		93	75 - 135	12	25
1,2,3-Trichlorobenzene	ND		10000	8950		ug/L		89	70 - 150	4	25
1,2,4-Trichlorobenzene	ND		10000	9460		ug/L		95	70 - 150	6	25
1,1,1-Trichloroethane	ND		10000	9000		ug/L		90	80 - 130	8	25
1,1,2-Trichloroethane	ND		10000	9320		ug/L		93	80 - 130	7	25
Trichloroethene	500		10000	9350		ug/L		88	65 - 130	11	25
Trichlorofluoromethane	ND		10000	11300		ug/L		113	75 - 130	3	25
1,2,3-Trichloropropane	ND		10000	8340		ug/L		83	80 - 135	3	25
1,2,4-Trimethylbenzene	ND		10000	11000		ug/L		110	80 - 140	13	25
1,3,5-Trimethylbenzene	ND		10000	10400		ug/L		104	70 - 145	11	25
Vinyl chloride	ND		10000	11400		ug/L		114	70 - 135	2	25
m,p-Xylene	ND		20000	18400		ug/L		92	75 - 135	11	25
o-Xylene	ND		10000	9510		ug/L		95	80 - 125	13	25
1,2-Dichlorobenzene	ND		10000	8370		ug/L		84	80 - 120	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-173628/1
Matrix: Water
Analysis Batch: 173628

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			10/23/14 13:30	1

Lab Sample ID: LCS 580-173628/2
Matrix: Water
Analysis Batch: 173628

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			15.0	15.0		mg/L		100	85 - 115		

Lab Sample ID: 250-22218-L-3 MS
Matrix: Water
Analysis Batch: 173628

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	39		100	131		mg/L		91	85 - 115		

Lab Sample ID: 250-22218-L-3 MSD
Matrix: Water
Analysis Batch: 173628

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	39		100	129		mg/L		90	85 - 115	1	20

Lab Sample ID: 250-22218-L-3 DU
Matrix: Water
Analysis Batch: 173628

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	39			36.8		mg/L				6	20

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-14
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Method Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 250-22146-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
SM 5310B	Organic Carbon, Total (TOC)	SM	TAL SEA

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Cust

250-22146 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

TestAmerica Laboratories, Inc.

Client Contact							
Your Company Name here: Hart Crowser	Project Manager: Jill Kiernan	Site Contact: Chris Martin	Date: 10/16/14	COC No: 1 of 1 COCs
Address: 8910 SW Gemini Dr.	Tel/Fax: 503-620-7284	Lab Contact:	Carrier:	
City/State/Zip: Beaverton, OR 97008	Analysis Turnaround Time: ☒ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
(xxx) xxx-xxxx Phone: 503 620-7284	TAT if different from Below ____			Walk-in Client:
(xxx) xxx-xxxx FAX	☒ 2 weeks			Lab Sampling:
Project Name: Frank Wear	☐ 1 week			Job / SDG No.:
Site:	☐ 2 days			
P O # 17800-23/Task 8 9 OM	☐ 1 day			Sampler: CWM

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOCs 8260B	TOC	Sample Specific Notes:
Ext-2	10/16/14	1345	G	W	4	N	Y	X	X	
Trip Blank #357				W	1			X		

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

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:

Sampled by: Chris Martin [signature]

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 4.4 Corr'd: ____ | Therm ID No.: IR-6-L

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chris Martin [signature]	Hart Crowser	10/20 826	[signature]	TA	10/20/14 @ 0852
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-22146-1

Login Number: 22146

List Source: TestAmerica Portland

List Number: 1

Creator: Svabik-Seror, Philip M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 250-22146-1

Login Number: 22146
List Number: 2
Creator: Abello, Andrea N

List Source: TestAmerica Seattle
List Creation: 10/21/14 10:22 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	A2TB = 2.1 / 2.4, 0.6 / 0.9, 0.4 / 0.7
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-46412-1
Client Project/Site: Frank Wear Site

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
12/4/2014 5:00:45 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-46412-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-46412-1

Comments
No additional comments.

Receipt
The samples were received on 11/20/2014 8:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

Except:

The container labels of sample DUP-1 (580-46412-2) lack the sampling time. The sample is logged in per chain of custody.

No (0) containers were received for sample MW-2 (11-19-14 @ 10:45), the last sample listed on the chain of custody. The sample was removed from the log-in.

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: DUP-1 (580-46412-2), MW-17 (580-46412-7), MW-20 (580-46412-10), MW-21 (580-46412-4), MW-22 (580-46412-3), MW-23 (580-46412-8), MW-24 (580-46412-1), MW-25 (580-46412-5), MW-5 (580-46412-13), MW-7 (580-46412-14). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-25 (580-46412-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The associated sample(s) were reanalyzed due to Methylene chloride contamination from insufficient purging of DI water before preparation of samples in the original analysis: MW-24 (580-46412-1), DUP-1 (580-46412-2), MW-22 (580-46412-3), MW-21 (580-46412-4), MW-25 (580-46412-5), MW-5 (580-46412-13), MW-7 (580-46412-14).

Method(s) 8260B: The associated sample MW-19 (580-46412-9) was reanalyzed due to the likelihood of carryover from a previously analyzed heavily contaminated sample in the original analysis.

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

GC VOA
Method(s) RSK-175: The surrogates recoveries were high in the Method Blank and LCS. Sample recoveries were within the acceptance criteria.

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.

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
X	Surrogate is outside control limits

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-24
Date Collected: 11/17/14 15:51
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 16:49	50
Chloromethane	ND		5.0		ug/L			11/21/14 16:49	50
Vinyl chloride	**21**		1.0		ug/L			11/21/14 16:49	50
Bromomethane	ND		5.0		ug/L			11/21/14 16:49	50
Chloroethane	ND		13		ug/L			11/21/14 16:49	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 16:49	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 16:49	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 16:49	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/21/14 16:49	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 16:49	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 16:49	50
cis-1,2-Dichloroethene	**440**		5.0		ug/L			11/21/14 16:49	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 16:49	50
Chloroform	**5.3**		5.0		ug/L			11/21/14 16:49	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 16:49	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 16:49	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 16:49	50
Benzene	ND		5.0		ug/L			11/21/14 16:49	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 16:49	50
Trichloroethene	**18**		5.0		ug/L			11/21/14 16:49	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 16:49	50
Dibromomethane	ND		5.0		ug/L			11/21/14 16:49	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 16:49	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 16:49	50
Toluene	ND		5.0		ug/L			11/21/14 16:49	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 16:49	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 16:49	50
Tetrachloroethene	**27**		5.0		ug/L			11/21/14 16:49	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 16:49	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 16:49	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 16:49	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 16:49	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 16:49	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 16:49	50
o-Xylene	ND		5.0		ug/L			11/21/14 16:49	50
Styrene	ND		5.0		ug/L			11/21/14 16:49	50
Bromoform	ND		5.0		ug/L			11/21/14 16:49	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
Bromobenzene	ND		5.0		ug/L			11/21/14 16:49	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 16:49	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 16:49	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 16:49	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 16:49	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 16:49	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-24
Date Collected: 11/17/14 15:51
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 16:49	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 16:49	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 16:49	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 16:49	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 16:49	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 16:49	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 16:49	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 16:49	50
Naphthalene	ND		20		ug/L			11/21/14 16:49	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 16:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 16:49*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 16:49*	*50*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*11/21/14 16:49*	*50*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/21/14 16:49*	*50*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*11/21/14 16:49*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 16:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/25/14 16:14*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/25/14 16:14*	*50*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*11/25/14 16:14*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 16:14*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/25/14 16:14*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: DUP-1
Date Collected: 11/17/14 16:00
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 17:15	50
Chloromethane	ND		5.0		ug/L			11/21/14 17:15	50
Vinyl chloride	**21**		1.0		ug/L			11/21/14 17:15	50
Bromomethane	ND		5.0		ug/L			11/21/14 17:15	50
Chloroethane	ND		13		ug/L			11/21/14 17:15	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 17:15	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 17:15	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 17:15	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/21/14 17:15	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 17:15	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 17:15	50
cis-1,2-Dichloroethene	**450**		5.0		ug/L			11/21/14 17:15	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 17:15	50
Chloroform	**5.1**		5.0		ug/L			11/21/14 17:15	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 17:15	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 17:15	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 17:15	50
Benzene	ND		5.0		ug/L			11/21/14 17:15	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 17:15	50
Trichloroethene	**18**		5.0		ug/L			11/21/14 17:15	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 17:15	50
Dibromomethane	ND		5.0		ug/L			11/21/14 17:15	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 17:15	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 17:15	50
Toluene	ND		5.0		ug/L			11/21/14 17:15	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 17:15	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 17:15	50
Tetrachloroethene	**27**		5.0		ug/L			11/21/14 17:15	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 17:15	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 17:15	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 17:15	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 17:15	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 17:15	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 17:15	50
o-Xylene	ND		5.0		ug/L			11/21/14 17:15	50
Styrene	ND		5.0		ug/L			11/21/14 17:15	50
Bromoform	ND		5.0		ug/L			11/21/14 17:15	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
Bromobenzene	ND		5.0		ug/L			11/21/14 17:15	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 17:15	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 17:15	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 17:15	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 17:15	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 17:15	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: DUP-1
Date Collected: 11/17/14 16:00
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 17:15	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 17:15	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 17:15	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 17:15	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 17:15	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 17:15	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 17:15	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 17:15	50
Naphthalene	ND		20		ug/L			11/21/14 17:15	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 17:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*11/21/14 17:15*	*50*
Toluene-d8 (Surr)	*102*		*75 - 125*		*11/21/14 17:15*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*11/21/14 17:15*	*50*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/21/14 17:15*	*50*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*11/21/14 17:15*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 16:40	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/25/14 16:40*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 16:40*	*50*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/25/14 16:40*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 16:40*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/25/14 16:40*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-22
Date Collected: 11/18/14 08:20
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 17:41	50
Chloromethane	ND		5.0		ug/L			11/21/14 17:41	50
Vinyl chloride	**37**		1.0		ug/L			11/21/14 17:41	50
Bromomethane	ND		5.0		ug/L			11/21/14 17:41	50
Chloroethane	ND		13		ug/L			11/21/14 17:41	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 17:41	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 17:41	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 17:41	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/21/14 17:41	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 17:41	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 17:41	50
cis-1,2-Dichloroethene	**270**		5.0		ug/L			11/21/14 17:41	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 17:41	50
Chloroform	ND		5.0		ug/L			11/21/14 17:41	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 17:41	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 17:41	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 17:41	50
Benzene	ND		5.0		ug/L			11/21/14 17:41	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 17:41	50
Trichloroethene	**5.1**		5.0		ug/L			11/21/14 17:41	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 17:41	50
Dibromomethane	ND		5.0		ug/L			11/21/14 17:41	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 17:41	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 17:41	50
Toluene	ND		5.0		ug/L			11/21/14 17:41	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 17:41	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 17:41	50
Tetrachloroethene	**17**		5.0		ug/L			11/21/14 17:41	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 17:41	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 17:41	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 17:41	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 17:41	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 17:41	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 17:41	50
o-Xylene	ND		5.0		ug/L			11/21/14 17:41	50
Styrene	ND		5.0		ug/L			11/21/14 17:41	50
Bromoform	ND		5.0		ug/L			11/21/14 17:41	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
Bromobenzene	ND		5.0		ug/L			11/21/14 17:41	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 17:41	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 17:41	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 17:41	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 17:41	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 17:41	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-22
Date Collected: 11/18/14 08:20
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 17:41	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 17:41	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 17:41	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 17:41	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 17:41	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 17:41	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 17:41	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 17:41	50
Naphthalene	ND		20		ug/L			11/21/14 17:41	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 17:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*11/21/14 17:41*	*50*
Toluene-d8 (Surr)	*99*		*75 - 125*		*11/21/14 17:41*	*50*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*11/21/14 17:41*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/21/14 17:41*	*50*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*11/21/14 17:41*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 17:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/25/14 17:06*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/25/14 17:06*	*50*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 128*		*11/25/14 17:06*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 17:06*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/25/14 17:06*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-21
Date Collected: 11/18/14 09:15
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 18:07	50
Chloromethane	ND		5.0		ug/L			11/21/14 18:07	50
Vinyl chloride	**10**		1.0		ug/L			11/21/14 18:07	50
Bromomethane	ND		5.0		ug/L			11/21/14 18:07	50
Chloroethane	ND		13		ug/L			11/21/14 18:07	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 18:07	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 18:07	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 18:07	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/21/14 18:07	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 18:07	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 18:07	50
cis-1,2-Dichloroethene	**220**		5.0		ug/L			11/21/14 18:07	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 18:07	50
Chloroform	**8.0**		5.0		ug/L			11/21/14 18:07	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 18:07	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 18:07	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 18:07	50
Benzene	ND		5.0		ug/L			11/21/14 18:07	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 18:07	50
Trichloroethene	ND		5.0		ug/L			11/21/14 18:07	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 18:07	50
Dibromomethane	ND		5.0		ug/L			11/21/14 18:07	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 18:07	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 18:07	50
Toluene	ND		5.0		ug/L			11/21/14 18:07	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 18:07	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 18:07	50
Tetrachloroethene	ND		5.0		ug/L			11/21/14 18:07	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 18:07	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 18:07	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 18:07	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 18:07	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 18:07	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 18:07	50
o-Xylene	ND		5.0		ug/L			11/21/14 18:07	50
Styrene	ND		5.0		ug/L			11/21/14 18:07	50
Bromoform	ND		5.0		ug/L			11/21/14 18:07	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
Bromobenzene	ND		5.0		ug/L			11/21/14 18:07	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 18:07	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 18:07	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 18:07	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 18:07	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 18:07	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-21
Date Collected: 11/18/14 09:15
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 18:07	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 18:07	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 18:07	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 18:07	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 18:07	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 18:07	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 18:07	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 18:07	50
Naphthalene	ND		20		ug/L			11/21/14 18:07	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 18:07	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/21/14 18:07*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 18:07*	*50*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*11/21/14 18:07*	*50*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/21/14 18:07*	*50*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*11/21/14 18:07*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 17:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/25/14 17:32*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/25/14 17:32*	*50*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/25/14 17:32*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/25/14 17:32*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/25/14 17:32*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-25
Date Collected: 11/18/14 10:20
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		4.0		ug/L			11/21/14 18:32	10
Chloromethane	ND		1.0		ug/L			11/21/14 18:32	10
Vinyl chloride	**87**		0.20		ug/L			11/21/14 18:32	10
Bromomethane	ND		1.0		ug/L			11/21/14 18:32	10
Chloroethane	ND		2.5		ug/L			11/21/14 18:32	10
Trichlorofluoromethane	ND		1.0		ug/L			11/21/14 18:32	10
1,1-Dichloroethene	ND		1.0		ug/L			11/21/14 18:32	10
Methyl tert-butyl ether	ND		1.0		ug/L			11/21/14 18:32	10
trans-1,2-Dichloroethene	**5.2**		1.0		ug/L			11/21/14 18:32	10
1,1-Dichloroethane	ND		1.0		ug/L			11/21/14 18:32	10
2,2-Dichloropropane	ND		1.0		ug/L			11/21/14 18:32	10
Chlorobromomethane	ND		1.0		ug/L			11/21/14 18:32	10
Chloroform	**4.9**		1.0		ug/L			11/21/14 18:32	10
1,1,1-Trichloroethane	ND		1.0		ug/L			11/21/14 18:32	10
Carbon tetrachloride	ND		1.0		ug/L			11/21/14 18:32	10
1,1-Dichloropropene	ND		1.0		ug/L			11/21/14 18:32	10
Benzene	ND		1.0		ug/L			11/21/14 18:32	10
1,2-Dichloroethane	ND		1.0		ug/L			11/21/14 18:32	10
Trichloroethene	**3.1**		1.0		ug/L			11/21/14 18:32	10
1,2-Dichloropropane	ND		1.0		ug/L			11/21/14 18:32	10
Dibromomethane	ND		1.0		ug/L			11/21/14 18:32	10
Dichlorobromomethane	ND		1.0		ug/L			11/21/14 18:32	10
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/21/14 18:32	10
Toluene	ND		1.0		ug/L			11/21/14 18:32	10
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/21/14 18:32	10
1,1,2-Trichloroethane	ND		1.0		ug/L			11/21/14 18:32	10
Tetrachloroethene	**6.4**		1.0		ug/L			11/21/14 18:32	10
1,3-Dichloropropane	ND		1.0		ug/L			11/21/14 18:32	10
Chlorodibromomethane	ND		1.0		ug/L			11/21/14 18:32	10
Ethylene Dibromide	ND		1.0		ug/L			11/21/14 18:32	10
Chlorobenzene	ND		1.0		ug/L			11/21/14 18:32	10
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/21/14 18:32	10
Ethylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
m-Xylene & p-Xylene	ND		2.0		ug/L			11/21/14 18:32	10
o-Xylene	ND		1.0		ug/L			11/21/14 18:32	10
Styrene	ND		1.0		ug/L			11/21/14 18:32	10
Bromoform	ND		1.0		ug/L			11/21/14 18:32	10
Isopropylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
Bromobenzene	ND		1.0		ug/L			11/21/14 18:32	10
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/21/14 18:32	10
1,2,3-Trichloropropane	ND		2.0		ug/L			11/21/14 18:32	10
N-Propylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
2-Chlorotoluene	ND		1.0		ug/L			11/21/14 18:32	10
4-Chlorotoluene	ND		2.0		ug/L			11/21/14 18:32	10
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
tert-Butylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
sec-Butylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
4-Isopropyltoluene	ND		2.0		ug/L			11/21/14 18:32	10

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-25
Date Collected: 11/18/14 10:20
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		2.0		ug/L			11/21/14 18:32	10
1,4-Dichlorobenzene	ND		2.0		ug/L			11/21/14 18:32	10
n-Butylbenzene	ND		1.0		ug/L			11/21/14 18:32	10
1,2-Dichlorobenzene	ND		2.0		ug/L			11/21/14 18:32	10
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/21/14 18:32	10
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/21/14 18:32	10
Hexachlorobutadiene	ND		2.0		ug/L			11/21/14 18:32	10
Naphthalene	ND		4.0		ug/L			11/21/14 18:32	10
1,2,3-Trichlorobenzene	ND		4.0		ug/L			11/21/14 18:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 18:32*	*10*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 18:32*	*10*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*11/21/14 18:32*	*10*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/21/14 18:32*	*10*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*11/21/14 18:32*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**800**		5.0		ug/L			11/24/14 17:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/24/14 17:38*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 17:38*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 17:38*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 17:38*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 17:38*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			11/25/14 19:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/25/14 19:14*	*10*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 19:14*	*10*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 128*		*11/25/14 19:14*	*10*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 19:14*	*10*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*11/25/14 19:14*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-16
Date Collected: 11/18/14 11:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 15:57	1
Chloromethane	ND		0.10		ug/L			11/21/14 15:57	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 15:57	1
Bromomethane	ND		0.10		ug/L			11/21/14 15:57	1
Chloroethane	ND		0.25		ug/L			11/21/14 15:57	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 15:57	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 15:57	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 15:57	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 15:57	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 15:57	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 15:57	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 15:57	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 15:57	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 15:57	1
Chloroform	**2.1**		0.10		ug/L			11/21/14 15:57	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 15:57	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 15:57	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 15:57	1
Benzene	ND		0.10		ug/L			11/21/14 15:57	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 15:57	1
Trichloroethene	**0.15**		0.10		ug/L			11/21/14 15:57	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 15:57	1
Dibromomethane	ND		0.10		ug/L			11/21/14 15:57	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 15:57	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 15:57	1
Toluene	ND		0.10		ug/L			11/21/14 15:57	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 15:57	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 15:57	1
Tetrachloroethene	**70**		0.10		ug/L			11/21/14 15:57	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 15:57	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 15:57	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 15:57	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 15:57	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 15:57	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 15:57	1
o-Xylene	ND		0.10		ug/L			11/21/14 15:57	1
Styrene	ND		0.10		ug/L			11/21/14 15:57	1
Bromoform	ND		0.10		ug/L			11/21/14 15:57	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
Bromobenzene	ND		0.10		ug/L			11/21/14 15:57	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 15:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 15:57	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 15:57	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 15:57	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 15:57	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-16
Date Collected: 11/18/14 11:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 15:57	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 15:57	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 15:57	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 15:57	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 15:57	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 15:57	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 15:57	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 15:57	1
Naphthalene	ND		0.40		ug/L			11/21/14 15:57	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*11/21/14 15:57*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/21/14 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*11/21/14 15:57*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/21/14 15:57*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*11/21/14 15:57*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-17
Date Collected: 11/18/14 12:32
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/25/14 15:23	1
Chloromethane	ND		0.10		ug/L			11/25/14 15:23	1
Vinyl chloride	ND		0.020		ug/L			11/25/14 15:23	1
Bromomethane	ND		0.10		ug/L			11/25/14 15:23	1
Chloroethane	ND		0.25		ug/L			11/25/14 15:23	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/14 15:23	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/14 15:23	1
Methylene Chloride	ND		0.50		ug/L			11/25/14 15:23	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/25/14 15:23	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 15:23	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/14 15:23	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/14 15:23	1
cis-1,2-Dichloroethene	**0.52**		0.10		ug/L			11/25/14 15:23	1
Chlorobromomethane	ND		0.10		ug/L			11/25/14 15:23	1
Chloroform	**0.21**		0.10		ug/L			11/25/14 15:23	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/14 15:23	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/14 15:23	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/14 15:23	1
Benzene	ND		0.10		ug/L			11/25/14 15:23	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/14 15:23	1
Trichloroethene	ND		0.10		ug/L			11/25/14 15:23	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/14 15:23	1
Dibromomethane	ND		0.10		ug/L			11/25/14 15:23	1
Dichlorobromomethane	ND		0.10		ug/L			11/25/14 15:23	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 15:23	1
Toluene	ND		0.10		ug/L			11/25/14 15:23	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 15:23	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/14 15:23	1
Tetrachloroethene	ND		0.10		ug/L			11/25/14 15:23	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/14 15:23	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/14 15:23	1
Ethylene Dibromide	ND		0.10		ug/L			11/25/14 15:23	1
Chlorobenzene	ND		0.10		ug/L			11/25/14 15:23	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 15:23	1
Ethylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/14 15:23	1
o-Xylene	ND		0.10		ug/L			11/25/14 15:23	1
Styrene	ND		0.10		ug/L			11/25/14 15:23	1
Bromoform	ND		0.10		ug/L			11/25/14 15:23	1
Isopropylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
Bromobenzene	ND		0.10		ug/L			11/25/14 15:23	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 15:23	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/14 15:23	1
N-Propylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/14 15:23	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/14 15:23	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/14 15:23	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-17
Date Collected: 11/18/14 12:32
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/14 15:23	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:23	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:23	1
n-Butylbenzene	ND		0.10		ug/L			11/25/14 15:23	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:23	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/14 15:23	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/14 15:23	1
Hexachlorobutadiene	ND		0.20		ug/L			11/25/14 15:23	1
Naphthalene	ND		0.40		ug/L			11/25/14 15:23	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/14 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*96*		*80 - 127*		*11/25/14 15:23*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*11/25/14 15:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/25/14 15:23*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/25/14 15:23*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/25/14 15:23*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-23
Date Collected: 11/18/14 14:18
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/25/14 15:49	1
Chloromethane	ND		0.10		ug/L			11/25/14 15:49	1
Vinyl chloride	**0.22**		0.020		ug/L			11/25/14 15:49	1
Bromomethane	ND		0.10		ug/L			11/25/14 15:49	1
Chloroethane	ND		0.25		ug/L			11/25/14 15:49	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/14 15:49	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/14 15:49	1
Methylene Chloride	ND		0.50		ug/L			11/25/14 15:49	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/25/14 15:49	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 15:49	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/14 15:49	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/14 15:49	1
cis-1,2-Dichloroethene	**7.2**		0.10		ug/L			11/25/14 15:49	1
Chlorobromomethane	ND		0.10		ug/L			11/25/14 15:49	1
Chloroform	**2.5**		0.10		ug/L			11/25/14 15:49	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/14 15:49	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/14 15:49	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/14 15:49	1
Benzene	ND		0.10		ug/L			11/25/14 15:49	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/14 15:49	1
Trichloroethene	**0.62**		0.10		ug/L			11/25/14 15:49	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/14 15:49	1
Dibromomethane	ND		0.10		ug/L			11/25/14 15:49	1
Dichlorobromomethane	ND		0.10		ug/L			11/25/14 15:49	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 15:49	1
Toluene	ND		0.10		ug/L			11/25/14 15:49	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 15:49	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/14 15:49	1
Tetrachloroethene	**8.0**		0.10		ug/L			11/25/14 15:49	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/14 15:49	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/14 15:49	1
Ethylene Dibromide	ND		0.10		ug/L			11/25/14 15:49	1
Chlorobenzene	ND		0.10		ug/L			11/25/14 15:49	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 15:49	1
Ethylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/14 15:49	1
o-Xylene	ND		0.10		ug/L			11/25/14 15:49	1
Styrene	ND		0.10		ug/L			11/25/14 15:49	1
Bromoform	ND		0.10		ug/L			11/25/14 15:49	1
Isopropylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
Bromobenzene	ND		0.10		ug/L			11/25/14 15:49	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 15:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/14 15:49	1
N-Propylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/14 15:49	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/14 15:49	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/14 15:49	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-23
Date Collected: 11/18/14 14:18
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/14 15:49	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:49	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:49	1
n-Butylbenzene	ND		0.10		ug/L			11/25/14 15:49	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/14 15:49	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/14 15:49	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/14 15:49	1
Hexachlorobutadiene	ND		0.20		ug/L			11/25/14 15:49	1
Naphthalene	ND		0.40		ug/L			11/25/14 15:49	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/14 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/25/14 15:49*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 15:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/25/14 15:49*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/25/14 15:49*	*1*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*11/25/14 15:49*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/02/14 19:27	1
Ethane	ND		0.50		ug/L			12/02/14 19:27	1
Ethene	ND		0.50		ug/L			12/02/14 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*110*		*66 - 132*		*12/02/14 19:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		0.90		mg/L			11/20/14 09:34	1
Nitrate as N	**6.2**		0.90		mg/L			11/20/14 09:34	1
Sulfate	**11**		1.2		mg/L			11/20/14 09:34	1
Total Organic Carbon	ND		1.0		mg/L			11/25/14 19:32	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-19
Date Collected: 11/18/14 15:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 16:23	1
Chloromethane	ND		0.10		ug/L			11/21/14 16:23	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 16:23	1
Bromomethane	ND		0.10		ug/L			11/21/14 16:23	1
Chloroethane	ND		0.25		ug/L			11/21/14 16:23	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 16:23	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 16:23	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 16:23	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 16:23	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 16:23	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 16:23	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 16:23	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 16:23	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 16:23	1
Chloroform	**0.13**		0.10		ug/L			11/21/14 16:23	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 16:23	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 16:23	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 16:23	1
Benzene	ND		0.10		ug/L			11/21/14 16:23	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 16:23	1
Trichloroethene	ND		0.10		ug/L			11/21/14 16:23	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 16:23	1
Dibromomethane	ND		0.10		ug/L			11/21/14 16:23	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 16:23	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 16:23	1
Toluene	ND		0.10		ug/L			11/21/14 16:23	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 16:23	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 16:23	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 16:23	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 16:23	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 16:23	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 16:23	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 16:23	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 16:23	1
o-Xylene	ND		0.10		ug/L			11/21/14 16:23	1
Styrene	ND		0.10		ug/L			11/21/14 16:23	1
Bromoform	ND		0.10		ug/L			11/21/14 16:23	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
Bromobenzene	ND		0.10		ug/L			11/21/14 16:23	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 16:23	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 16:23	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 16:23	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 16:23	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 16:23	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-19
Date Collected: 11/18/14 15:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 16:23	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 16:23	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 16:23	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 16:23	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 16:23	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 16:23	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 16:23	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 16:23	1
Naphthalene	ND		0.40		ug/L			11/21/14 16:23	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*11/21/14 16:23*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 16:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 128*		*11/21/14 16:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*11/21/14 16:23*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*11/21/14 16:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.11**		0.10		ug/L			11/25/14 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 14:57*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 14:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/25/14 14:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 14:57*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/25/14 14:57*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-20
Date Collected: 11/19/14 07:05
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		4.0		ug/L			11/25/14 18:49	10
Chloromethane	ND		1.0		ug/L			11/25/14 18:49	10
Vinyl chloride	**3.8**		0.20		ug/L			11/25/14 18:49	10
Bromomethane	ND		1.0		ug/L			11/25/14 18:49	10
Chloroethane	ND		2.5		ug/L			11/25/14 18:49	10
Trichlorofluoromethane	ND		1.0		ug/L			11/25/14 18:49	10
1,1-Dichloroethene	ND		1.0		ug/L			11/25/14 18:49	10
Methylene Chloride	ND		5.0		ug/L			11/25/14 18:49	10
Methyl tert-butyl ether	ND		1.0		ug/L			11/25/14 18:49	10
trans-1,2-Dichloroethene	**1.4**		1.0		ug/L			11/25/14 18:49	10
1,1-Dichloroethane	ND		1.0		ug/L			11/25/14 18:49	10
2,2-Dichloropropane	ND		1.0		ug/L			11/25/14 18:49	10
cis-1,2-Dichloroethene	**170**		1.0		ug/L			11/25/14 18:49	10
Chlorobromomethane	ND		1.0		ug/L			11/25/14 18:49	10
Chloroform	**3.4**		1.0		ug/L			11/25/14 18:49	10
1,1,1-Trichloroethane	ND		1.0		ug/L			11/25/14 18:49	10
Carbon tetrachloride	ND		1.0		ug/L			11/25/14 18:49	10
1,1-Dichloropropene	ND		1.0		ug/L			11/25/14 18:49	10
Benzene	ND		1.0		ug/L			11/25/14 18:49	10
1,2-Dichloroethane	ND		1.0		ug/L			11/25/14 18:49	10
Trichloroethene	**16**		1.0		ug/L			11/25/14 18:49	10
1,2-Dichloropropane	ND		1.0		ug/L			11/25/14 18:49	10
Dibromomethane	ND		1.0		ug/L			11/25/14 18:49	10
Dichlorobromomethane	ND		1.0		ug/L			11/25/14 18:49	10
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/25/14 18:49	10
Toluene	ND		1.0		ug/L			11/25/14 18:49	10
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/25/14 18:49	10
1,1,2-Trichloroethane	ND		1.0		ug/L			11/25/14 18:49	10
Tetrachloroethene	**200**		1.0		ug/L			11/25/14 18:49	10
1,3-Dichloropropane	ND		1.0		ug/L			11/25/14 18:49	10
Chlorodibromomethane	ND		1.0		ug/L			11/25/14 18:49	10
Ethylene Dibromide	ND		1.0		ug/L			11/25/14 18:49	10
Chlorobenzene	ND		1.0		ug/L			11/25/14 18:49	10
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/25/14 18:49	10
Ethylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
m-Xylene & p-Xylene	ND		2.0		ug/L			11/25/14 18:49	10
o-Xylene	ND		1.0		ug/L			11/25/14 18:49	10
Styrene	ND		1.0		ug/L			11/25/14 18:49	10
Bromoform	ND		1.0		ug/L			11/25/14 18:49	10
Isopropylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
Bromobenzene	ND		1.0		ug/L			11/25/14 18:49	10
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/25/14 18:49	10
1,2,3-Trichloropropane	ND		2.0		ug/L			11/25/14 18:49	10
N-Propylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
2-Chlorotoluene	ND		1.0		ug/L			11/25/14 18:49	10
4-Chlorotoluene	ND		2.0		ug/L			11/25/14 18:49	10
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
tert-Butylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/25/14 18:49	10

Client Sample ID: MW-20
Date Collected: 11/19/14 07:05
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
4-Isopropyltoluene	ND		2.0		ug/L			11/25/14 18:49	10
1,3-Dichlorobenzene	ND		2.0		ug/L			11/25/14 18:49	10
1,4-Dichlorobenzene	ND		2.0		ug/L			11/25/14 18:49	10
n-Butylbenzene	ND		1.0		ug/L			11/25/14 18:49	10
1,2-Dichlorobenzene	ND		2.0		ug/L			11/25/14 18:49	10
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/25/14 18:49	10
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/25/14 18:49	10
Hexachlorobutadiene	ND		2.0		ug/L			11/25/14 18:49	10
Naphthalene	ND		4.0		ug/L			11/25/14 18:49	10
1,2,3-Trichlorobenzene	ND		4.0		ug/L			11/25/14 18:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/25/14 18:49*	*10*
Toluene-d8 (Surr)	*99*		*75 - 125*		*11/25/14 18:49*	*10*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 128*		*11/25/14 18:49*	*10*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 18:49*	*10*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/25/14 18:49*	*10*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1.1**		0.50		ug/L			12/02/14 19:39	1
Ethane	ND		0.50		ug/L			12/02/14 19:39	1
Ethene	ND		0.50		ug/L			12/02/14 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*113*		*66 - 132*		*12/02/14 19:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**		0.90		mg/L			11/20/14 09:49	1
Nitrate as N	**3.4**		0.90		mg/L			11/20/14 09:49	1
Sulfate	**9.4**		1.2		mg/L			11/20/14 09:49	1
Total Organic Carbon	ND		1.0		mg/L			11/25/14 19:32	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: EQB-1
Date Collected: 11/19/14 11:03
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 14:40	1
Chloromethane	ND		0.10		ug/L			11/21/14 14:40	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 14:40	1
Bromomethane	ND		0.10		ug/L			11/21/14 14:40	1
Chloroethane	ND		0.25		ug/L			11/21/14 14:40	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 14:40	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 14:40	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 14:40	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 14:40	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 14:40	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 14:40	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 14:40	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 14:40	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 14:40	1
Chloroform	ND		0.10		ug/L			11/21/14 14:40	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 14:40	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 14:40	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 14:40	1
Benzene	ND		0.10		ug/L			11/21/14 14:40	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 14:40	1
Trichloroethene	ND		0.10		ug/L			11/21/14 14:40	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 14:40	1
Dibromomethane	ND		0.10		ug/L			11/21/14 14:40	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 14:40	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 14:40	1
Toluene	**0.10**		0.10		ug/L			11/21/14 14:40	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 14:40	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 14:40	1
Tetrachloroethene	ND		0.10		ug/L			11/21/14 14:40	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 14:40	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 14:40	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 14:40	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 14:40	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 14:40	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 14:40	1
o-Xylene	ND		0.10		ug/L			11/21/14 14:40	1
Styrene	ND		0.10		ug/L			11/21/14 14:40	1
Bromoform	ND		0.10		ug/L			11/21/14 14:40	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
Bromobenzene	ND		0.10		ug/L			11/21/14 14:40	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 14:40	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 14:40	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 14:40	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 14:40	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 14:40	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: EQB-1
Date Collected: 11/19/14 11:03
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 14:40	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:40	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:40	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 14:40	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:40	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 14:40	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 14:40	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 14:40	1
Naphthalene	ND		0.40		ug/L			11/21/14 14:40	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 14:40*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/21/14 14:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 128*		*11/21/14 14:40*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/21/14 14:40*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*11/21/14 14:40*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: Trip Blank
Date Collected: 11/10/14 00:00
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 14:14	1
Chloromethane	ND		0.10		ug/L			11/21/14 14:14	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 14:14	1
Bromomethane	ND		0.10		ug/L			11/21/14 14:14	1
Chloroethane	ND		0.25		ug/L			11/21/14 14:14	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 14:14	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 14:14	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 14:14	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 14:14	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 14:14	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 14:14	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 14:14	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 14:14	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 14:14	1
Chloroform	ND		0.10		ug/L			11/21/14 14:14	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 14:14	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 14:14	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 14:14	1
Benzene	ND		0.10		ug/L			11/21/14 14:14	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 14:14	1
Trichloroethene	ND		0.10		ug/L			11/21/14 14:14	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 14:14	1
Dibromomethane	ND		0.10		ug/L			11/21/14 14:14	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 14:14	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 14:14	1
Toluene	ND		0.10		ug/L			11/21/14 14:14	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 14:14	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 14:14	1
Tetrachloroethene	ND		0.10		ug/L			11/21/14 14:14	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 14:14	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 14:14	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 14:14	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 14:14	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 14:14	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 14:14	1
o-Xylene	ND		0.10		ug/L			11/21/14 14:14	1
Styrene	ND		0.10		ug/L			11/21/14 14:14	1
Bromoform	ND		0.10		ug/L			11/21/14 14:14	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
Bromobenzene	ND		0.10		ug/L			11/21/14 14:14	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 14:14	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 14:14	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 14:14	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 14:14	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 14:14	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: Trip Blank
Date Collected: 11/10/14 00:00
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 14:14	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:14	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:14	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 14:14	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 14:14	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 14:14	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 14:14	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 14:14	1
Naphthalene	ND		0.40		ug/L			11/21/14 14:14	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 14:14*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 14:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 128*		*11/21/14 14:14*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*11/21/14 14:14*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*11/21/14 14:14*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-5
Date Collected: 11/19/14 08:11
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 20:15	50
Chloromethane	ND		5.0		ug/L			11/21/14 20:15	50
Vinyl chloride	**620**		1.0		ug/L			11/21/14 20:15	50
Bromomethane	ND		5.0		ug/L			11/21/14 20:15	50
Chloroethane	ND		13		ug/L			11/21/14 20:15	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 20:15	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 20:15	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 20:15	50
trans-1,2-Dichloroethene	**24**		5.0		ug/L			11/21/14 20:15	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 20:15	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 20:15	50
cis-1,2-Dichloroethene	**3200**		5.0		ug/L			11/21/14 20:15	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 20:15	50
Chloroform	ND		5.0		ug/L			11/21/14 20:15	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 20:15	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 20:15	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 20:15	50
Benzene	ND		5.0		ug/L			11/21/14 20:15	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 20:15	50
Trichloroethene	ND		5.0		ug/L			11/21/14 20:15	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 20:15	50
Dibromomethane	ND		5.0		ug/L			11/21/14 20:15	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 20:15	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 20:15	50
Toluene	ND		5.0		ug/L			11/21/14 20:15	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 20:15	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 20:15	50
Tetrachloroethene	ND		5.0		ug/L			11/21/14 20:15	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 20:15	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 20:15	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 20:15	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 20:15	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 20:15	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 20:15	50
o-Xylene	ND		5.0		ug/L			11/21/14 20:15	50
Styrene	ND		5.0		ug/L			11/21/14 20:15	50
Bromoform	ND		5.0		ug/L			11/21/14 20:15	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
Bromobenzene	ND		5.0		ug/L			11/21/14 20:15	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 20:15	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 20:15	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 20:15	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 20:15	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 20:15	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-5
Date Collected: 11/19/14 08:11
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 20:15	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 20:15	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 20:15	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 20:15	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 20:15	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 20:15	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 20:15	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 20:15	50
Naphthalene	ND		20		ug/L			11/21/14 20:15	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 20:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/21/14 20:15*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 20:15*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*11/21/14 20:15*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/21/14 20:15*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/21/14 20:15*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 17:58	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 17:58*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 17:58*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/25/14 17:58*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 17:58*	*50*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*11/25/14 17:58*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-7
Date Collected: 11/19/14 09:09
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 20:41	50
Chloromethane	ND		5.0		ug/L			11/21/14 20:41	50
Vinyl chloride	**1600**		1.0		ug/L			11/21/14 20:41	50
Bromomethane	ND		5.0		ug/L			11/21/14 20:41	50
Chloroethane	ND		13		ug/L			11/21/14 20:41	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 20:41	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 20:41	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 20:41	50
trans-1,2-Dichloroethene	**32**		5.0		ug/L			11/21/14 20:41	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 20:41	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 20:41	50
cis-1,2-Dichloroethene	**3200**		5.0		ug/L			11/21/14 20:41	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 20:41	50
Chloroform	ND		5.0		ug/L			11/21/14 20:41	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 20:41	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 20:41	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 20:41	50
Benzene	ND		5.0		ug/L			11/21/14 20:41	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 20:41	50
Trichloroethene	**6.3**		5.0		ug/L			11/21/14 20:41	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 20:41	50
Dibromomethane	ND		5.0		ug/L			11/21/14 20:41	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 20:41	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 20:41	50
Toluene	ND		5.0		ug/L			11/21/14 20:41	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 20:41	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 20:41	50
Tetrachloroethene	**14**		5.0		ug/L			11/21/14 20:41	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 20:41	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 20:41	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 20:41	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 20:41	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 20:41	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 20:41	50
o-Xylene	ND		5.0		ug/L			11/21/14 20:41	50
Styrene	ND		5.0		ug/L			11/21/14 20:41	50
Bromoform	ND		5.0		ug/L			11/21/14 20:41	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
Bromobenzene	ND		5.0		ug/L			11/21/14 20:41	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 20:41	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 20:41	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 20:41	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 20:41	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 20:41	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-7
Date Collected: 11/19/14 09:09
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/21/14 20:41	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 20:41	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 20:41	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 20:41	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 20:41	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 20:41	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 20:41	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 20:41	50
Naphthalene	ND		20		ug/L			11/21/14 20:41	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 20:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 20:41*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/21/14 20:41*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 128*		*11/21/14 20:41*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/21/14 20:41*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/21/14 20:41*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		25		ug/L			11/25/14 18:23	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 18:23*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 18:23*	*50*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/25/14 18:23*	*50*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*11/25/14 18:23*	*50*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*11/25/14 18:23*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1300**		1.5		ug/L			12/03/14 18:07	3
Ethane	ND		0.50		ug/L			12/02/14 19:52	1
Ethene	**13**		0.50		ug/L			12/02/14 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*108*		*66 - 132*		*12/02/14 19:52*	*1*
1,1,1-Trifluoroethane	*113*		*66 - 132*		*12/03/14 18:07*	*3*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38**		0.90		mg/L			11/20/14 10:03	1
Nitrate as N	**1.2**		0.90		mg/L			11/20/14 10:03	1
Sulfate	**4.2**		1.2		mg/L			11/20/14 10:03	1
Total Organic Carbon	**20**		10		mg/L			11/26/14 10:53	10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-176448/7
Matrix: Water
Analysis Batch: 176448

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 12:05	1
Chloromethane	ND		0.10		ug/L			11/21/14 12:05	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 12:05	1
Bromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Chloroethane	ND		0.25		ug/L			11/21/14 12:05	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 12:05	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 12:05	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Chloroform	ND		0.10		ug/L			11/21/14 12:05	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
Benzene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Trichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
Dibromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 12:05	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
Toluene	ND		0.10		ug/L			11/21/14 12:05	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Tetrachloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 12:05	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 12:05	1
o-Xylene	ND		0.10		ug/L			11/21/14 12:05	1
Styrene	ND		0.10		ug/L			11/21/14 12:05	1
Bromoform	ND		0.10		ug/L			11/21/14 12:05	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
Bromobenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 12:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 12:05	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 12:05	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 12:05	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1

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

Lab Sample ID: MB 580-176448/7
Matrix: Water
Analysis Batch: 176448

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 12:05	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 12:05	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 12:05	1
Naphthalene	ND		0.40		ug/L			11/21/14 12:05	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*11/21/14 12:05*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 12:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*11/21/14 12:05*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*11/21/14 12:05*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*11/21/14 12:05*	*1*

Lab Sample ID: LCS 580-176448/8
Matrix: Water
Analysis Batch: 176448

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.99		ug/L		100	30 - 180
Chloromethane	5.00	5.33		ug/L		107	50 - 140
Vinyl chloride	5.00	5.05		ug/L		101	65 - 140
Bromomethane	5.00	5.50		ug/L		110	70 - 135
Chloroethane	5.00	4.86		ug/L		97	75 - 140
Trichlorofluoromethane	5.00	4.83		ug/L		97	30 - 180
1,1-Dichloroethene	5.00	5.20		ug/L		104	70 - 150
Methylene Chloride	5.00	5.16		ug/L		103	60 - 145
Methyl tert-butyl ether	5.00	4.52		ug/L		90	75 - 120
trans-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 140
1,1-Dichloroethane	5.00	5.01		ug/L		100	75 - 135
2,2-Dichloropropane	5.00	4.88		ug/L		98	60 - 150
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 130
Chlorobromomethane	5.00	5.18		ug/L		104	80 - 125
Chloroform	5.00	4.98		ug/L		100	80 - 130
1,1,1-Trichloroethane	5.00	5.12		ug/L		102	80 - 140
Carbon tetrachloride	5.00	5.10		ug/L		102	75 - 140
1,1-Dichloropropene	5.00	4.97		ug/L		99	80 - 130
Benzene	5.00	4.80		ug/L		96	80 - 120
1,2-Dichloroethane	5.00	4.84		ug/L		97	80 - 140
Trichloroethene	5.00	5.18		ug/L		104	80 - 130
1,2-Dichloropropane	5.00	4.97		ug/L		99	80 - 120
Dibromomethane	5.00	5.04		ug/L		101	80 - 130

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

Lab Sample ID: LCS 580-176448/8
Matrix: Water
Analysis Batch: 176448

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	4.95		ug/L		99	80 - 125
cis-1,3-Dichloropropene	5.00	4.83		ug/L		97	70 - 120
Toluene	5.00	5.04		ug/L		101	80 - 120
trans-1,3-Dichloropropene	5.00	4.77		ug/L		95	60 - 140
1,1,2-Trichloroethane	5.00	4.94		ug/L		99	80 - 130
Tetrachloroethene	5.00	6.14		ug/L		123	40 - 180
1,3-Dichloropropane	5.00	4.83		ug/L		97	80 - 130
Chlorodibromomethane	5.00	4.64		ug/L		93	70 - 120
Ethylene Dibromide	5.00	5.00		ug/L		100	70 - 130
Chlorobenzene	5.00	4.97		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.89		ug/L		98	75 - 125
Ethylbenzene	5.00	5.07		ug/L		101	80 - 125
m-Xylene & p-Xylene	5.00	5.04		ug/L		101	80 - 130
o-Xylene	5.00	5.08		ug/L		102	80 - 120
Styrene	5.00	5.03		ug/L		101	75 - 130
Bromoform	5.00	4.03		ug/L		81	65 - 130
Isopropylbenzene	5.00	5.10		ug/L		102	75 - 120
Bromobenzene	5.00	4.80		ug/L		96	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	5.06		ug/L		101	75 - 120
N-Propylbenzene	5.00	5.04		ug/L		101	80 - 120
2-Chlorotoluene	5.00	4.98		ug/L		100	75 - 130
4-Chlorotoluene	5.00	5.02		ug/L		100	75 - 130
1,3,5-Trimethylbenzene	5.00	5.02		ug/L		100	80 - 125
tert-Butylbenzene	5.00	4.96		ug/L		99	80 - 130
1,2,4-Trimethylbenzene	5.00	4.94		ug/L		99	80 - 125
sec-Butylbenzene	5.00	4.94		ug/L		99	80 - 125
4-Isopropyltoluene	5.00	4.96		ug/L		99	80 - 120
1,3-Dichlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.90		ug/L		98	80 - 120
n-Butylbenzene	5.00	4.81		ug/L		96	75 - 125
1,2-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.27		ug/L		85	55 - 120
1,2,4-Trichlorobenzene	5.00	4.41		ug/L		88	60 - 125
Hexachlorobutadiene	5.00	4.33		ug/L		87	75 - 135
Naphthalene	5.00	4.35		ug/L		87	45 - 130
1,2,3-Trichlorobenzene	5.00	4.28		ug/L		86	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*104*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

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

Lab Sample ID: LCSD 580-176448/9
Matrix: Water
Analysis Batch: 176448

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
Dichlorodifluoromethane	5.00	4.79		ug/L		96	30 - 180	4	20
Chloromethane	5.00	5.12		ug/L		102	50 - 140	4	20
Vinyl chloride	5.00	4.86		ug/L		97	65 - 140	4	20
Bromomethane	5.00	5.03		ug/L		101	70 - 135	9	20
Chloroethane	5.00	4.65		ug/L		93	75 - 140	4	20
Trichlorofluoromethane	5.00	5.02		ug/L		100	30 - 180	4	20
1,1-Dichloroethene	5.00	5.03		ug/L		101	70 - 150	3	20
Methylene Chloride	5.00	5.11		ug/L		102	60 - 145	1	20
Methyl tert-butyl ether	5.00	4.63		ug/L		93	75 - 120	2	20
trans-1,2-Dichloroethene	5.00	5.12		ug/L		102	80 - 140	0	20
1,1-Dichloroethane	5.00	5.06		ug/L		101	75 - 135	1	20
2,2-Dichloropropane	5.00	5.11		ug/L		102	60 - 150	4	20
cis-1,2-Dichloroethene	5.00	4.92		ug/L		98	80 - 130	2	20
Chlorobromomethane	5.00	5.24		ug/L		105	80 - 125	1	20
Chloroform	5.00	5.01		ug/L		100	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.19		ug/L		104	80 - 140	1	20
Carbon tetrachloride	5.00	5.20		ug/L		104	75 - 140	2	20
1,1-Dichloropropene	5.00	5.03		ug/L		101	80 - 130	1	20
Benzene	5.00	4.90		ug/L		98	80 - 120	2	20
1,2-Dichloroethane	5.00	4.93		ug/L		99	80 - 140	2	20
Trichloroethene	5.00	5.29		ug/L		106	80 - 130	2	20
1,2-Dichloropropane	5.00	5.06		ug/L		101	80 - 120	2	20
Dibromomethane	5.00	5.10		ug/L		102	80 - 130	1	20
Dichlorobromomethane	5.00	5.05		ug/L		101	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	4.89		ug/L		98	70 - 120	1	20
Toluene	5.00	5.12		ug/L		102	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	4.80		ug/L		96	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 130	1	20
Tetrachloroethene	5.00	6.80		ug/L		136	40 - 180	10	20
1,3-Dichloropropane	5.00	4.95		ug/L		99	80 - 130	2	20
Chlorodibromomethane	5.00	4.72		ug/L		94	70 - 120	2	20
Ethylene Dibromide	5.00	4.96		ug/L		99	70 - 130	1	20
Chlorobenzene	5.00	4.98		ug/L		100	80 - 120	0	20
1,1,1,2-Tetrachloroethane	5.00	4.92		ug/L		98	75 - 125	1	20
Ethylbenzene	5.00	5.09		ug/L		102	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.05		ug/L		101	80 - 130	0	20
o-Xylene	5.00	5.11		ug/L		102	80 - 120	1	20
Styrene	5.00	5.07		ug/L		101	75 - 130	1	20
Bromoform	5.00	4.07		ug/L		81	65 - 130	1	20
Isopropylbenzene	5.00	5.12		ug/L		102	75 - 120	0	20
Bromobenzene	5.00	4.94		ug/L		99	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	4.88		ug/L		98	75 - 125	0	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	2	20
N-Propylbenzene	5.00	5.11		ug/L		102	80 - 120	2	20
2-Chlorotoluene	5.00	5.10		ug/L		102	75 - 130	2	20
4-Chlorotoluene	5.00	5.06		ug/L		101	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.10		ug/L		102	80 - 125	2	20
tert-Butylbenzene	5.00	5.01		ug/L		100	80 - 130	1	20

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

Lab Sample ID: LCSD 580-176448/9
Matrix: Water
Analysis Batch: 176448

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
1,2,4-Trimethylbenzene			5.00	4.95		ug/L		99	80 - 125	0	20
sec-Butylbenzene			5.00	4.99		ug/L		100	80 - 125	1	20
4-Isopropyltoluene			5.00	5.03		ug/L		101	80 - 120	1	20
1,3-Dichlorobenzene			5.00	5.00		ug/L		100	80 - 120	3	20
1,4-Dichlorobenzene			5.00	5.01		ug/L		100	80 - 120	2	20
n-Butylbenzene			5.00	5.04		ug/L		101	75 - 125	5	20
1,2-Dichlorobenzene			5.00	4.90		ug/L		98	80 - 130	2	20
1,2-Dibromo-3-Chloropropane			5.00	4.45		ug/L		89	55 - 120	4	20
1,2,4-Trichlorobenzene			5.00	4.68		ug/L		94	60 - 125	6	20
Hexachlorobutadiene			5.00	4.55		ug/L		91	75 - 135	5	20
Naphthalene			5.00	4.67		ug/L		93	45 - 130	7	20
1,2,3-Trichlorobenzene			5.00	4.61		ug/L		92	60 - 125	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*102*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 12:51	1
Chloromethane	ND		0.10		ug/L			11/24/14 12:51	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 12:51	1
Bromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroethane	ND		0.25		ug/L			11/24/14 12:51	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 12:51	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroform	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Benzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Trichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Dibromomethane	ND		0.10		ug/L			11/24/14 12:51	1

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

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Toluene	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Tetrachloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 12:51	1
o-Xylene	ND		0.10		ug/L			11/24/14 12:51	1
Styrene	ND		0.10		ug/L			11/24/14 12:51	1
Bromoform	ND		0.10		ug/L			11/24/14 12:51	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
Bromobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 12:51	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 12:51	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 12:51	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 12:51	1
Naphthalene	ND		0.40		ug/L			11/24/14 12:51	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 12:51*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*11/24/14 12:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 12:51*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 12:51*	*1*

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

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.01		ug/L		120	30 - 180
Chloromethane	5.00	5.95		ug/L		119	50 - 140
Vinyl chloride	5.00	5.58		ug/L		112	65 - 140
Bromomethane	5.00	5.88		ug/L		118	70 - 135
Chloroethane	5.00	5.00		ug/L		100	75 - 140
Trichlorofluoromethane	5.00	5.96		ug/L		119	30 - 180
1,1-Dichloroethene	5.00	5.22		ug/L		104	70 - 150
Methylene Chloride	5.00	5.74		ug/L		115	60 - 145
Methyl tert-butyl ether	5.00	4.87		ug/L		97	75 - 120
trans-1,2-Dichloroethene	5.00	5.39		ug/L		108	80 - 140
1,1-Dichloroethane	5.00	5.35		ug/L		107	75 - 135
2,2-Dichloropropane	5.00	5.85		ug/L		117	60 - 150
cis-1,2-Dichloroethene	5.00	5.17		ug/L		103	80 - 130
Chlorobromomethane	5.00	5.46		ug/L		109	80 - 125
Chloroform	5.00	5.43		ug/L		109	80 - 130
1,1,1-Trichloroethane	5.00	5.80		ug/L		116	80 - 140
Carbon tetrachloride	5.00	5.77		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.33		ug/L		107	80 - 130
Benzene	5.00	4.99		ug/L		100	80 - 120
1,2-Dichloroethane	5.00	5.53		ug/L		111	80 - 140
Trichloroethene	5.00	5.45		ug/L		109	80 - 130
1,2-Dichloropropane	5.00	5.09		ug/L		102	80 - 120
Dibromomethane	5.00	5.22		ug/L		104	80 - 130
Dichlorobromomethane	5.00	5.51		ug/L		110	80 - 125
cis-1,3-Dichloropropene	5.00	5.08		ug/L		102	70 - 120
Toluene	5.00	5.33		ug/L		107	80 - 120
trans-1,3-Dichloropropene	5.00	5.04		ug/L		101	60 - 140
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 130
Tetrachloroethene	5.00	4.72		ug/L		94	40 - 180
1,3-Dichloropropane	5.00	5.02		ug/L		100	80 - 130
Chlorodibromomethane	5.00	4.91		ug/L		98	70 - 120
Ethylene Dibromide	5.00	5.08		ug/L		102	70 - 130
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.26		ug/L		105	75 - 125
Ethylbenzene	5.00	5.31		ug/L		106	80 - 125
m-Xylene & p-Xylene	5.00	5.27		ug/L		105	80 - 130
o-Xylene	5.00	5.47		ug/L		109	80 - 120
Styrene	5.00	5.18		ug/L		104	75 - 130
Bromoform	5.00	4.20		ug/L		84	65 - 130
Isopropylbenzene	5.00	5.47		ug/L		109	75 - 120
Bromobenzene	5.00	4.73		ug/L		95	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.89		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	4.96		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.12		ug/L		102	80 - 120
2-Chlorotoluene	5.00	5.03		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.05		ug/L		101	75 - 130
1,3,5-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125
tert-Butylbenzene	5.00	5.09		ug/L		102	80 - 130

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

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			5.00	5.08		ug/L		102	80 - 125		
sec-Butylbenzene			5.00	5.21		ug/L		104	80 - 125		
4-Isopropyltoluene			5.00	5.28		ug/L		106	80 - 120		
1,3-Dichlorobenzene			5.00	5.05		ug/L		101	80 - 120		
1,4-Dichlorobenzene			5.00	5.03		ug/L		101	80 - 120		
n-Butylbenzene			5.00	5.17		ug/L		103	75 - 125		
1,2-Dichlorobenzene			5.00	5.02		ug/L		100	80 - 130		
1,2-Dibromo-3-Chloropropane			5.00	4.23		ug/L		85	55 - 120		
1,2,4-Trichlorobenzene			5.00	4.99		ug/L		100	60 - 125		
Hexachlorobutadiene			5.00	5.03		ug/L		101	75 - 135		
Naphthalene			5.00	4.76		ug/L		95	45 - 130		
1,2,3-Trichlorobenzene			5.00	4.93		ug/L		99	60 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*95*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
Dichlorodifluoromethane			5.00	5.99		ug/L		120	30 - 180	0	20
Chloromethane			5.00	5.89		ug/L		118	50 - 140	1	20
Vinyl chloride			5.00	5.55		ug/L		111	65 - 140	1	20
Bromomethane			5.00	5.82		ug/L		116	70 - 135	1	20
Chloroethane			5.00	5.16		ug/L		103	75 - 140	3	20
Trichlorofluoromethane			5.00	5.48		ug/L		110	30 - 180	8	20
1,1-Dichloroethene			5.00	5.37		ug/L		107	70 - 150	3	20
Methylene Chloride			5.00	5.88		ug/L		118	60 - 145	2	20
Methyl tert-butyl ether			5.00	4.81		ug/L		96	75 - 120	1	20
trans-1,2-Dichloroethene			5.00	5.34		ug/L		107	80 - 140	1	20
1,1-Dichloroethane			5.00	5.41		ug/L		108	75 - 135	1	20
2,2-Dichloropropane			5.00	5.53		ug/L		111	60 - 150	6	20
cis-1,2-Dichloroethene			5.00	5.08		ug/L		102	80 - 130	2	20
Chlorobromomethane			5.00	5.39		ug/L		108	80 - 125	1	20
Chloroform			5.00	5.50		ug/L		110	80 - 130	1	20
1,1,1-Trichloroethane			5.00	5.74		ug/L		115	80 - 140	1	20
Carbon tetrachloride			5.00	5.79		ug/L		116	75 - 140	0	20
1,1-Dichloropropene			5.00	5.35		ug/L		107	80 - 130	0	20
Benzene			5.00	5.03		ug/L		101	80 - 120	1	20
1,2-Dichloroethane			5.00	5.56		ug/L		111	80 - 140	1	20
Trichloroethene			5.00	5.54		ug/L		111	80 - 130	2	20
1,2-Dichloropropane			5.00	5.24		ug/L		105	80 - 120	3	20
Dibromomethane			5.00	5.27		ug/L		105	80 - 130	1	20

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

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
Dichlorobromomethane	5.00	5.39		ug/L		108	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	5.04		ug/L		101	70 - 120	1	20
Toluene	5.00	5.20		ug/L		104	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.04		ug/L		101	80 - 130	1	20
Tetrachloroethene	5.00	4.73		ug/L		95	40 - 180	0	20
1,3-Dichloropropane	5.00	5.01		ug/L		100	80 - 130	0	20
Chlorodibromomethane	5.00	4.82		ug/L		96	70 - 120	2	20
Ethylene Dibromide	5.00	5.13		ug/L		103	70 - 130	1	20
Chlorobenzene	5.00	5.18		ug/L		104	80 - 120	0	20
1,1,1,2-Tetrachloroethane	5.00	5.20		ug/L		104	75 - 125	1	20
Ethylbenzene	5.00	5.28		ug/L		106	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.22		ug/L		104	80 - 130	1	20
o-Xylene	5.00	5.36		ug/L		107	80 - 120	2	20
Styrene	5.00	5.20		ug/L		104	75 - 130	1	20
Bromoform	5.00	4.24		ug/L		85	65 - 130	1	20
Isopropylbenzene	5.00	5.34		ug/L		107	75 - 120	2	20
Bromobenzene	5.00	4.84		ug/L		97	80 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	4.97		ug/L		99	75 - 125	2	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	4	20
N-Propylbenzene	5.00	5.22		ug/L		104	80 - 120	2	20
2-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	2	20
4-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.23		ug/L		105	80 - 125	2	20
tert-Butylbenzene	5.00	5.19		ug/L		104	80 - 130	2	20
1,2,4-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125	1	20
sec-Butylbenzene	5.00	5.21		ug/L		104	80 - 125	0	20
4-Isopropyltoluene	5.00	5.27		ug/L		105	80 - 120	0	20
1,3-Dichlorobenzene	5.00	5.12		ug/L		102	80 - 120	1	20
1,4-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 120	1	20
n-Butylbenzene	5.00	5.15		ug/L		103	75 - 125	0	20
1,2-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.20		ug/L		84	55 - 120	1	20
1,2,4-Trichlorobenzene	5.00	4.94		ug/L		99	60 - 125	1	20
Hexachlorobutadiene	5.00	5.08		ug/L		102	75 - 135	1	20
Naphthalene	5.00	4.80		ug/L		96	45 - 130	1	20
1,2,3-Trichlorobenzene	5.00	4.99		ug/L		100	60 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

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

Lab Sample ID: MB 580-176690/7
Matrix: Water
Analysis Batch: 176690

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/25/14 12:49	1
Chloromethane	ND		0.10		ug/L			11/25/14 12:49	1
Vinyl chloride	ND		0.020		ug/L			11/25/14 12:49	1
Bromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Chloroethane	ND		0.25		ug/L			11/25/14 12:49	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
Methylene Chloride	ND		0.50		ug/L			11/25/14 12:49	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/25/14 12:49	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
Chlorobromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Chloroform	ND		0.10		ug/L			11/25/14 12:49	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
Benzene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Trichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
Dibromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Dichlorobromomethane	ND		0.10		ug/L			11/25/14 12:49	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
Toluene	ND		0.10		ug/L			11/25/14 12:49	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Tetrachloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Ethylene Dibromide	ND		0.10		ug/L			11/25/14 12:49	1
Chlorobenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Ethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/14 12:49	1
o-Xylene	ND		0.10		ug/L			11/25/14 12:49	1
Styrene	ND		0.10		ug/L			11/25/14 12:49	1
Bromoform	ND		0.10		ug/L			11/25/14 12:49	1
Isopropylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
Bromobenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 12:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/14 12:49	1
N-Propylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/14 12:49	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/14 12:49	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1

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

Lab Sample ID: MB 580-176690/7
Matrix: Water
Analysis Batch: 176690

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/14 12:49	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
n-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/14 12:49	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
Hexachlorobutadiene	ND		0.20		ug/L			11/25/14 12:49	1
Naphthalene	ND		0.40		ug/L			11/25/14 12:49	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/14 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 12:49*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/25/14 12:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/25/14 12:49*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 12:49*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/25/14 12:49*	*1*

Lab Sample ID: LCS 580-176690/10
Matrix: Water
Analysis Batch: 176690

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.64		ug/L		113	30 - 180
Chloromethane	5.00	5.56		ug/L		111	50 - 140
Vinyl chloride	5.00	5.26		ug/L		105	65 - 140
Bromomethane	5.00	5.51		ug/L		110	70 - 135
Chloroethane	5.00	4.84		ug/L		97	75 - 140
Trichlorofluoromethane	5.00	5.82		ug/L		116	30 - 180
1,1-Dichloroethene	5.00	4.94		ug/L		99	70 - 150
Methylene Chloride	5.00	5.12		ug/L		102	60 - 145
Methyl tert-butyl ether	5.00	4.57		ug/L		91	75 - 120
trans-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 140
1,1-Dichloroethane	5.00	5.21		ug/L		104	75 - 135
2,2-Dichloropropane	5.00	5.66		ug/L		113	60 - 150
cis-1,2-Dichloroethene	5.00	4.93		ug/L		99	80 - 130
Chlorobromomethane	5.00	5.24		ug/L		105	80 - 125
Chloroform	5.00	5.36		ug/L		107	80 - 130
1,1,1-Trichloroethane	5.00	5.77		ug/L		115	80 - 140
Carbon tetrachloride	5.00	5.73		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.15		ug/L		103	80 - 130
Benzene	5.00	4.81		ug/L		96	80 - 120
1,2-Dichloroethane	5.00	5.47		ug/L		109	80 - 140
Trichloroethene	5.00	5.33		ug/L		107	80 - 130
1,2-Dichloropropane	5.00	4.95		ug/L		99	80 - 120
Dibromomethane	5.00	5.17		ug/L		103	80 - 130

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

Lab Sample ID: LCS 580-176690/10
Matrix: Water
Analysis Batch: 176690

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.46		ug/L		109	80 - 125
cis-1,3-Dichloropropene	5.00	4.65		ug/L		93	70 - 120
Toluene	5.00	5.00		ug/L		100	80 - 120
trans-1,3-Dichloropropene	5.00	4.63		ug/L		93	60 - 140
1,1,2-Trichloroethane	5.00	4.73		ug/L		95	80 - 130
Tetrachloroethene	5.00	5.95		ug/L		119	40 - 180
1,3-Dichloropropane	5.00	4.84		ug/L		97	80 - 130
Chlorodibromomethane	5.00	4.65		ug/L		93	70 - 120
Ethylene Dibromide	5.00	4.86		ug/L		97	70 - 130
Chlorobenzene	5.00	4.96		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.02		ug/L		100	75 - 125
Ethylbenzene	5.00	5.06		ug/L		101	80 - 125
m-Xylene & p-Xylene	5.00	4.99		ug/L		100	80 - 130
o-Xylene	5.00	5.18		ug/L		104	80 - 120
Styrene	5.00	4.92		ug/L		98	75 - 130
Bromoform	5.00	3.98		ug/L		80	65 - 130
Isopropylbenzene	5.00	5.21		ug/L		104	75 - 120
Bromobenzene	5.00	4.54		ug/L		91	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.54		ug/L		91	75 - 125
1,2,3-Trichloropropane	5.00	4.70		ug/L		94	75 - 120
N-Propylbenzene	5.00	4.88		ug/L		98	80 - 120
2-Chlorotoluene	5.00	4.74		ug/L		95	75 - 130
4-Chlorotoluene	5.00	4.78		ug/L		96	75 - 130
1,3,5-Trimethylbenzene	5.00	4.91		ug/L		98	80 - 125
tert-Butylbenzene	5.00	4.84		ug/L		97	80 - 130
1,2,4-Trimethylbenzene	5.00	4.89		ug/L		98	80 - 125
sec-Butylbenzene	5.00	4.91		ug/L		98	80 - 125
4-Isopropyltoluene	5.00	5.00		ug/L		100	80 - 120
1,3-Dichlorobenzene	5.00	4.76		ug/L		95	80 - 120
1,4-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120
n-Butylbenzene	5.00	4.88		ug/L		98	75 - 125
1,2-Dichlorobenzene	5.00	4.72		ug/L		94	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.95		ug/L		79	55 - 120
1,2,4-Trichlorobenzene	5.00	4.51		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	4.71		ug/L		94	75 - 135
Naphthalene	5.00	4.24		ug/L		85	45 - 130
1,2,3-Trichlorobenzene	5.00	4.48		ug/L		90	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*93*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

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

Lab Sample ID: LCSD 580-176690/11
Matrix: Water
Analysis Batch: 176690

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
Dichlorodifluoromethane	5.00	5.44		ug/L		109	30 - 180	4	20
Chloromethane	5.00	5.10		ug/L		102	50 - 140	9	20
Vinyl chloride	5.00	4.90		ug/L		98	65 - 140	7	20
Bromomethane	5.00	5.26		ug/L		105	70 - 135	5	20
Chloroethane	5.00	4.38		ug/L		88	75 - 140	10	20
Trichlorofluoromethane	5.00	5.04		ug/L		101	30 - 180	14	20
1,1-Dichloroethene	5.00	4.90		ug/L		98	70 - 150	1	20
Methylene Chloride	5.00	4.88		ug/L		98	60 - 145	5	20
Methyl tert-butyl ether	5.00	4.22		ug/L		84	75 - 120	8	20
trans-1,2-Dichloroethene	5.00	4.86		ug/L		97	80 - 140	2	20
1,1-Dichloroethane	5.00	4.92		ug/L		98	75 - 135	6	20
2,2-Dichloropropane	5.00	5.03		ug/L		101	60 - 150	12	20
cis-1,2-Dichloroethene	5.00	4.63		ug/L		93	80 - 130	6	20
Chlorobromomethane	5.00	5.01		ug/L		100	80 - 125	4	20
Chloroform	5.00	5.03		ug/L		101	80 - 130	6	20
1,1,1-Trichloroethane	5.00	5.28		ug/L		106	80 - 140	9	20
Carbon tetrachloride	5.00	5.34		ug/L		107	75 - 140	7	20
1,1-Dichloropropene	5.00	4.91		ug/L		98	80 - 130	5	20
Benzene	5.00	4.59		ug/L		92	80 - 120	5	20
1,2-Dichloroethane	5.00	5.19		ug/L		104	80 - 140	5	20
Trichloroethene	5.00	5.08		ug/L		102	80 - 130	5	20
1,2-Dichloropropane	5.00	4.76		ug/L		95	80 - 120	4	20
Dibromomethane	5.00	4.73		ug/L		95	80 - 130	9	20
Dichlorobromomethane	5.00	5.04		ug/L		101	80 - 125	8	20
cis-1,3-Dichloropropene	5.00	4.55		ug/L		91	70 - 120	2	20
Toluene	5.00	4.86		ug/L		97	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	4.50		ug/L		90	60 - 140	3	20
1,1,2-Trichloroethane	5.00	4.70		ug/L		94	80 - 130	1	20
Tetrachloroethene	5.00	6.23		ug/L		125	40 - 180	5	20
1,3-Dichloropropane	5.00	4.72		ug/L		94	80 - 130	2	20
Chlorodibromomethane	5.00	4.46		ug/L		89	70 - 120	4	20
Ethylene Dibromide	5.00	4.59		ug/L		92	70 - 130	6	20
Chlorobenzene	5.00	4.69		ug/L		94	80 - 120	6	20
1,1,1,2-Tetrachloroethane	5.00	4.70		ug/L		94	75 - 125	6	20
Ethylbenzene	5.00	4.81		ug/L		96	80 - 125	5	20
m-Xylene & p-Xylene	5.00	4.76		ug/L		95	80 - 130	5	20
o-Xylene	5.00	4.89		ug/L		98	80 - 120	6	20
Styrene	5.00	4.66		ug/L		93	75 - 130	6	20
Bromoform	5.00	3.78		ug/L		76	65 - 130	5	20
Isopropylbenzene	5.00	4.86		ug/L		97	75 - 120	7	20
Bromobenzene	5.00	4.30		ug/L		86	80 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	4.29		ug/L		86	75 - 125	6	20
1,2,3-Trichloropropane	5.00	4.68		ug/L		94	75 - 120	1	20
N-Propylbenzene	5.00	4.68		ug/L		94	80 - 120	4	20
2-Chlorotoluene	5.00	4.59		ug/L		92	75 - 130	3	20
4-Chlorotoluene	5.00	4.61		ug/L		92	75 - 130	4	20
1,3,5-Trimethylbenzene	5.00	4.69		ug/L		94	80 - 125	4	20
tert-Butylbenzene	5.00	4.59		ug/L		92	80 - 130	5	20

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

Lab Sample ID: LCSD 580-176690/11
Matrix: Water
Analysis Batch: 176690

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
1,2,4-Trimethylbenzene			5.00	4.56		ug/L		91	80 - 125	7	20
sec-Butylbenzene			5.00	4.67		ug/L		93	80 - 125	5	20
4-Isopropyltoluene			5.00	4.73		ug/L		95	80 - 120	5	20
1,3-Dichlorobenzene			5.00	4.55		ug/L		91	80 - 120	5	20
1,4-Dichlorobenzene			5.00	4.55		ug/L		91	80 - 120	8	20
n-Butylbenzene			5.00	4.62		ug/L		92	75 - 125	5	20
1,2-Dichlorobenzene			5.00	4.44		ug/L		89	80 - 130	6	20
1,2-Dibromo-3-Chloropropane			5.00	3.63		ug/L		73	55 - 120	8	20
1,2,4-Trichlorobenzene			5.00	4.39		ug/L		88	60 - 125	3	20
Hexachlorobutadiene			5.00	4.57		ug/L		91	75 - 135	3	20
Naphthalene			5.00	4.16		ug/L		83	45 - 130	2	20
1,2,3-Trichlorobenzene			5.00	4.35		ug/L		87	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-159108/28
Matrix: Water
Analysis Batch: 159108

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/02/14 17:00	1
Ethane	ND		0.50		ug/L			12/02/14 17:00	1
Ethene	ND		0.50		ug/L			12/02/14 17:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*112*		*66 - 132*		*12/02/14 17:00*	*1*

Lab Sample ID: LCS 240-159108/29
Matrix: Water
Analysis Batch: 159108

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			116	124		ug/L		107	76 - 120		
Ethane			218	212		ug/L		97	80 - 120		
Ethene			203	188		ug/L		93	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

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

Lab Sample ID: MB 240-159321/4
Matrix: Water
Analysis Batch: 159321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/03/14 14:15	1
Ethane	ND		0.50		ug/L			12/03/14 14:15	1
Ethene	ND		0.50		ug/L			12/03/14 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*145*	*X*	*66 - 132*		*12/03/14 14:15*	*1*

Lab Sample ID: LCS 240-159321/5
Matrix: Water
Analysis Batch: 159321

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			116	130		ug/L		112	76 - 120		
Ethane			218	231		ug/L		106	80 - 120		
Ethene			203	226		ug/L		111	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*141*	*X*	*66 - 132*

Lab Sample ID: 580-46412-14 MS
Matrix: Water
Analysis Batch: 159321

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	1300		347	1600		ug/L		93	34 - 153		
Ethane	ND		653	613		ug/L		94	61 - 120		
Ethene	11		610	564		ug/L		91	60 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*114*		*66 - 132*

Lab Sample ID: 580-46412-14 MSD
Matrix: Water
Analysis Batch: 159321

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	1300		347	1370	F1	ug/L		26	34 - 153	16	22
Ethane	ND		653	624		ug/L		96	61 - 120	2	21
Ethene	11		610	568		ug/L		91	60 - 120	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-176401/3
Matrix: Water
Analysis Batch: 176401

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			11/20/14 08:08	1

Lab Sample ID: LCS 580-176401/4
Matrix: Water
Analysis Batch: 176401

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.80	1.80		mg/L		100	90 - 110		

Lab Sample ID: LCSD 580-176401/5
Matrix: Water
Analysis Batch: 176401

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
Nitrate as N			1.80	1.86		mg/L		103	90 - 110	3	15

Lab Sample ID: 580-46412-14 MS
Matrix: Water
Analysis Batch: 176401

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	1.2		1.80	2.99		mg/L		100	90 - 110		

Lab Sample ID: 580-46412-14 DU
Matrix: Water
Analysis Batch: 176401

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	1.2		1.19		mg/L		0	10

Lab Sample ID: MB 580-176402/3
Matrix: Water
Analysis Batch: 176402

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			11/20/14 08:08	1
Sulfate	ND		1.2		mg/L			11/20/14 08:08	1

Lab Sample ID: LCS 580-176402/4
Matrix: Water
Analysis Batch: 176402

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			9.00	9.09		mg/L		101	90 - 110		
Sulfate			12.0	11.2		mg/L		93	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-176402/5
Matrix: Water
Analysis Batch: 176402

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
Chloride			9.00	9.09		mg/L		101	90 - 110	0	15
Sulfate			12.0	11.3		mg/L		94	90 - 110	0	15

Lab Sample ID: 580-46412-14 MS
Matrix: Water
Analysis Batch: 176402

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	38		9.00	46.8	4	mg/L		98	90 - 110		
Sulfate	4.2		12.0	14.7	F1	mg/L		88	90 - 110		

Lab Sample ID: 580-46412-14 DU
Matrix: Water
Analysis Batch: 176402

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	38		38.0		mg/L				0	10
Sulfate	4.2		4.17		mg/L				0.2	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-176802/1
Matrix: Water
Analysis Batch: 176802

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			11/25/14 19:32	1

Lab Sample ID: LCS 580-176802/2
Matrix: Water
Analysis Batch: 176802

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			15.0	16.2		mg/L		108	85 - 115		

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-24

Lab Sample ID: 580-46412-1

Date Collected: 11/17/14 15:51

Matrix: Water

Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 16:49	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 16:14	AS	TAL SEA

Client Sample ID: DUP-1

Lab Sample ID: 580-46412-2

Date Collected: 11/17/14 16:00

Matrix: Water

Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 17:15	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 16:40	AS	TAL SEA

Client Sample ID: MW-22

Lab Sample ID: 580-46412-3

Date Collected: 11/18/14 08:20

Matrix: Water

Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 17:41	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 17:06	AS	TAL SEA

Client Sample ID: MW-21

Lab Sample ID: 580-46412-4

Date Collected: 11/18/14 09:15

Matrix: Water

Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 18:07	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 17:32	AS	TAL SEA

Client Sample ID: MW-25

Lab Sample ID: 580-46412-5

Date Collected: 11/18/14 10:20

Matrix: Water

Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	176448	11/21/14 18:32	AS	TAL SEA
Total/NA	Analysis	8260B	DL	50	176588	11/24/14 17:38	AS	TAL SEA
Total/NA	Analysis	8260B	RA	10	176690	11/25/14 19:14	AS	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: MW-16

Date Collected: 11/18/14 11:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176448	11/21/14 15:57	AS	TAL SEA

Client Sample ID: MW-17

Date Collected: 11/18/14 12:32
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176690	11/25/14 15:23	AS	TAL SEA

Client Sample ID: MW-23

Date Collected: 11/18/14 14:18
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176690	11/25/14 15:49	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159108	12/02/14 19:27	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176401	11/20/14 09:34	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176402	11/20/14 09:34	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	176802	11/25/14 19:32	RSB	TAL SEA

Client Sample ID: MW-19

Date Collected: 11/18/14 15:36
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176448	11/21/14 16:23	AS	TAL SEA
Total/NA	Analysis	8260B	RA	1	176690	11/25/14 14:57	AS	TAL SEA

Client Sample ID: MW-20

Date Collected: 11/19/14 07:05
Date Received: 11/20/14 08:10

Lab Sample ID: 580-46412-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	176690	11/25/14 18:49	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159108	12/02/14 19:39	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176401	11/20/14 09:49	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176402	11/20/14 09:49	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	176802	11/25/14 19:32	RSB	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Client Sample ID: EQB-1

Lab Sample ID: 580-46412-11

Date Collected: 11/19/14 11:03
Matrix: Water
Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176448	11/21/14 14:40	AS	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-46412-12

Date Collected: 11/10/14 00:00
Matrix: Water
Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176448	11/21/14 14:14	AS	TAL SEA

Client Sample ID: MW-5

Lab Sample ID: 580-46412-13

Date Collected: 11/19/14 08:11
Matrix: Water
Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 20:15	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 17:58	AS	TAL SEA

Client Sample ID: MW-7

Lab Sample ID: 580-46412-14

Date Collected: 11/19/14 09:09
Matrix: Water
Date Received: 11/20/14 08:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 20:41	AS	TAL SEA
Total/NA	Analysis	8260B	RA	50	176690	11/25/14 18:23	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159108	12/02/14 19:52	BPM	TAL CAN
Total/NA	Analysis	RSK-175		3	159321	12/03/14 18:07	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176401	11/20/14 10:03	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176402	11/20/14 10:03	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		10	176802	11/26/14 10:53	RSB	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46412-1	MW-24	Water	11/17/14 15:51	11/20/14 08:10
580-46412-2	DUP-1	Water	11/17/14 16:00	11/20/14 08:10
580-46412-3	MW-22	Water	11/18/14 08:20	11/20/14 08:10
580-46412-4	MW-21	Water	11/18/14 09:15	11/20/14 08:10
580-46412-5	MW-25	Water	11/18/14 10:20	11/20/14 08:10
580-46412-6	MW-16	Water	11/18/14 11:36	11/20/14 08:10
580-46412-7	MW-17	Water	11/18/14 12:32	11/20/14 08:10
580-46412-8	MW-23	Water	11/18/14 14:18	11/20/14 08:10
580-46412-9	MW-19	Water	11/18/14 15:36	11/20/14 08:10
580-46412-10	MW-20	Water	11/19/14 07:05	11/20/14 08:10
580-46412-11	EQB-1	Water	11/19/14 11:03	11/20/14 08:10
580-46412-12	Trip Blank	Water	11/10/14 00:00	11/20/14 08:10
580-46412-13	MW-5	Water	11/19/14 08:11	11/20/14 08:10
580-46412-14	MW-7	Water	11/19/14 09:09	11/20/14 08:10

Sample Custody Record

Samples Shipped to: Test America – Seattle (5755 8th Str. E. Tacoma, WA 98424)

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • **Fax** 503.620.6918

JOB 17800-23 LAB NUMBER

PROJECT NAME Frank Wear Site

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY: Kaylan Smyth

46412

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate Cl- Sulfate 300.0	TOC SM 5310 B	Ethane Methane Ethane RSK-175	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
-1	MW-24		11-17-14	15:51	W	6	X					
-2	DUP-1		11-17-14	16:00	W	6	X					
-3	MW-22		11-18-14	8:20	W	6	X					
-4	MW-21		11-18-14	9:15	W	6	X					
-5	MW-25		11-18-14	10:20	W	6	X					
-6	MW-16		11-18-14	11:36	W	6	X					
-7	MW-17		11-18-14	12:32	W	6	X					
-8	MW-23		11-18-14	14:18	W	~~6~~ 11	X	X	X	X		
-9	MW-19		11-18-14	15:36	W	6	X					
-10	MW-20		11-19-14	7:05	W	11	X	X	X	X		
-11	EQB-1		11-19-14	11:03	W	6	X					
-12 HCL	TRIP BLANK		11-10-14		W	3 ~~6~~	X					

580-46412 Chain of Custody

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Kaylan Smyth	11-19-14	Tom Blankinship	11/20/14
SIGNATURE	TIME	SIGNATURE	TIME
KAYLAN SMYTH	15:00	Blankinship	0810
PRINT NAME		PRINT NAME	
HART CROWSER		TA-Sea	
COMPANY		COMPANY	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:
Results can be emailed to:
jill.kiernan@hartcrowser.com

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____
for Other Contract Requirements

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS:
☐YES ☐NO ☐N/A
GOOD CONDITION
☐YES ☐NO
TEMPERATURE _____
SHIPMENT METHOD: ☐HAND
☐COURIER ☐OVERNIGHT

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Sample Custody Record

Samples Shipped to: Test America – Seattle (5755 8th Str. E. Tacoma, WA 98424)

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • **Fax** 503.620.6918

JOB 17800-23 LAB NUMBER

PROJECT NAME FRANK WEAR SITE

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY: Kaylan Smyth

46412

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate Cl- Sulfate 300.0	TOC SM 5310 B	Ethane Methane Ethane RSK-175	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
-13	MW-5		11-19-14	8:11	W	6	X					
-14	MW-7		11-19-14	9:09	W	11	X	X	X	X		
-15	MW-2		11-19-14	10:45	W	6	X					

Cooler/TB Dig/IR cor 2.5 unc 4.5

Cooler Dsc hg Red/wh @ Lab

Wet/Packs Packing Bubb

Fed 1st ON

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE Kaylan Smyth	11-19-14	SIGNATURE Blan Kinship	11/20/14
PRINT NAME Kaylan Smyth	TIME 15:00	PRINT NAME TA-Sea	TIME 0810
COMPANY Hart Crowser		COMPANY	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

Results can be emailed to:

jill.kiernan@hartcrowser.com

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____ for Other Contract Requirements

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION

CUSTODY SEALS: ☐YES ☐NO ☐N/A

GOOD CONDITION ☐YES ☐NO

TEMPERATURE _____

SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

TURNAROUND TIME:

☐ 24 HOURS ☐ 1 WEEK

☐48 HOURS ☐STANDARD

☐72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

12/4/2014

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

1.8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Allen, Kristine D	Carrier Tracking No(s):	COC No: 580-21974.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: kristine.allen@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 580-46412-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 12/2/2014			Preservation Codes:
City: North Canton	TAT Requested (days):			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 - Na2S2SO3 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)
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Frank Wear Site	Project #: 58005577			
Site: Fran Wear - Yakima	SSOW#:			RSK

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175/ MEE Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-23 (580-46412-8)	11/18/14	14:18 Pacific		Water			X		
MW-20 (580-46412-10)	11/19/14	07:05 Pacific		Water			X		
MW-7 (580-46412-14)	11/19/14	09:09 Pacific		Water			X		

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11/20/14 1400	TA STL	[signature]	11/21/14 945	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client Seattle Site Name _____ Cooler unpacked by:

Cooler Received on 11-21-14 Opened on 11-21-14

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +4.0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp. 1.8 °C	Corrected Cooler Temp. 2.2 °C	
IR GUN# 8	(CF +0.7 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC425511
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-46412-1

Login Number: 46412

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-46431-1
Client Project/Site: Frank Wear Site

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
12/9/2014 12:17:56 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-46431-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-46431-1

Comments
No additional comments.

Receipt
The samples were received on 11/21/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

Except:

The container labels for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-3 (580-46431-7). The container labels list the ID as MW-3/EXT-5 while the COC lists MW-3. The sample is logged in per COC.

The following sample(s) was activated for TOC analysis by the client on 11/24/2014: Ext-1 (580-46431-6).

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-2 (580-46431-1), MW-6 (580-46431-2), MW-8 (580-46431-3), Ext-1 (580-46431-6), MW-10 (580-46431-5), MW-4/Ext-8 (580-46431-8), SPW-12 (580-46431-10), SPW-15 (580-46431-4). 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
Method(s) RSK-175: Surrogate recoveries were high in the Continuing Calibration Verification standards, Method Blank, and field and QC samples. Surrogate is consistently high throughout these runs. The target analyte compound RFs are consistent with established calibration curve. The sample has been qualified and reported: SPW-12 (580-46431-10).

Sample SPW-12 (580-46431-10) was diluted to bring the methane results within the calibration range of the instrument. This dilution happened outside of holding time. The data has been qualified and reported.

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.

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-2
Date Collected: 11/19/14 10:45
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 21:07	50
Chloromethane	ND		5.0		ug/L			11/21/14 21:07	50
Vinyl chloride	**1900**		1.0		ug/L			11/21/14 21:07	50
Bromomethane	ND		5.0		ug/L			11/21/14 21:07	50
Chloroethane	ND		13		ug/L			11/21/14 21:07	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 21:07	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 21:07	50
Methylene Chloride	ND		25		ug/L			11/21/14 21:07	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 21:07	50
trans-1,2-Dichloroethene	**16**		5.0		ug/L			11/21/14 21:07	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 21:07	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:07	50
cis-1,2-Dichloroethene	**1500**		5.0		ug/L			11/21/14 21:07	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 21:07	50
Chloroform	ND		5.0		ug/L			11/21/14 21:07	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 21:07	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 21:07	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 21:07	50
Benzene	ND		5.0		ug/L			11/21/14 21:07	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 21:07	50
Trichloroethene	ND		5.0		ug/L			11/21/14 21:07	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:07	50
Dibromomethane	ND		5.0		ug/L			11/21/14 21:07	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 21:07	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:07	50
Toluene	ND		5.0		ug/L			11/21/14 21:07	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:07	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 21:07	50
Tetrachloroethene	ND		5.0		ug/L			11/21/14 21:07	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 21:07	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 21:07	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 21:07	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 21:07	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:07	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 21:07	50
o-Xylene	ND		5.0		ug/L			11/21/14 21:07	50
Styrene	ND		5.0		ug/L			11/21/14 21:07	50
Bromoform	ND		5.0		ug/L			11/21/14 21:07	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
Bromobenzene	ND		5.0		ug/L			11/21/14 21:07	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:07	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 21:07	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 21:07	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 21:07	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:07	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-2
Date Collected: 11/19/14 10:45
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
4-Isopropyltoluene	ND		10		ug/L			11/21/14 21:07	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 21:07	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 21:07	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 21:07	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 21:07	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 21:07	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 21:07	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 21:07	50
Naphthalene	ND		20		ug/L			11/21/14 21:07	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 21:07	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 21:07*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 21:07*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*11/21/14 21:07*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/21/14 21:07*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/21/14 21:07*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-6
Date Collected: 11/19/14 12:03
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 21:32	50
Chloromethane	ND		5.0		ug/L			11/21/14 21:32	50
Vinyl chloride	**26**		1.0		ug/L			11/21/14 21:32	50
Bromomethane	ND		5.0		ug/L			11/21/14 21:32	50
Chloroethane	ND		13		ug/L			11/21/14 21:32	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 21:32	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 21:32	50
Methylene Chloride	ND		25		ug/L			11/21/14 21:32	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 21:32	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/21/14 21:32	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 21:32	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:32	50
cis-1,2-Dichloroethene	**390**		5.0		ug/L			11/21/14 21:32	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 21:32	50
Chloroform	ND		5.0		ug/L			11/21/14 21:32	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 21:32	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 21:32	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 21:32	50
Benzene	ND		5.0		ug/L			11/21/14 21:32	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 21:32	50
Trichloroethene	**8.6**		5.0		ug/L			11/21/14 21:32	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:32	50
Dibromomethane	ND		5.0		ug/L			11/21/14 21:32	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 21:32	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:32	50
Toluene	ND		5.0		ug/L			11/21/14 21:32	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:32	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 21:32	50
Tetrachloroethene	**19**		5.0		ug/L			11/21/14 21:32	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 21:32	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 21:32	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 21:32	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 21:32	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:32	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 21:32	50
o-Xylene	ND		5.0		ug/L			11/21/14 21:32	50
Styrene	ND		5.0		ug/L			11/21/14 21:32	50
Bromoform	ND		5.0		ug/L			11/21/14 21:32	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
Bromobenzene	ND		5.0		ug/L			11/21/14 21:32	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:32	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 21:32	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 21:32	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 21:32	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:32	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-6
Date Collected: 11/19/14 12:03
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
4-Isopropyltoluene	ND		10		ug/L			11/21/14 21:32	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 21:32	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 21:32	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 21:32	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 21:32	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 21:32	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 21:32	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 21:32	50
Naphthalene	ND		20		ug/L			11/21/14 21:32	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 21:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/21/14 21:32*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 21:32*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*11/21/14 21:32*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/21/14 21:32*	*50*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*11/21/14 21:32*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-8
Date Collected: 11/19/14 12:50
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/21/14 21:58	50
Chloromethane	ND		5.0		ug/L			11/21/14 21:58	50
Vinyl chloride	**1300**		1.0		ug/L			11/21/14 21:58	50
Bromomethane	ND		5.0		ug/L			11/21/14 21:58	50
Chloroethane	ND		13		ug/L			11/21/14 21:58	50
Trichlorofluoromethane	ND		5.0		ug/L			11/21/14 21:58	50
1,1-Dichloroethene	ND		5.0		ug/L			11/21/14 21:58	50
Methylene Chloride	ND		25		ug/L			11/21/14 21:58	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/21/14 21:58	50
trans-1,2-Dichloroethene	**26**		5.0		ug/L			11/21/14 21:58	50
1,1-Dichloroethane	ND		5.0		ug/L			11/21/14 21:58	50
2,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:58	50
cis-1,2-Dichloroethene	**2700**		5.0		ug/L			11/21/14 21:58	50
Chlorobromomethane	ND		5.0		ug/L			11/21/14 21:58	50
Chloroform	ND		5.0		ug/L			11/21/14 21:58	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/21/14 21:58	50
Carbon tetrachloride	ND		5.0		ug/L			11/21/14 21:58	50
1,1-Dichloropropene	ND		5.0		ug/L			11/21/14 21:58	50
Benzene	ND		5.0		ug/L			11/21/14 21:58	50
1,2-Dichloroethane	ND		5.0		ug/L			11/21/14 21:58	50
Trichloroethene	ND		5.0		ug/L			11/21/14 21:58	50
1,2-Dichloropropane	ND		5.0		ug/L			11/21/14 21:58	50
Dibromomethane	ND		5.0		ug/L			11/21/14 21:58	50
Dichlorobromomethane	ND		5.0		ug/L			11/21/14 21:58	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:58	50
Toluene	ND		5.0		ug/L			11/21/14 21:58	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/21/14 21:58	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/21/14 21:58	50
Tetrachloroethene	ND		5.0		ug/L			11/21/14 21:58	50
1,3-Dichloropropane	ND		5.0		ug/L			11/21/14 21:58	50
Chlorodibromomethane	ND		5.0		ug/L			11/21/14 21:58	50
Ethylene Dibromide	ND		5.0		ug/L			11/21/14 21:58	50
Chlorobenzene	ND		5.0		ug/L			11/21/14 21:58	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:58	50
Ethylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
m-Xylene & p-Xylene	ND		10		ug/L			11/21/14 21:58	50
o-Xylene	ND		5.0		ug/L			11/21/14 21:58	50
Styrene	ND		5.0		ug/L			11/21/14 21:58	50
Bromoform	ND		5.0		ug/L			11/21/14 21:58	50
Isopropylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
Bromobenzene	ND		5.0		ug/L			11/21/14 21:58	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/21/14 21:58	50
1,2,3-Trichloropropane	ND		10		ug/L			11/21/14 21:58	50
N-Propylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
2-Chlorotoluene	ND		5.0		ug/L			11/21/14 21:58	50
4-Chlorotoluene	ND		10		ug/L			11/21/14 21:58	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
tert-Butylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/21/14 21:58	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-8
Date Collected: 11/19/14 12:50
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
4-Isopropyltoluene	ND		10		ug/L			11/21/14 21:58	50
1,3-Dichlorobenzene	ND		10		ug/L			11/21/14 21:58	50
1,4-Dichlorobenzene	ND		10		ug/L			11/21/14 21:58	50
n-Butylbenzene	ND		5.0		ug/L			11/21/14 21:58	50
1,2-Dichlorobenzene	ND		10		ug/L			11/21/14 21:58	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/21/14 21:58	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/21/14 21:58	50
Hexachlorobutadiene	ND		10		ug/L			11/21/14 21:58	50
Naphthalene	ND		20		ug/L			11/21/14 21:58	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/21/14 21:58	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*11/21/14 21:58*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 21:58*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*		*11/21/14 21:58*	*50*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*11/21/14 21:58*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/21/14 21:58*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2100**		1.5		ug/L			12/03/14 21:10	3
Ethane	ND		0.50		ug/L			12/02/14 20:28	1
Ethene	**18**		0.50		ug/L			12/02/14 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*108*		*66 - 132*		*12/02/14 20:28*	*1*
1,1,1-Trifluoroethane	*108*		*66 - 132*		*12/03/14 21:10*	*3*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35**		0.90		mg/L			11/21/14 11:30	1
Nitrate as N	ND		0.90		mg/L			11/21/14 11:30	1
Sulfate	ND		1.2		mg/L			11/21/14 11:30	1
Total Organic Carbon	**45**		10		mg/L			12/02/14 17:55	10

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: SPW-15
Date Collected: 11/19/14 14:41
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 18:03	50
Chloromethane	ND		5.0		ug/L			11/24/14 18:03	50
Vinyl chloride	**1200**		1.0		ug/L			11/24/14 18:03	50
Bromomethane	ND		5.0		ug/L			11/24/14 18:03	50
Chloroethane	ND		13		ug/L			11/24/14 18:03	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 18:03	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 18:03	50
Methylene Chloride	ND		25		ug/L			11/24/14 18:03	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 18:03	50
trans-1,2-Dichloroethene	**37**		5.0		ug/L			11/24/14 18:03	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 18:03	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:03	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 18:03	50
Chloroform	ND		5.0		ug/L			11/24/14 18:03	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 18:03	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 18:03	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 18:03	50
Benzene	ND		5.0		ug/L			11/24/14 18:03	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 18:03	50
Trichloroethene	**23**		5.0		ug/L			11/24/14 18:03	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:03	50
Dibromomethane	ND		5.0		ug/L			11/24/14 18:03	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 18:03	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:03	50
Toluene	ND		5.0		ug/L			11/24/14 18:03	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:03	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 18:03	50
Tetrachloroethene	**29**		5.0		ug/L			11/24/14 18:03	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 18:03	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 18:03	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 18:03	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 18:03	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:03	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 18:03	50
o-Xylene	ND		5.0		ug/L			11/24/14 18:03	50
Styrene	ND		5.0		ug/L			11/24/14 18:03	50
Bromoform	ND		5.0		ug/L			11/24/14 18:03	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
Bromobenzene	ND		5.0		ug/L			11/24/14 18:03	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:03	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 18:03	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 18:03	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 18:03	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 18:03	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: SPW-15
Date Collected: 11/19/14 14:41
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		10		ug/L			11/24/14 18:03	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 18:03	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 18:03	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 18:03	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 18:03	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 18:03	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 18:03	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 18:03	50
Naphthalene	ND		20		ug/L			11/24/14 18:03	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 18:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/24/14 18:03*	*50*
Toluene-d8 (Surr)	*99*		*75 - 125*		*11/24/14 18:03*	*50*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*11/24/14 18:03*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/24/14 18:03*	*50*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*11/24/14 18:03*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**5100**		50		ug/L			11/25/14 19:40	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 19:40*	*500*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/25/14 19:40*	*500*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/25/14 19:40*	*500*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*11/25/14 19:40*	*500*
Dibromofluoromethane (Surr)	*105*		*85 - 115*		*11/25/14 19:40*	*500*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-10
Date Collected: 11/19/14 15:48
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 18:29	50
Chloromethane	ND		5.0		ug/L			11/24/14 18:29	50
Vinyl chloride	**400**		1.0		ug/L			11/24/14 18:29	50
Bromomethane	ND		5.0		ug/L			11/24/14 18:29	50
Chloroethane	ND		13		ug/L			11/24/14 18:29	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 18:29	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 18:29	50
Methylene Chloride	ND		25		ug/L			11/24/14 18:29	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 18:29	50
trans-1,2-Dichloroethene	**26**		5.0		ug/L			11/24/14 18:29	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 18:29	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:29	50
cis-1,2-Dichloroethene	**3600**		5.0		ug/L			11/24/14 18:29	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 18:29	50
Chloroform	ND		5.0		ug/L			11/24/14 18:29	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 18:29	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 18:29	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 18:29	50
Benzene	ND		5.0		ug/L			11/24/14 18:29	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 18:29	50
Trichloroethene	**190**		5.0		ug/L			11/24/14 18:29	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:29	50
Dibromomethane	ND		5.0		ug/L			11/24/14 18:29	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 18:29	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:29	50
Toluene	ND		5.0		ug/L			11/24/14 18:29	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:29	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 18:29	50
Tetrachloroethene	**370**		5.0		ug/L			11/24/14 18:29	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 18:29	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 18:29	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 18:29	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 18:29	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:29	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 18:29	50
o-Xylene	ND		5.0		ug/L			11/24/14 18:29	50
Styrene	ND		5.0		ug/L			11/24/14 18:29	50
Bromoform	ND		5.0		ug/L			11/24/14 18:29	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
Bromobenzene	ND		5.0		ug/L			11/24/14 18:29	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:29	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 18:29	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 18:29	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 18:29	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:29	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-10
Date Collected: 11/19/14 15:48
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 18:29	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 18:29	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 18:29	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 18:29	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 18:29	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 18:29	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 18:29	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 18:29	50
Naphthalene	ND		20		ug/L			11/24/14 18:29	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 18:29	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 18:29*	*50*
Toluene-d8 (Surr)	*99*		*75 - 125*		*11/24/14 18:29*	*50*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*11/24/14 18:29*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 18:29*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 18:29*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**98**		0.50		ug/L			12/02/14 20:40	1
Ethane	ND		0.50		ug/L			12/02/14 20:40	1
Ethene	**28**		0.50		ug/L			12/02/14 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*107*		*66 - 132*		*12/02/14 20:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37**		0.90		mg/L			11/21/14 12:14	1
Nitrate as N	ND		0.90		mg/L			11/21/14 12:14	1
Sulfate	**1.5**		1.2		mg/L			11/21/14 12:14	1
Total Organic Carbon	**6.8**		1.0		mg/L			12/03/14 12:08	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: Ext-1
Date Collected: 11/19/14 16:56
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 18:54	50
Chloromethane	ND		5.0		ug/L			11/24/14 18:54	50
Vinyl chloride	**67**		1.0		ug/L			11/24/14 18:54	50
Bromomethane	ND		5.0		ug/L			11/24/14 18:54	50
Chloroethane	ND		13		ug/L			11/24/14 18:54	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 18:54	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 18:54	50
Methylene Chloride	ND		25		ug/L			11/24/14 18:54	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 18:54	50
trans-1,2-Dichloroethene	**7.1**		5.0		ug/L			11/24/14 18:54	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 18:54	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:54	50
cis-1,2-Dichloroethene	**790**		5.0		ug/L			11/24/14 18:54	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 18:54	50
Chloroform	ND		5.0		ug/L			11/24/14 18:54	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 18:54	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 18:54	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 18:54	50
Benzene	ND		5.0		ug/L			11/24/14 18:54	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 18:54	50
Trichloroethene	**35**		5.0		ug/L			11/24/14 18:54	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 18:54	50
Dibromomethane	ND		5.0		ug/L			11/24/14 18:54	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 18:54	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:54	50
Toluene	ND		5.0		ug/L			11/24/14 18:54	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 18:54	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 18:54	50
Tetrachloroethene	**81**		5.0		ug/L			11/24/14 18:54	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 18:54	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 18:54	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 18:54	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 18:54	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:54	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 18:54	50
o-Xylene	ND		5.0		ug/L			11/24/14 18:54	50
Styrene	ND		5.0		ug/L			11/24/14 18:54	50
Bromoform	ND		5.0		ug/L			11/24/14 18:54	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
Bromobenzene	ND		5.0		ug/L			11/24/14 18:54	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 18:54	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 18:54	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 18:54	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 18:54	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 18:54	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: Ext-1
Date Collected: 11/19/14 16:56
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 18:54	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 18:54	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 18:54	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 18:54	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 18:54	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 18:54	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 18:54	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 18:54	50
Naphthalene	ND		20		ug/L			11/24/14 18:54	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 18:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/24/14 18:54*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/24/14 18:54*	*50*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*11/24/14 18:54*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 18:54*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 18:54*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			12/03/14 12:08	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-3
Date Collected: 11/20/14 07:24
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 16:47	1
Chloromethane	ND		0.10		ug/L			11/24/14 16:47	1
Vinyl chloride	**3.2**		0.020		ug/L			11/24/14 16:47	1
Bromomethane	ND		0.10		ug/L			11/24/14 16:47	1
Chloroethane	ND		0.25		ug/L			11/24/14 16:47	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 16:47	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 16:47	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 16:47	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 16:47	1
trans-1,2-Dichloroethene	**0.52**		0.10		ug/L			11/24/14 16:47	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 16:47	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 16:47	1
cis-1,2-Dichloroethene	**79**		0.10		ug/L			11/24/14 16:47	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 16:47	1
Chloroform	**2.6**		0.10		ug/L			11/24/14 16:47	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 16:47	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 16:47	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 16:47	1
Benzene	ND		0.10		ug/L			11/24/14 16:47	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 16:47	1
Trichloroethene	**3.8**		0.10		ug/L			11/24/14 16:47	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 16:47	1
Dibromomethane	ND		0.10		ug/L			11/24/14 16:47	1
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 16:47	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 16:47	1
Toluene	ND		0.10		ug/L			11/24/14 16:47	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 16:47	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 16:47	1
Tetrachloroethene	**12**		0.10		ug/L			11/24/14 16:47	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 16:47	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 16:47	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 16:47	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 16:47	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 16:47	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 16:47	1
o-Xylene	ND		0.10		ug/L			11/24/14 16:47	1
Styrene	ND		0.10		ug/L			11/24/14 16:47	1
Bromoform	ND		0.10		ug/L			11/24/14 16:47	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
Bromobenzene	ND		0.10		ug/L			11/24/14 16:47	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 16:47	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 16:47	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 16:47	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 16:47	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 16:47	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-3
Date Collected: 11/20/14 07:24
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 16:47	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:47	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:47	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 16:47	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:47	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 16:47	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 16:47	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 16:47	1
Naphthalene	ND		0.40		ug/L			11/24/14 16:47	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/24/14 16:47*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 16:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*11/24/14 16:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/24/14 16:47*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 16:47*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/03/14 21:22	1
Ethane	ND		0.50		ug/L			12/03/14 21:22	1
Ethene	ND		0.50		ug/L			12/03/14 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*107*		*66 - 132*		*12/03/14 21:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		0.90		mg/L			11/21/14 12:28	1
Nitrate as N	**4.0**		0.90		mg/L			11/21/14 12:28	1
Sulfate	**9.5**		1.2		mg/L			11/21/14 12:28	1
Total Organic Carbon	**1.0**		1.0		mg/L			12/03/14 12:08	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-4/Ext-8
Date Collected: 11/20/14 08:30
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		4.0		ug/L			11/24/14 19:20	10
Chloromethane	ND		1.0		ug/L			11/24/14 19:20	10
Vinyl chloride	**77**		0.20		ug/L			11/24/14 19:20	10
Bromomethane	ND		1.0		ug/L			11/24/14 19:20	10
Chloroethane	ND		2.5		ug/L			11/24/14 19:20	10
Trichlorofluoromethane	ND		1.0		ug/L			11/24/14 19:20	10
1,1-Dichloroethene	ND		1.0		ug/L			11/24/14 19:20	10
Methylene Chloride	ND		5.0		ug/L			11/24/14 19:20	10
Methyl tert-butyl ether	ND		1.0		ug/L			11/24/14 19:20	10
trans-1,2-Dichloroethene	**2.8**		1.0		ug/L			11/24/14 19:20	10
1,1-Dichloroethane	ND		1.0		ug/L			11/24/14 19:20	10
2,2-Dichloropropane	ND		1.0		ug/L			11/24/14 19:20	10
cis-1,2-Dichloroethene	**300**		1.0		ug/L			11/24/14 19:20	10
Chlorobromomethane	ND		1.0		ug/L			11/24/14 19:20	10
Chloroform	**2.9**		1.0		ug/L			11/24/14 19:20	10
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/14 19:20	10
Carbon tetrachloride	ND		1.0		ug/L			11/24/14 19:20	10
1,1-Dichloropropene	ND		1.0		ug/L			11/24/14 19:20	10
Benzene	ND		1.0		ug/L			11/24/14 19:20	10
1,2-Dichloroethane	ND		1.0		ug/L			11/24/14 19:20	10
Trichloroethene	**4.7**		1.0		ug/L			11/24/14 19:20	10
1,2-Dichloropropane	ND		1.0		ug/L			11/24/14 19:20	10
Dibromomethane	ND		1.0		ug/L			11/24/14 19:20	10
Dichlorobromomethane	ND		1.0		ug/L			11/24/14 19:20	10
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/14 19:20	10
Toluene	ND		1.0		ug/L			11/24/14 19:20	10
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/24/14 19:20	10
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/14 19:20	10
Tetrachloroethene	**9.4**		1.0		ug/L			11/24/14 19:20	10
1,3-Dichloropropane	ND		1.0		ug/L			11/24/14 19:20	10
Chlorodibromomethane	ND		1.0		ug/L			11/24/14 19:20	10
Ethylene Dibromide	ND		1.0		ug/L			11/24/14 19:20	10
Chlorobenzene	ND		1.0		ug/L			11/24/14 19:20	10
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/24/14 19:20	10
Ethylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
m-Xylene & p-Xylene	ND		2.0		ug/L			11/24/14 19:20	10
o-Xylene	ND		1.0		ug/L			11/24/14 19:20	10
Styrene	ND		1.0		ug/L			11/24/14 19:20	10
Bromoform	ND		1.0		ug/L			11/24/14 19:20	10
Isopropylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
Bromobenzene	ND		1.0		ug/L			11/24/14 19:20	10
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/14 19:20	10
1,2,3-Trichloropropane	ND		2.0		ug/L			11/24/14 19:20	10
N-Propylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
2-Chlorotoluene	ND		1.0		ug/L			11/24/14 19:20	10
4-Chlorotoluene	ND		2.0		ug/L			11/24/14 19:20	10
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
tert-Butylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/24/14 19:20	10

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-4/Ext-8
Date Collected: 11/20/14 08:30
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
4-Isopropyltoluene	ND		2.0		ug/L			11/24/14 19:20	10
1,3-Dichlorobenzene	ND		2.0		ug/L			11/24/14 19:20	10
1,4-Dichlorobenzene	ND		2.0		ug/L			11/24/14 19:20	10
n-Butylbenzene	ND		1.0		ug/L			11/24/14 19:20	10
1,2-Dichlorobenzene	ND		2.0		ug/L			11/24/14 19:20	10
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/24/14 19:20	10
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/24/14 19:20	10
Hexachlorobutadiene	ND		2.0		ug/L			11/24/14 19:20	10
Naphthalene	ND		4.0		ug/L			11/24/14 19:20	10
1,2,3-Trichlorobenzene	ND		4.0		ug/L			11/24/14 19:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/24/14 19:20*	*10*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/24/14 19:20*	*10*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*11/24/14 19:20*	*10*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*11/24/14 19:20*	*10*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 19:20*	*10*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-18
Date Collected: 11/20/14 09:42
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 17:12	1
Chloromethane	ND		0.10		ug/L			11/24/14 17:12	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 17:12	1
Bromomethane	ND		0.10		ug/L			11/24/14 17:12	1
Chloroethane	ND		0.25		ug/L			11/24/14 17:12	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 17:12	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 17:12	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 17:12	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 17:12	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 17:12	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 17:12	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 17:12	1
cis-1,2-Dichloroethene	**0.44**		0.10		ug/L			11/24/14 17:12	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 17:12	1
Chloroform	**0.19**		0.10		ug/L			11/24/14 17:12	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 17:12	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 17:12	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 17:12	1
Benzene	ND		0.10		ug/L			11/24/14 17:12	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 17:12	1
Trichloroethene	ND		0.10		ug/L			11/24/14 17:12	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 17:12	1
Dibromomethane	ND		0.10		ug/L			11/24/14 17:12	1
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 17:12	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 17:12	1
Toluene	ND		0.10		ug/L			11/24/14 17:12	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 17:12	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 17:12	1
Tetrachloroethene	**0.31**		0.10		ug/L			11/24/14 17:12	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 17:12	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 17:12	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 17:12	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 17:12	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 17:12	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 17:12	1
o-Xylene	ND		0.10		ug/L			11/24/14 17:12	1
Styrene	ND		0.10		ug/L			11/24/14 17:12	1
Bromoform	ND		0.10		ug/L			11/24/14 17:12	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
Bromobenzene	ND		0.10		ug/L			11/24/14 17:12	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 17:12	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 17:12	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 17:12	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 17:12	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 17:12	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-18
Date Collected: 11/20/14 09:42
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 17:12	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 17:12	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 17:12	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 17:12	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 17:12	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 17:12	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 17:12	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 17:12	1
Naphthalene	ND		0.40		ug/L			11/24/14 17:12	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/24/14 17:12*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 17:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*11/24/14 17:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 17:12*	*1*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 17:12*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/03/14 21:35	1
Ethane	ND		0.50		ug/L			12/03/14 21:35	1
Ethene	ND		0.50		ug/L			12/03/14 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*107*		*66 - 132*		*12/03/14 21:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.3**		0.90		mg/L			11/21/14 12:42	1
Nitrate as N	**2.6**		0.90		mg/L			11/21/14 12:42	1
Sulfate	**9.0**		1.2		mg/L			11/21/14 12:42	1
Total Organic Carbon	**1.7**		1.0		mg/L			12/04/14 09:30	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: SPW-12
Date Collected: 11/20/14 10:55
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 19:46	50
Chloromethane	ND		5.0		ug/L			11/24/14 19:46	50
Vinyl chloride	**1400**		1.0		ug/L			11/24/14 19:46	50
Bromomethane	ND		5.0		ug/L			11/24/14 19:46	50
Chloroethane	ND		13		ug/L			11/24/14 19:46	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 19:46	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 19:46	50
Methylene Chloride	ND		25		ug/L			11/24/14 19:46	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 19:46	50
trans-1,2-Dichloroethene	**21**		5.0		ug/L			11/24/14 19:46	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 19:46	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 19:46	50
cis-1,2-Dichloroethene	**3100**		5.0		ug/L			11/24/14 19:46	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 19:46	50
Chloroform	ND		5.0		ug/L			11/24/14 19:46	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 19:46	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 19:46	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 19:46	50
Benzene	ND		5.0		ug/L			11/24/14 19:46	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 19:46	50
Trichloroethene	**7.2**		5.0		ug/L			11/24/14 19:46	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 19:46	50
Dibromomethane	ND		5.0		ug/L			11/24/14 19:46	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 19:46	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 19:46	50
Toluene	ND		5.0		ug/L			11/24/14 19:46	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 19:46	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 19:46	50
Tetrachloroethene	**7.4**		5.0		ug/L			11/24/14 19:46	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 19:46	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 19:46	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 19:46	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 19:46	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 19:46	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 19:46	50
o-Xylene	ND		5.0		ug/L			11/24/14 19:46	50
Styrene	ND		5.0		ug/L			11/24/14 19:46	50
Bromoform	ND		5.0		ug/L			11/24/14 19:46	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
Bromobenzene	ND		5.0		ug/L			11/24/14 19:46	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 19:46	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 19:46	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 19:46	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 19:46	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 19:46	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: SPW-12
Date Collected: 11/20/14 10:55
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 19:46	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 19:46	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 19:46	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 19:46	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 19:46	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 19:46	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 19:46	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 19:46	50
Naphthalene	ND		20		ug/L			11/24/14 19:46	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 19:46	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*96*		*80 - 127*		*11/24/14 19:46*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 19:46*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 19:46*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 19:46*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/24/14 19:46*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2100**	**H**	1.5		ug/L			12/05/14 17:22	3
Ethane	ND		0.50		ug/L			12/03/14 21:47	1
Ethene	**17**		0.50		ug/L			12/03/14 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*106*		*66 - 132*		*12/03/14 21:47*	*1*
1,1,1-Trifluoroethane	*138*	*X*	*66 - 132*		*12/05/14 17:22*	*3*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34**		0.90		mg/L			11/21/14 12:57	1
Nitrate as N	ND		0.90		mg/L			11/21/14 12:57	1
Sulfate	ND		1.2		mg/L			11/21/14 12:57	1
Total Organic Carbon	**12**		2.0		mg/L			12/03/14 12:08	2

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: Trip Blank
Date Collected: 11/10/14 00:00
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 15:55	1
Chloromethane	ND		0.10		ug/L			11/24/14 15:55	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 15:55	1
Bromomethane	ND		0.10		ug/L			11/24/14 15:55	1
Chloroethane	ND		0.25		ug/L			11/24/14 15:55	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 15:55	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 15:55	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 15:55	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 15:55	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 15:55	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 15:55	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 15:55	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 15:55	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 15:55	1
Chloroform	ND		0.10		ug/L			11/24/14 15:55	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 15:55	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 15:55	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 15:55	1
Benzene	ND		0.10		ug/L			11/24/14 15:55	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 15:55	1
Trichloroethene	ND		0.10		ug/L			11/24/14 15:55	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 15:55	1
Dibromomethane	ND		0.10		ug/L			11/24/14 15:55	1
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 15:55	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 15:55	1
Toluene	ND		0.10		ug/L			11/24/14 15:55	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 15:55	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 15:55	1
Tetrachloroethene	ND		0.10		ug/L			11/24/14 15:55	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 15:55	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 15:55	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 15:55	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 15:55	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 15:55	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 15:55	1
o-Xylene	ND		0.10		ug/L			11/24/14 15:55	1
Styrene	ND		0.10		ug/L			11/24/14 15:55	1
Bromoform	ND		0.10		ug/L			11/24/14 15:55	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
Bromobenzene	ND		0.10		ug/L			11/24/14 15:55	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 15:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 15:55	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 15:55	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 15:55	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 15:55	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: Trip Blank
Date Collected: 11/10/14 00:00
Date Received: 11/21/14 08:30

Lab Sample ID: 580-46431-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 15:55	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 15:55	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 15:55	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 15:55	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 15:55	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 15:55	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 15:55	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 15:55	1
Naphthalene	ND		0.40		ug/L			11/24/14 15:55	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*11/24/14 15:55*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*11/24/14 15:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*11/24/14 15:55*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 15:55*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*11/24/14 15:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-176448/7
Matrix: Water
Analysis Batch: 176448

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/21/14 12:05	1
Chloromethane	ND		0.10		ug/L			11/21/14 12:05	1
Vinyl chloride	ND		0.020		ug/L			11/21/14 12:05	1
Bromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Chloroethane	ND		0.25		ug/L			11/21/14 12:05	1
Trichlorofluoromethane	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
Methylene Chloride	ND		0.50		ug/L			11/21/14 12:05	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/21/14 12:05	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
2,2-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
Chlorobromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Chloroform	ND		0.10		ug/L			11/21/14 12:05	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Carbon tetrachloride	ND		0.10		ug/L			11/21/14 12:05	1
1,1-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
Benzene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Trichloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
Dibromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Dichlorobromomethane	ND		0.10		ug/L			11/21/14 12:05	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
Toluene	ND		0.10		ug/L			11/21/14 12:05	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Tetrachloroethene	ND		0.10		ug/L			11/21/14 12:05	1
1,3-Dichloropropane	ND		0.10		ug/L			11/21/14 12:05	1
Chlorodibromomethane	ND		0.10		ug/L			11/21/14 12:05	1
Ethylene Dibromide	ND		0.10		ug/L			11/21/14 12:05	1
Chlorobenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 12:05	1
Ethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/21/14 12:05	1
o-Xylene	ND		0.10		ug/L			11/21/14 12:05	1
Styrene	ND		0.10		ug/L			11/21/14 12:05	1
Bromoform	ND		0.10		ug/L			11/21/14 12:05	1
Isopropylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
Bromobenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/21/14 12:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/21/14 12:05	1
N-Propylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
2-Chlorotoluene	ND		0.10		ug/L			11/21/14 12:05	1
4-Chlorotoluene	ND		0.20		ug/L			11/21/14 12:05	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
tert-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1

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

Lab Sample ID: MB 580-176448/7
Matrix: Water
Analysis Batch: 176448

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
sec-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
4-Isopropyltoluene	ND		0.20		ug/L			11/21/14 12:05	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
n-Butylbenzene	ND		0.10		ug/L			11/21/14 12:05	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/21/14 12:05	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/21/14 12:05	1
Hexachlorobutadiene	ND		0.20		ug/L			11/21/14 12:05	1
Naphthalene	ND		0.40		ug/L			11/21/14 12:05	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/21/14 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*11/21/14 12:05*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/21/14 12:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*11/21/14 12:05*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*11/21/14 12:05*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*11/21/14 12:05*	*1*

Lab Sample ID: LCS 580-176448/8
Matrix: Water
Analysis Batch: 176448

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.99		ug/L		100	30 - 180
Chloromethane	5.00	5.33		ug/L		107	50 - 140
Vinyl chloride	5.00	5.05		ug/L		101	65 - 140
Bromomethane	5.00	5.50		ug/L		110	70 - 135
Chloroethane	5.00	4.86		ug/L		97	75 - 140
Trichlorofluoromethane	5.00	4.83		ug/L		97	30 - 180
1,1-Dichloroethene	5.00	5.20		ug/L		104	70 - 150
Methylene Chloride	5.00	5.16		ug/L		103	60 - 145
Methyl tert-butyl ether	5.00	4.52		ug/L		90	75 - 120
trans-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 140
1,1-Dichloroethane	5.00	5.01		ug/L		100	75 - 135
2,2-Dichloropropane	5.00	4.88		ug/L		98	60 - 150
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 130
Chlorobromomethane	5.00	5.18		ug/L		104	80 - 125
Chloroform	5.00	4.98		ug/L		100	80 - 130
1,1,1-Trichloroethane	5.00	5.12		ug/L		102	80 - 140
Carbon tetrachloride	5.00	5.10		ug/L		102	75 - 140
1,1-Dichloropropene	5.00	4.97		ug/L		99	80 - 130
Benzene	5.00	4.80		ug/L		96	80 - 120
1,2-Dichloroethane	5.00	4.84		ug/L		97	80 - 140
Trichloroethene	5.00	5.18		ug/L		104	80 - 130
1,2-Dichloropropane	5.00	4.97		ug/L		99	80 - 120
Dibromomethane	5.00	5.04		ug/L		101	80 - 130

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

Lab Sample ID: LCS 580-176448/8
Matrix: Water
Analysis Batch: 176448

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	4.95		ug/L		99	80 - 125
cis-1,3-Dichloropropene	5.00	4.83		ug/L		97	70 - 120
Toluene	5.00	5.04		ug/L		101	80 - 120
trans-1,3-Dichloropropene	5.00	4.77		ug/L		95	60 - 140
1,1,2-Trichloroethane	5.00	4.94		ug/L		99	80 - 130
Tetrachloroethene	5.00	6.14		ug/L		123	40 - 180
1,3-Dichloropropane	5.00	4.83		ug/L		97	80 - 130
Chlorodibromomethane	5.00	4.64		ug/L		93	70 - 120
Ethylene Dibromide	5.00	5.00		ug/L		100	70 - 130
Chlorobenzene	5.00	4.97		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.89		ug/L		98	75 - 125
Ethylbenzene	5.00	5.07		ug/L		101	80 - 125
m-Xylene & p-Xylene	5.00	5.04		ug/L		101	80 - 130
o-Xylene	5.00	5.08		ug/L		102	80 - 120
Styrene	5.00	5.03		ug/L		101	75 - 130
Bromoform	5.00	4.03		ug/L		81	65 - 130
Isopropylbenzene	5.00	5.10		ug/L		102	75 - 120
Bromobenzene	5.00	4.80		ug/L		96	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	5.06		ug/L		101	75 - 120
N-Propylbenzene	5.00	5.04		ug/L		101	80 - 120
2-Chlorotoluene	5.00	4.98		ug/L		100	75 - 130
4-Chlorotoluene	5.00	5.02		ug/L		100	75 - 130
1,3,5-Trimethylbenzene	5.00	5.02		ug/L		100	80 - 125
tert-Butylbenzene	5.00	4.96		ug/L		99	80 - 130
1,2,4-Trimethylbenzene	5.00	4.94		ug/L		99	80 - 125
sec-Butylbenzene	5.00	4.94		ug/L		99	80 - 125
4-Isopropyltoluene	5.00	4.96		ug/L		99	80 - 120
1,3-Dichlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.90		ug/L		98	80 - 120
n-Butylbenzene	5.00	4.81		ug/L		96	75 - 125
1,2-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.27		ug/L		85	55 - 120
1,2,4-Trichlorobenzene	5.00	4.41		ug/L		88	60 - 125
Hexachlorobutadiene	5.00	4.33		ug/L		87	75 - 135
Naphthalene	5.00	4.35		ug/L		87	45 - 130
1,2,3-Trichlorobenzene	5.00	4.28		ug/L		86	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*104*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 128*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

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

Lab Sample ID: LCSD 580-176448/9
Matrix: Water
Analysis Batch: 176448

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
Dichlorodifluoromethane	5.00	4.79		ug/L		96	30 - 180	4	20
Chloromethane	5.00	5.12		ug/L		102	50 - 140	4	20
Vinyl chloride	5.00	4.86		ug/L		97	65 - 140	4	20
Bromomethane	5.00	5.03		ug/L		101	70 - 135	9	20
Chloroethane	5.00	4.65		ug/L		93	75 - 140	4	20
Trichlorofluoromethane	5.00	5.02		ug/L		100	30 - 180	4	20
1,1-Dichloroethene	5.00	5.03		ug/L		101	70 - 150	3	20
Methylene Chloride	5.00	5.11		ug/L		102	60 - 145	1	20
Methyl tert-butyl ether	5.00	4.63		ug/L		93	75 - 120	2	20
trans-1,2-Dichloroethene	5.00	5.12		ug/L		102	80 - 140	0	20
1,1-Dichloroethane	5.00	5.06		ug/L		101	75 - 135	1	20
2,2-Dichloropropane	5.00	5.11		ug/L		102	60 - 150	4	20
cis-1,2-Dichloroethene	5.00	4.92		ug/L		98	80 - 130	2	20
Chlorobromomethane	5.00	5.24		ug/L		105	80 - 125	1	20
Chloroform	5.00	5.01		ug/L		100	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.19		ug/L		104	80 - 140	1	20
Carbon tetrachloride	5.00	5.20		ug/L		104	75 - 140	2	20
1,1-Dichloropropene	5.00	5.03		ug/L		101	80 - 130	1	20
Benzene	5.00	4.90		ug/L		98	80 - 120	2	20
1,2-Dichloroethane	5.00	4.93		ug/L		99	80 - 140	2	20
Trichloroethene	5.00	5.29		ug/L		106	80 - 130	2	20
1,2-Dichloropropane	5.00	5.06		ug/L		101	80 - 120	2	20
Dibromomethane	5.00	5.10		ug/L		102	80 - 130	1	20
Dichlorobromomethane	5.00	5.05		ug/L		101	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	4.89		ug/L		98	70 - 120	1	20
Toluene	5.00	5.12		ug/L		102	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	4.80		ug/L		96	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 130	1	20
Tetrachloroethene	5.00	6.80		ug/L		136	40 - 180	10	20
1,3-Dichloropropane	5.00	4.95		ug/L		99	80 - 130	2	20
Chlorodibromomethane	5.00	4.72		ug/L		94	70 - 120	2	20
Ethylene Dibromide	5.00	4.96		ug/L		99	70 - 130	1	20
Chlorobenzene	5.00	4.98		ug/L		100	80 - 120	0	20
1,1,1,2-Tetrachloroethane	5.00	4.92		ug/L		98	75 - 125	1	20
Ethylbenzene	5.00	5.09		ug/L		102	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.05		ug/L		101	80 - 130	0	20
o-Xylene	5.00	5.11		ug/L		102	80 - 120	1	20
Styrene	5.00	5.07		ug/L		101	75 - 130	1	20
Bromoform	5.00	4.07		ug/L		81	65 - 130	1	20
Isopropylbenzene	5.00	5.12		ug/L		102	75 - 120	0	20
Bromobenzene	5.00	4.94		ug/L		99	80 - 130	3	20
1,1,2,2-Tetrachloroethane	5.00	4.88		ug/L		98	75 - 125	0	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	2	20
N-Propylbenzene	5.00	5.11		ug/L		102	80 - 120	2	20
2-Chlorotoluene	5.00	5.10		ug/L		102	75 - 130	2	20
4-Chlorotoluene	5.00	5.06		ug/L		101	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.10		ug/L		102	80 - 125	2	20
tert-Butylbenzene	5.00	5.01		ug/L		100	80 - 130	1	20

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

Lab Sample ID: LCSD 580-176448/9
Matrix: Water
Analysis Batch: 176448

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
1,2,4-Trimethylbenzene			5.00	4.95		ug/L		99	80 - 125	0	20
sec-Butylbenzene			5.00	4.99		ug/L		100	80 - 125	1	20
4-Isopropyltoluene			5.00	5.03		ug/L		101	80 - 120	1	20
1,3-Dichlorobenzene			5.00	5.00		ug/L		100	80 - 120	3	20
1,4-Dichlorobenzene			5.00	5.01		ug/L		100	80 - 120	2	20
n-Butylbenzene			5.00	5.04		ug/L		101	75 - 125	5	20
1,2-Dichlorobenzene			5.00	4.90		ug/L		98	80 - 130	2	20
1,2-Dibromo-3-Chloropropane			5.00	4.45		ug/L		89	55 - 120	4	20
1,2,4-Trichlorobenzene			5.00	4.68		ug/L		94	60 - 125	6	20
Hexachlorobutadiene			5.00	4.55		ug/L		91	75 - 135	5	20
Naphthalene			5.00	4.67		ug/L		93	45 - 130	7	20
1,2,3-Trichlorobenzene			5.00	4.61		ug/L		92	60 - 125	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*102*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Dibromofluoromethane (Surr)	*100*		*85 - 115*

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 12:51	1
Chloromethane	ND		0.10		ug/L			11/24/14 12:51	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 12:51	1
Bromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroethane	ND		0.25		ug/L			11/24/14 12:51	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 12:51	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroform	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Benzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Trichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Dibromomethane	ND		0.10		ug/L			11/24/14 12:51	1

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

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Toluene	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Tetrachloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 12:51	1
o-Xylene	ND		0.10		ug/L			11/24/14 12:51	1
Styrene	ND		0.10		ug/L			11/24/14 12:51	1
Bromoform	ND		0.10		ug/L			11/24/14 12:51	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
Bromobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 12:51	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 12:51	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 12:51	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 12:51	1
Naphthalene	ND		0.40		ug/L			11/24/14 12:51	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 12:51*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*11/24/14 12:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 12:51*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 12:51*	*1*

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

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.01		ug/L		120	30 - 180
Chloromethane	5.00	5.95		ug/L		119	50 - 140
Vinyl chloride	5.00	5.58		ug/L		112	65 - 140
Bromomethane	5.00	5.88		ug/L		118	70 - 135
Chloroethane	5.00	5.00		ug/L		100	75 - 140
Trichlorofluoromethane	5.00	5.96		ug/L		119	30 - 180
1,1-Dichloroethene	5.00	5.22		ug/L		104	70 - 150
Methylene Chloride	5.00	5.74		ug/L		115	60 - 145
Methyl tert-butyl ether	5.00	4.87		ug/L		97	75 - 120
trans-1,2-Dichloroethene	5.00	5.39		ug/L		108	80 - 140
1,1-Dichloroethane	5.00	5.35		ug/L		107	75 - 135
2,2-Dichloropropane	5.00	5.85		ug/L		117	60 - 150
cis-1,2-Dichloroethene	5.00	5.17		ug/L		103	80 - 130
Chlorobromomethane	5.00	5.46		ug/L		109	80 - 125
Chloroform	5.00	5.43		ug/L		109	80 - 130
1,1,1-Trichloroethane	5.00	5.80		ug/L		116	80 - 140
Carbon tetrachloride	5.00	5.77		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.33		ug/L		107	80 - 130
Benzene	5.00	4.99		ug/L		100	80 - 120
1,2-Dichloroethane	5.00	5.53		ug/L		111	80 - 140
Trichloroethene	5.00	5.45		ug/L		109	80 - 130
1,2-Dichloropropane	5.00	5.09		ug/L		102	80 - 120
Dibromomethane	5.00	5.22		ug/L		104	80 - 130
Dichlorobromomethane	5.00	5.51		ug/L		110	80 - 125
cis-1,3-Dichloropropene	5.00	5.08		ug/L		102	70 - 120
Toluene	5.00	5.33		ug/L		107	80 - 120
trans-1,3-Dichloropropene	5.00	5.04		ug/L		101	60 - 140
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 130
Tetrachloroethene	5.00	4.72		ug/L		94	40 - 180
1,3-Dichloropropane	5.00	5.02		ug/L		100	80 - 130
Chlorodibromomethane	5.00	4.91		ug/L		98	70 - 120
Ethylene Dibromide	5.00	5.08		ug/L		102	70 - 130
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.26		ug/L		105	75 - 125
Ethylbenzene	5.00	5.31		ug/L		106	80 - 125
m-Xylene & p-Xylene	5.00	5.27		ug/L		105	80 - 130
o-Xylene	5.00	5.47		ug/L		109	80 - 120
Styrene	5.00	5.18		ug/L		104	75 - 130
Bromoform	5.00	4.20		ug/L		84	65 - 130
Isopropylbenzene	5.00	5.47		ug/L		109	75 - 120
Bromobenzene	5.00	4.73		ug/L		95	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.89		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	4.96		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.12		ug/L		102	80 - 120
2-Chlorotoluene	5.00	5.03		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.05		ug/L		101	75 - 130
1,3,5-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125
tert-Butylbenzene	5.00	5.09		ug/L		102	80 - 130

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

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			5.00	5.08		ug/L		102	80 - 125		
sec-Butylbenzene			5.00	5.21		ug/L		104	80 - 125		
4-Isopropyltoluene			5.00	5.28		ug/L		106	80 - 120		
1,3-Dichlorobenzene			5.00	5.05		ug/L		101	80 - 120		
1,4-Dichlorobenzene			5.00	5.03		ug/L		101	80 - 120		
n-Butylbenzene			5.00	5.17		ug/L		103	75 - 125		
1,2-Dichlorobenzene			5.00	5.02		ug/L		100	80 - 130		
1,2-Dibromo-3-Chloropropane			5.00	4.23		ug/L		85	55 - 120		
1,2,4-Trichlorobenzene			5.00	4.99		ug/L		100	60 - 125		
Hexachlorobutadiene			5.00	5.03		ug/L		101	75 - 135		
Naphthalene			5.00	4.76		ug/L		95	45 - 130		
1,2,3-Trichlorobenzene			5.00	4.93		ug/L		99	60 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*95*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
Dichlorodifluoromethane			5.00	5.99		ug/L		120	30 - 180	0	20
Chloromethane			5.00	5.89		ug/L		118	50 - 140	1	20
Vinyl chloride			5.00	5.55		ug/L		111	65 - 140	1	20
Bromomethane			5.00	5.82		ug/L		116	70 - 135	1	20
Chloroethane			5.00	5.16		ug/L		103	75 - 140	3	20
Trichlorofluoromethane			5.00	5.48		ug/L		110	30 - 180	8	20
1,1-Dichloroethene			5.00	5.37		ug/L		107	70 - 150	3	20
Methylene Chloride			5.00	5.88		ug/L		118	60 - 145	2	20
Methyl tert-butyl ether			5.00	4.81		ug/L		96	75 - 120	1	20
trans-1,2-Dichloroethene			5.00	5.34		ug/L		107	80 - 140	1	20
1,1-Dichloroethane			5.00	5.41		ug/L		108	75 - 135	1	20
2,2-Dichloropropane			5.00	5.53		ug/L		111	60 - 150	6	20
cis-1,2-Dichloroethene			5.00	5.08		ug/L		102	80 - 130	2	20
Chlorobromomethane			5.00	5.39		ug/L		108	80 - 125	1	20
Chloroform			5.00	5.50		ug/L		110	80 - 130	1	20
1,1,1-Trichloroethane			5.00	5.74		ug/L		115	80 - 140	1	20
Carbon tetrachloride			5.00	5.79		ug/L		116	75 - 140	0	20
1,1-Dichloropropene			5.00	5.35		ug/L		107	80 - 130	0	20
Benzene			5.00	5.03		ug/L		101	80 - 120	1	20
1,2-Dichloroethane			5.00	5.56		ug/L		111	80 - 140	1	20
Trichloroethene			5.00	5.54		ug/L		111	80 - 130	2	20
1,2-Dichloropropane			5.00	5.24		ug/L		105	80 - 120	3	20
Dibromomethane			5.00	5.27		ug/L		105	80 - 130	1	20

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

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
Dichlorobromomethane	5.00	5.39		ug/L		108	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	5.04		ug/L		101	70 - 120	1	20
Toluene	5.00	5.20		ug/L		104	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.04		ug/L		101	80 - 130	1	20
Tetrachloroethene	5.00	4.73		ug/L		95	40 - 180	0	20
1,3-Dichloropropane	5.00	5.01		ug/L		100	80 - 130	0	20
Chlorodibromomethane	5.00	4.82		ug/L		96	70 - 120	2	20
Ethylene Dibromide	5.00	5.13		ug/L		103	70 - 130	1	20
Chlorobenzene	5.00	5.18		ug/L		104	80 - 120	0	20
1,1,1,2-Tetrachloroethane	5.00	5.20		ug/L		104	75 - 125	1	20
Ethylbenzene	5.00	5.28		ug/L		106	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.22		ug/L		104	80 - 130	1	20
o-Xylene	5.00	5.36		ug/L		107	80 - 120	2	20
Styrene	5.00	5.20		ug/L		104	75 - 130	1	20
Bromoform	5.00	4.24		ug/L		85	65 - 130	1	20
Isopropylbenzene	5.00	5.34		ug/L		107	75 - 120	2	20
Bromobenzene	5.00	4.84		ug/L		97	80 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	4.97		ug/L		99	75 - 125	2	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	4	20
N-Propylbenzene	5.00	5.22		ug/L		104	80 - 120	2	20
2-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	2	20
4-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.23		ug/L		105	80 - 125	2	20
tert-Butylbenzene	5.00	5.19		ug/L		104	80 - 130	2	20
1,2,4-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125	1	20
sec-Butylbenzene	5.00	5.21		ug/L		104	80 - 125	0	20
4-Isopropyltoluene	5.00	5.27		ug/L		105	80 - 120	0	20
1,3-Dichlorobenzene	5.00	5.12		ug/L		102	80 - 120	1	20
1,4-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 120	1	20
n-Butylbenzene	5.00	5.15		ug/L		103	75 - 125	0	20
1,2-Dichlorobenzene	5.00	5.06		ug/L		101	80 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.20		ug/L		84	55 - 120	1	20
1,2,4-Trichlorobenzene	5.00	4.94		ug/L		99	60 - 125	1	20
Hexachlorobutadiene	5.00	5.08		ug/L		102	75 - 135	1	20
Naphthalene	5.00	4.80		ug/L		96	45 - 130	1	20
1,2,3-Trichlorobenzene	5.00	4.99		ug/L		100	60 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

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

Lab Sample ID: MB 580-176690/7
Matrix: Water
Analysis Batch: 176690

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/25/14 12:49	1
Chloromethane	ND		0.10		ug/L			11/25/14 12:49	1
Vinyl chloride	ND		0.020		ug/L			11/25/14 12:49	1
Bromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Chloroethane	ND		0.25		ug/L			11/25/14 12:49	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
Methylene Chloride	ND		0.50		ug/L			11/25/14 12:49	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/25/14 12:49	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
Chlorobromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Chloroform	ND		0.10		ug/L			11/25/14 12:49	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/14 12:49	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
Benzene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Trichloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
Dibromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Dichlorobromomethane	ND		0.10		ug/L			11/25/14 12:49	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
Toluene	ND		0.10		ug/L			11/25/14 12:49	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Tetrachloroethene	ND		0.10		ug/L			11/25/14 12:49	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/14 12:49	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/14 12:49	1
Ethylene Dibromide	ND		0.10		ug/L			11/25/14 12:49	1
Chlorobenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 12:49	1
Ethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/14 12:49	1
o-Xylene	ND		0.10		ug/L			11/25/14 12:49	1
Styrene	ND		0.10		ug/L			11/25/14 12:49	1
Bromoform	ND		0.10		ug/L			11/25/14 12:49	1
Isopropylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
Bromobenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/14 12:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/14 12:49	1
N-Propylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/14 12:49	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/14 12:49	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1

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

Lab Sample ID: MB 580-176690/7
Matrix: Water
Analysis Batch: 176690

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/14 12:49	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
n-Butylbenzene	ND		0.10		ug/L			11/25/14 12:49	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/14 12:49	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/14 12:49	1
Hexachlorobutadiene	ND		0.20		ug/L			11/25/14 12:49	1
Naphthalene	ND		0.40		ug/L			11/25/14 12:49	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/14 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/25/14 12:49*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/25/14 12:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/25/14 12:49*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/25/14 12:49*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/25/14 12:49*	*1*

Lab Sample ID: LCS 580-176690/10
Matrix: Water
Analysis Batch: 176690

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	5.64		ug/L		113	30 - 180
Chloromethane	5.00	5.56		ug/L		111	50 - 140
Vinyl chloride	5.00	5.26		ug/L		105	65 - 140
Bromomethane	5.00	5.51		ug/L		110	70 - 135
Chloroethane	5.00	4.84		ug/L		97	75 - 140
Trichlorofluoromethane	5.00	5.82		ug/L		116	30 - 180
1,1-Dichloroethene	5.00	4.94		ug/L		99	70 - 150
Methylene Chloride	5.00	5.12		ug/L		102	60 - 145
Methyl tert-butyl ether	5.00	4.57		ug/L		91	75 - 120
trans-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 140
1,1-Dichloroethane	5.00	5.21		ug/L		104	75 - 135
2,2-Dichloropropane	5.00	5.66		ug/L		113	60 - 150
cis-1,2-Dichloroethene	5.00	4.93		ug/L		99	80 - 130
Chlorobromomethane	5.00	5.24		ug/L		105	80 - 125
Chloroform	5.00	5.36		ug/L		107	80 - 130
1,1,1-Trichloroethane	5.00	5.77		ug/L		115	80 - 140
Carbon tetrachloride	5.00	5.73		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.15		ug/L		103	80 - 130
Benzene	5.00	4.81		ug/L		96	80 - 120
1,2-Dichloroethane	5.00	5.47		ug/L		109	80 - 140
Trichloroethene	5.00	5.33		ug/L		107	80 - 130
1,2-Dichloropropane	5.00	4.95		ug/L		99	80 - 120
Dibromomethane	5.00	5.17		ug/L		103	80 - 130

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

Lab Sample ID: LCS 580-176690/10
Matrix: Water
Analysis Batch: 176690

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.46		ug/L		109	80 - 125
cis-1,3-Dichloropropene	5.00	4.65		ug/L		93	70 - 120
Toluene	5.00	5.00		ug/L		100	80 - 120
trans-1,3-Dichloropropene	5.00	4.63		ug/L		93	60 - 140
1,1,2-Trichloroethane	5.00	4.73		ug/L		95	80 - 130
Tetrachloroethene	5.00	5.95		ug/L		119	40 - 180
1,3-Dichloropropane	5.00	4.84		ug/L		97	80 - 130
Chlorodibromomethane	5.00	4.65		ug/L		93	70 - 120
Ethylene Dibromide	5.00	4.86		ug/L		97	70 - 130
Chlorobenzene	5.00	4.96		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.02		ug/L		100	75 - 125
Ethylbenzene	5.00	5.06		ug/L		101	80 - 125
m-Xylene & p-Xylene	5.00	4.99		ug/L		100	80 - 130
o-Xylene	5.00	5.18		ug/L		104	80 - 120
Styrene	5.00	4.92		ug/L		98	75 - 130
Bromoform	5.00	3.98		ug/L		80	65 - 130
Isopropylbenzene	5.00	5.21		ug/L		104	75 - 120
Bromobenzene	5.00	4.54		ug/L		91	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.54		ug/L		91	75 - 125
1,2,3-Trichloropropane	5.00	4.70		ug/L		94	75 - 120
N-Propylbenzene	5.00	4.88		ug/L		98	80 - 120
2-Chlorotoluene	5.00	4.74		ug/L		95	75 - 130
4-Chlorotoluene	5.00	4.78		ug/L		96	75 - 130
1,3,5-Trimethylbenzene	5.00	4.91		ug/L		98	80 - 125
tert-Butylbenzene	5.00	4.84		ug/L		97	80 - 130
1,2,4-Trimethylbenzene	5.00	4.89		ug/L		98	80 - 125
sec-Butylbenzene	5.00	4.91		ug/L		98	80 - 125
4-Isopropyltoluene	5.00	5.00		ug/L		100	80 - 120
1,3-Dichlorobenzene	5.00	4.76		ug/L		95	80 - 120
1,4-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120
n-Butylbenzene	5.00	4.88		ug/L		98	75 - 125
1,2-Dichlorobenzene	5.00	4.72		ug/L		94	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.95		ug/L		79	55 - 120
1,2,4-Trichlorobenzene	5.00	4.51		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	4.71		ug/L		94	75 - 135
Naphthalene	5.00	4.24		ug/L		85	45 - 130
1,2,3-Trichlorobenzene	5.00	4.48		ug/L		90	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*93*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

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

Lab Sample ID: LCSD 580-176690/11
Matrix: Water
Analysis Batch: 176690

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
Dichlorodifluoromethane	5.00	5.44		ug/L		109	30 - 180	4	20
Chloromethane	5.00	5.10		ug/L		102	50 - 140	9	20
Vinyl chloride	5.00	4.90		ug/L		98	65 - 140	7	20
Bromomethane	5.00	5.26		ug/L		105	70 - 135	5	20
Chloroethane	5.00	4.38		ug/L		88	75 - 140	10	20
Trichlorofluoromethane	5.00	5.04		ug/L		101	30 - 180	14	20
1,1-Dichloroethene	5.00	4.90		ug/L		98	70 - 150	1	20
Methylene Chloride	5.00	4.88		ug/L		98	60 - 145	5	20
Methyl tert-butyl ether	5.00	4.22		ug/L		84	75 - 120	8	20
trans-1,2-Dichloroethene	5.00	4.86		ug/L		97	80 - 140	2	20
1,1-Dichloroethane	5.00	4.92		ug/L		98	75 - 135	6	20
2,2-Dichloropropane	5.00	5.03		ug/L		101	60 - 150	12	20
cis-1,2-Dichloroethene	5.00	4.63		ug/L		93	80 - 130	6	20
Chlorobromomethane	5.00	5.01		ug/L		100	80 - 125	4	20
Chloroform	5.00	5.03		ug/L		101	80 - 130	6	20
1,1,1-Trichloroethane	5.00	5.28		ug/L		106	80 - 140	9	20
Carbon tetrachloride	5.00	5.34		ug/L		107	75 - 140	7	20
1,1-Dichloropropene	5.00	4.91		ug/L		98	80 - 130	5	20
Benzene	5.00	4.59		ug/L		92	80 - 120	5	20
1,2-Dichloroethane	5.00	5.19		ug/L		104	80 - 140	5	20
Trichloroethene	5.00	5.08		ug/L		102	80 - 130	5	20
1,2-Dichloropropane	5.00	4.76		ug/L		95	80 - 120	4	20
Dibromomethane	5.00	4.73		ug/L		95	80 - 130	9	20
Dichlorobromomethane	5.00	5.04		ug/L		101	80 - 125	8	20
cis-1,3-Dichloropropene	5.00	4.55		ug/L		91	70 - 120	2	20
Toluene	5.00	4.86		ug/L		97	80 - 120	3	20
trans-1,3-Dichloropropene	5.00	4.50		ug/L		90	60 - 140	3	20
1,1,2-Trichloroethane	5.00	4.70		ug/L		94	80 - 130	1	20
Tetrachloroethene	5.00	6.23		ug/L		125	40 - 180	5	20
1,3-Dichloropropane	5.00	4.72		ug/L		94	80 - 130	2	20
Chlorodibromomethane	5.00	4.46		ug/L		89	70 - 120	4	20
Ethylene Dibromide	5.00	4.59		ug/L		92	70 - 130	6	20
Chlorobenzene	5.00	4.69		ug/L		94	80 - 120	6	20
1,1,1,2-Tetrachloroethane	5.00	4.70		ug/L		94	75 - 125	6	20
Ethylbenzene	5.00	4.81		ug/L		96	80 - 125	5	20
m-Xylene & p-Xylene	5.00	4.76		ug/L		95	80 - 130	5	20
o-Xylene	5.00	4.89		ug/L		98	80 - 120	6	20
Styrene	5.00	4.66		ug/L		93	75 - 130	6	20
Bromoform	5.00	3.78		ug/L		76	65 - 130	5	20
Isopropylbenzene	5.00	4.86		ug/L		97	75 - 120	7	20
Bromobenzene	5.00	4.30		ug/L		86	80 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	4.29		ug/L		86	75 - 125	6	20
1,2,3-Trichloropropane	5.00	4.68		ug/L		94	75 - 120	1	20
N-Propylbenzene	5.00	4.68		ug/L		94	80 - 120	4	20
2-Chlorotoluene	5.00	4.59		ug/L		92	75 - 130	3	20
4-Chlorotoluene	5.00	4.61		ug/L		92	75 - 130	4	20
1,3,5-Trimethylbenzene	5.00	4.69		ug/L		94	80 - 125	4	20
tert-Butylbenzene	5.00	4.59		ug/L		92	80 - 130	5	20

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

Lab Sample ID: LCSD 580-176690/11
Matrix: Water
Analysis Batch: 176690

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
1,2,4-Trimethylbenzene			5.00	4.56		ug/L		91	80 - 125	7	20
sec-Butylbenzene			5.00	4.67		ug/L		93	80 - 125	5	20
4-Isopropyltoluene			5.00	4.73		ug/L		95	80 - 120	5	20
1,3-Dichlorobenzene			5.00	4.55		ug/L		91	80 - 120	5	20
1,4-Dichlorobenzene			5.00	4.55		ug/L		91	80 - 120	8	20
n-Butylbenzene			5.00	4.62		ug/L		92	75 - 125	5	20
1,2-Dichlorobenzene			5.00	4.44		ug/L		89	80 - 130	6	20
1,2-Dibromo-3-Chloropropane			5.00	3.63		ug/L		73	55 - 120	8	20
1,2,4-Trichlorobenzene			5.00	4.39		ug/L		88	60 - 125	3	20
Hexachlorobutadiene			5.00	4.57		ug/L		91	75 - 135	3	20
Naphthalene			5.00	4.16		ug/L		83	45 - 130	2	20
1,2,3-Trichlorobenzene			5.00	4.35		ug/L		87	60 - 125	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-159108/28
Matrix: Water
Analysis Batch: 159108

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/02/14 17:00	1
Ethane	ND		0.50		ug/L			12/02/14 17:00	1
Ethene	ND		0.50		ug/L			12/02/14 17:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*112*		*66 - 132*		*12/02/14 17:00*	*1*

Lab Sample ID: LCS 240-159108/29
Matrix: Water
Analysis Batch: 159108

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			116	124		ug/L		107	76 - 120		
Ethane			218	212		ug/L		97	80 - 120		
Ethene			203	188		ug/L		93	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*110*		*66 - 132*

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

Lab Sample ID: MB 240-159321/27
Matrix: Water
Analysis Batch: 159321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/03/14 18:56	1
Ethane	ND		0.50		ug/L			12/03/14 18:56	1
Ethene	ND		0.50		ug/L			12/03/14 18:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*114*		*66 - 132*		*12/03/14 18:56*	*1*

Lab Sample ID: LCS 240-159321/28
Matrix: Water
Analysis Batch: 159321

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	116	122		ug/L		105	76 - 120
Ethane	218	214		ug/L		98	80 - 120
Ethene	203	191		ug/L		94	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*112*		*66 - 132*

Lab Sample ID: MB 240-159736/4
Matrix: Water
Analysis Batch: 159736

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/05/14 16:57	1
Ethane	ND		0.50		ug/L			12/05/14 16:57	1
Ethene	ND		0.50		ug/L			12/05/14 16:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*132*		*66 - 132*		*12/05/14 16:57*	*1*

Lab Sample ID: LCS 240-159736/5
Matrix: Water
Analysis Batch: 159736

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	116	129		ug/L		112	76 - 120
Ethane	218	238		ug/L		110	80 - 120
Ethene	203	223		ug/L		110	81 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*131*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-176518/3
Matrix: Water
Analysis Batch: 176518

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			11/21/14 08:25	1

Lab Sample ID: LCS 580-176518/4
Matrix: Water
Analysis Batch: 176518

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.79		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-176518/5
Matrix: Water
Analysis Batch: 176518

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
Nitrate as N	1.80	1.79		mg/L		99	90 - 110	0	15

Lab Sample ID: 580-46431-10 MS
Matrix: Water
Analysis Batch: 176518

Client Sample ID: SPW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		1.80	1.78		mg/L		99	90 - 110

Lab Sample ID: MB 580-176519/3
Matrix: Water
Analysis Batch: 176519

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			11/21/14 08:25	1
Sulfate	ND		1.2		mg/L			11/21/14 08:25	1

Lab Sample ID: LCS 580-176519/4
Matrix: Water
Analysis Batch: 176519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.09		mg/L		101	90 - 110
Sulfate	12.0	11.6		mg/L		97	90 - 110

Lab Sample ID: LCSD 580-176519/5
Matrix: Water
Analysis Batch: 176519

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
Chloride	9.00	9.11		mg/L		101	90 - 110	0	15
Sulfate	12.0	11.6		mg/L		96	90 - 110	1	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-46431-10 MS
Matrix: Water
Analysis Batch: 176519

Client Sample ID: SPW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	34		9.00	42.8		mg/L		98	90 - 110
Sulfate	ND		12.0	10.3	F1	mg/L		86	90 - 110

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-177212/1
Matrix: Water
Analysis Batch: 177212

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			12/02/14 17:55	1

Lab Sample ID: LCS 580-177212/2
Matrix: Water
Analysis Batch: 177212

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	15.0	14.6		mg/L		97	85 - 115

Lab Sample ID: 580-46431-3 MS
Matrix: Water
Analysis Batch: 177212

Client Sample ID: MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	45		100	139		mg/L		94	85 - 115

Lab Sample ID: 580-46431-3 MSD
Matrix: Water
Analysis Batch: 177212

Client Sample ID: MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	45		100	142		mg/L		97	85 - 115	2	20

Lab Sample ID: 580-46431-3 DU
Matrix: Water
Analysis Batch: 177212

Client Sample ID: MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	45		41.8		mg/L		8	20

Lab Sample ID: MB 580-177296/1
Matrix: Water
Analysis Batch: 177296

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			12/03/14 12:08	1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 580-177296/2
Matrix: Water
Analysis Batch: 177296

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	15.0	14.4		mg/L		96	85 - 115

Lab Sample ID: 580-46431-7 MS
Matrix: Water
Analysis Batch: 177296

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.0		10.0	10.7		mg/L		97	85 - 115

Lab Sample ID: 580-46431-7 MSD
Matrix: Water
Analysis Batch: 177296

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.0		10.0	10.9		mg/L		99	85 - 115	2	20

Lab Sample ID: 580-46431-7 DU
Matrix: Water
Analysis Batch: 177296

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.0		ND		mg/L		NC	20

Lab Sample ID: MB 580-177315/1
Matrix: Water
Analysis Batch: 177315

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			12/04/14 09:30	1

Lab Sample ID: LCS 580-177315/2
Matrix: Water
Analysis Batch: 177315

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	15.0	14.1		mg/L		94	85 - 115

Lab Sample ID: 580-46431-9 MS
Matrix: Water
Analysis Batch: 177315

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.7		10.0	10.9		mg/L		93	85 - 115

Lab Sample ID: 580-46431-9 MSD
Matrix: Water
Analysis Batch: 177315

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.7		10.0	10.9		mg/L		93	85 - 115	0	20

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Lab Sample ID: 580-46431-9 DU
Matrix: Water
Analysis Batch: 177315

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	1.7			1.68		mg/L				0.8	20

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: MW-2

Lab Sample ID: 580-46431-1

Date Collected: 11/19/14 10:45

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 21:07	AS	TAL SEA

Client Sample ID: MW-6

Lab Sample ID: 580-46431-2

Date Collected: 11/19/14 12:03

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 21:32	AS	TAL SEA

Client Sample ID: MW-8

Lab Sample ID: 580-46431-3

Date Collected: 11/19/14 12:50

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176448	11/21/14 21:58	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159108	12/02/14 20:28	BPM	TAL CAN
Total/NA	Analysis	RSK-175		3	159321	12/03/14 21:10	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176518	11/21/14 11:30	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176519	11/21/14 11:30	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		10	177212	12/02/14 17:55	JLS	TAL SEA

Client Sample ID: SPW-15

Lab Sample ID: 580-46431-4

Date Collected: 11/19/14 14:41

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 18:03	AS	TAL SEA
Total/NA	Analysis	8260B	DL	500	176690	11/25/14 19:40	AS	TAL SEA

Client Sample ID: MW-10

Lab Sample ID: 580-46431-5

Date Collected: 11/19/14 15:48

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 18:29	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159108	12/02/14 20:40	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176518	11/21/14 12:14	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176519	11/21/14 12:14	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: Ext-1

Lab Sample ID: 580-46431-6

Date Collected: 11/19/14 16:56

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 18:54	AS	TAL SEA
Total/NA	Analysis	SM 5310B		1	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: MW-3

Lab Sample ID: 580-46431-7

Date Collected: 11/20/14 07:24

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176588	11/24/14 16:47	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159321	12/03/14 21:22	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176518	11/21/14 12:28	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176519	11/21/14 12:28	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: MW-4/Ext-8

Lab Sample ID: 580-46431-8

Date Collected: 11/20/14 08:30

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	176588	11/24/14 19:20	AS	TAL SEA

Client Sample ID: MW-18

Lab Sample ID: 580-46431-9

Date Collected: 11/20/14 09:42

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176588	11/24/14 17:12	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159321	12/03/14 21:35	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176518	11/21/14 12:42	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176519	11/21/14 12:42	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	177315	12/04/14 09:30	JLS	TAL SEA

Client Sample ID: SPW-12

Lab Sample ID: 580-46431-10

Date Collected: 11/20/14 10:55

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 19:46	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159321	12/03/14 21:47	BPM	TAL CAN
Total/NA	Analysis	RSK-175		3	159736	12/05/14 17:22	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176518	11/21/14 12:57	RSB	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Client Sample ID: SPW-12

Lab Sample ID: 580-46431-10

Date Collected: 11/20/14 10:55

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	176519	11/21/14 12:57	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		2	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-46431-11

Date Collected: 11/10/14 00:00

Matrix: Water

Date Received: 11/21/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176588	11/24/14 15:55	AS	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46431-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46431-1	MW-2	Water	11/19/14 10:45	11/21/14 08:30
580-46431-2	MW-6	Water	11/19/14 12:03	11/21/14 08:30
580-46431-3	MW-8	Water	11/19/14 12:50	11/21/14 08:30
580-46431-4	SPW-15	Water	11/19/14 14:41	11/21/14 08:30
580-46431-5	MW-10	Water	11/19/14 15:48	11/21/14 08:30
580-46431-6	Ext-1	Water	11/19/14 16:56	11/21/14 08:30
580-46431-7	MW-3	Water	11/20/14 07:24	11/21/14 08:30
580-46431-8	MW-4/Ext-8	Water	11/20/14 08:30	11/21/14 08:30
580-46431-9	MW-18	Water	11/20/14 09:42	11/21/14 08:30
580-46431-10	SPW-12	Water	11/20/14 10:55	11/21/14 08:30
580-46431-11	Trip Blank	Water	11/10/14 00:00	11/21/14 08:30

Sample Custody Record

Samples Shipped to: Test America – Seattle (5755 8th Str. E. Tacoma, WA 98424)

HARTCROWSER

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • **Fax** 503.620.6918

JOB 17800-23 LAB NUMBER

PROJECT NAME FRANK WEAR SITE

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY: Kaylan Smyth

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate Cl- Sulfate 300.0	TOC SM 5310 B	Ethene Methane Ethane RSK-175	NO. OF CONTAINERS
-1	MW-2		11-19-14	10:45	W	6	X				
-2	MW-6		11-19-14	12:03	W	6	X				
-3	MW-8		11-19-14	12:50	W	11	X	X	X	X	
-4	SPW-15		11-19-14	14:41	W	6	X				
-5	MW-10		11-19-14	15:48	W	11	X	X	X	X	
-6	Ext-1		11-19-14	16:56	W	6	X				
-7	MW-3		11-20-14	7:24	W	11	X	X	X	X	
-8	MW-4/EXT-8		11-20-14	~~9:45~~ 8:30 KS	W	6	X				
-9	MW-18		11-20-14	9:42	W	11	X	X	X	X	
-10	SPW-12		11-20-14	10:55	W	11	X	X	X	X	
-11	HCL	TRIP BLANK	11-10-14		W	3	X				

REQUESTED ANALYSIS

OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS

46431

580-46431 Chain of Custody

Cooler/TB Dig/IR cor 4.2 unc 5.5

Cooler Dsc Lg Blu/wh @Lab

Wet/Packs Packing bub

Fed 1st ON

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	11-20-14	SIGNATURE	11/21/14
PRINT NAME Kaylan Smyth	TIME	PRINT NAME BlankKinship	TIME
COMPANY Hart Crowser	14:00	COMPANY TA-Sea	0830
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE		SIGNATURE	
PRINT NAME	TIME	PRINT NAME	TIME
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

Results can be emailed to:
jill.kiernan@hartcrowser.com

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

12/9/2014

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-46431-1

Login Number: 46431

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	going out the day of receipt.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-46453-1
Client Project/Site: Frank Wear Site

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
12/9/2014 2:12:41 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Job ID: 580-46453-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-46453-1

Comments
No additional comments.

Receipt
The samples were received on 11/22/2014 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5º C.

Except:

The following samples were received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours. As such, the laboratory had insufficient time remaining to perform the Nitrate analysis within holding time: EXT-2 (580-46453-9), MW-9 (580-46453-6).

The following sample(s) was activated for TOC analysis by the client on 11/24/14L EXT-3 (580-46453-8), EXT-4 (580-46453-7). This analysis was not originally requested on the chain-of-custody (COC).

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: DUP-2 (580-46453-2), EXT-3 (580-46453-8), EXT-4 (580-46453-7), MW-1 (580-46453-4), MW-9 (580-46453-6), SPW-13 (580-46453-1), SPW-14 (580-46453-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was initially run at a higher dilution due to the sample historically being reported from high dilutions. After results were observed, it was determined that the sample should be reanalyzed with a lower dilution factor in order to correctly determine the presence of target analytes. Results are therefore reported from both analysis.

EXT-2 (580-46453-9)

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

GC VOA
Method(s) RSK-175: The following sample(s) was analyzed at a dilution for methane only to bring the result within the calibration range of the instrument: MW-9 (580-46453-6), This dilution was analyzed outside of holding time. The data has been qualified and reported.

Method(s) RSK-175: The matrix spike, matrix spike duplicate were analyzed outside of holding time: 580-46453-6 MS, 580-46453-6 MSD.

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

General Chemistry
The following samples were received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours. As such, the laboratory had insufficient time remaining to perform the Nitrate analysis within holding time: EXT-2 (580-46453-9), MW-9 (580-46453-6).

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

Qualifiers

GC VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
F1	MS and/or MSD Recovery exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: SPW-13
Date Collected: 11/20/14 12:21
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 20:11	50
Chloromethane	ND		5.0		ug/L			11/24/14 20:11	50
Vinyl chloride	**270**		1.0		ug/L			11/24/14 20:11	50
Bromomethane	ND		5.0		ug/L			11/24/14 20:11	50
Chloroethane	ND		13		ug/L			11/24/14 20:11	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 20:11	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 20:11	50
Methylene Chloride	ND		25		ug/L			11/24/14 20:11	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 20:11	50
trans-1,2-Dichloroethene	**21**		5.0		ug/L			11/24/14 20:11	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 20:11	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 20:11	50
cis-1,2-Dichloroethene	**3000**		5.0		ug/L			11/24/14 20:11	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 20:11	50
Chloroform	ND		5.0		ug/L			11/24/14 20:11	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 20:11	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 20:11	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 20:11	50
Benzene	ND		5.0		ug/L			11/24/14 20:11	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 20:11	50
Trichloroethene	ND		5.0		ug/L			11/24/14 20:11	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 20:11	50
Dibromomethane	ND		5.0		ug/L			11/24/14 20:11	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 20:11	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 20:11	50
Toluene	ND		5.0		ug/L			11/24/14 20:11	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 20:11	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 20:11	50
Tetrachloroethene	ND		5.0		ug/L			11/24/14 20:11	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 20:11	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 20:11	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 20:11	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 20:11	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 20:11	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 20:11	50
o-Xylene	ND		5.0		ug/L			11/24/14 20:11	50
Styrene	ND		5.0		ug/L			11/24/14 20:11	50
Bromoform	ND		5.0		ug/L			11/24/14 20:11	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
Bromobenzene	ND		5.0		ug/L			11/24/14 20:11	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 20:11	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 20:11	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 20:11	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 20:11	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 20:11	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: SPW-13
Date Collected: 11/20/14 12:21
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 20:11	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 20:11	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 20:11	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 20:11	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 20:11	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 20:11	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 20:11	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 20:11	50
Naphthalene	ND		20		ug/L			11/24/14 20:11	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 20:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*11/24/14 20:11*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 20:11*	*50*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*11/24/14 20:11*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/24/14 20:11*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 20:11*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: DUP-2
Date Collected: 11/20/14 12:40
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 20:37	50
Chloromethane	ND		5.0		ug/L			11/24/14 20:37	50
Vinyl chloride	**260**		1.0		ug/L			11/24/14 20:37	50
Bromomethane	ND		5.0		ug/L			11/24/14 20:37	50
Chloroethane	ND		13		ug/L			11/24/14 20:37	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 20:37	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 20:37	50
Methylene Chloride	ND		25		ug/L			11/24/14 20:37	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 20:37	50
trans-1,2-Dichloroethene	**19**		5.0		ug/L			11/24/14 20:37	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 20:37	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 20:37	50
cis-1,2-Dichloroethene	**2900**		5.0		ug/L			11/24/14 20:37	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 20:37	50
Chloroform	ND		5.0		ug/L			11/24/14 20:37	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 20:37	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 20:37	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 20:37	50
Benzene	ND		5.0		ug/L			11/24/14 20:37	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 20:37	50
Trichloroethene	ND		5.0		ug/L			11/24/14 20:37	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 20:37	50
Dibromomethane	ND		5.0		ug/L			11/24/14 20:37	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 20:37	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 20:37	50
Toluene	ND		5.0		ug/L			11/24/14 20:37	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 20:37	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 20:37	50
Tetrachloroethene	ND		5.0		ug/L			11/24/14 20:37	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 20:37	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 20:37	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 20:37	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 20:37	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 20:37	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 20:37	50
o-Xylene	ND		5.0		ug/L			11/24/14 20:37	50
Styrene	ND		5.0		ug/L			11/24/14 20:37	50
Bromoform	ND		5.0		ug/L			11/24/14 20:37	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
Bromobenzene	ND		5.0		ug/L			11/24/14 20:37	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 20:37	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 20:37	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 20:37	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 20:37	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 20:37	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: DUP-2
Date Collected: 11/20/14 12:40
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 20:37	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 20:37	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 20:37	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 20:37	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 20:37	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 20:37	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 20:37	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 20:37	50
Naphthalene	ND		20		ug/L			11/24/14 20:37	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 20:37	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 20:37*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 20:37*	*50*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*11/24/14 20:37*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 20:37*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/24/14 20:37*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: SPW-14
Date Collected: 11/20/14 13:40
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 21:02	50
Chloromethane	ND		5.0		ug/L			11/24/14 21:02	50
Vinyl chloride	**830**		1.0		ug/L			11/24/14 21:02	50
Bromomethane	ND		5.0		ug/L			11/24/14 21:02	50
Chloroethane	ND		13		ug/L			11/24/14 21:02	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 21:02	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 21:02	50
Methylene Chloride	ND		25		ug/L			11/24/14 21:02	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 21:02	50
trans-1,2-Dichloroethene	**18**		5.0		ug/L			11/24/14 21:02	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 21:02	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:02	50
cis-1,2-Dichloroethene	**1700**		5.0		ug/L			11/24/14 21:02	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 21:02	50
Chloroform	ND		5.0		ug/L			11/24/14 21:02	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 21:02	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 21:02	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 21:02	50
Benzene	ND		5.0		ug/L			11/24/14 21:02	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 21:02	50
Trichloroethene	ND		5.0		ug/L			11/24/14 21:02	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:02	50
Dibromomethane	ND		5.0		ug/L			11/24/14 21:02	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 21:02	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:02	50
Toluene	ND		5.0		ug/L			11/24/14 21:02	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:02	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 21:02	50
Tetrachloroethene	ND		5.0		ug/L			11/24/14 21:02	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 21:02	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 21:02	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 21:02	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 21:02	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:02	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 21:02	50
o-Xylene	ND		5.0		ug/L			11/24/14 21:02	50
Styrene	ND		5.0		ug/L			11/24/14 21:02	50
Bromoform	ND		5.0		ug/L			11/24/14 21:02	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
Bromobenzene	ND		5.0		ug/L			11/24/14 21:02	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:02	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 21:02	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 21:02	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 21:02	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:02	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: SPW-14
Date Collected: 11/20/14 13:40
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 21:02	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 21:02	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 21:02	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 21:02	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 21:02	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 21:02	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 21:02	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 21:02	50
Naphthalene	ND		20		ug/L			11/24/14 21:02	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 21:02	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/24/14 21:02*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 21:02*	*50*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*11/24/14 21:02*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 21:02*	*50*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*11/24/14 21:02*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: MW-1
Date Collected: 11/20/14 14:26
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 21:28	50
Chloromethane	ND		5.0		ug/L			11/24/14 21:28	50
Vinyl chloride	**390**		1.0		ug/L			11/24/14 21:28	50
Bromomethane	ND		5.0		ug/L			11/24/14 21:28	50
Chloroethane	ND		13		ug/L			11/24/14 21:28	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 21:28	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 21:28	50
Methylene Chloride	ND		25		ug/L			11/24/14 21:28	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 21:28	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/24/14 21:28	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 21:28	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:28	50
cis-1,2-Dichloroethene	**28**		5.0		ug/L			11/24/14 21:28	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 21:28	50
Chloroform	ND		5.0		ug/L			11/24/14 21:28	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 21:28	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 21:28	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 21:28	50
Benzene	ND		5.0		ug/L			11/24/14 21:28	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 21:28	50
Trichloroethene	ND		5.0		ug/L			11/24/14 21:28	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:28	50
Dibromomethane	ND		5.0		ug/L			11/24/14 21:28	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 21:28	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:28	50
Toluene	ND		5.0		ug/L			11/24/14 21:28	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:28	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 21:28	50
Tetrachloroethene	ND		5.0		ug/L			11/24/14 21:28	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 21:28	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 21:28	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 21:28	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 21:28	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:28	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 21:28	50
o-Xylene	ND		5.0		ug/L			11/24/14 21:28	50
Styrene	ND		5.0		ug/L			11/24/14 21:28	50
Bromoform	ND		5.0		ug/L			11/24/14 21:28	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
Bromobenzene	ND		5.0		ug/L			11/24/14 21:28	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:28	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 21:28	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 21:28	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 21:28	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:28	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: MW-1
Date Collected: 11/20/14 14:26
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 21:28	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 21:28	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 21:28	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 21:28	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 21:28	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 21:28	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 21:28	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 21:28	50
Naphthalene	ND		20		ug/L			11/24/14 21:28	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 21:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*11/24/14 21:28*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 21:28*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 21:28*	*50*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*11/24/14 21:28*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 21:28*	*50*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EQB-2
Date Collected: 11/20/14 14:50
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 16:21	1
Chloromethane	ND		0.10		ug/L			11/24/14 16:21	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 16:21	1
Bromomethane	ND		0.10		ug/L			11/24/14 16:21	1
Chloroethane	ND		0.25		ug/L			11/24/14 16:21	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 16:21	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 16:21	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 16:21	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 16:21	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 16:21	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 16:21	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 16:21	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 16:21	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 16:21	1
Chloroform	ND		0.10		ug/L			11/24/14 16:21	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 16:21	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 16:21	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 16:21	1
Benzene	ND		0.10		ug/L			11/24/14 16:21	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 16:21	1
Trichloroethene	ND		0.10		ug/L			11/24/14 16:21	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 16:21	1
Dibromomethane	ND		0.10		ug/L			11/24/14 16:21	1
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 16:21	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 16:21	1
Toluene	ND		0.10		ug/L			11/24/14 16:21	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 16:21	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 16:21	1
Tetrachloroethene	ND		0.10		ug/L			11/24/14 16:21	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 16:21	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 16:21	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 16:21	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 16:21	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 16:21	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 16:21	1
o-Xylene	ND		0.10		ug/L			11/24/14 16:21	1
Styrene	ND		0.10		ug/L			11/24/14 16:21	1
Bromoform	ND		0.10		ug/L			11/24/14 16:21	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
Bromobenzene	ND		0.10		ug/L			11/24/14 16:21	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 16:21	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 16:21	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 16:21	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 16:21	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 16:21	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EQB-2
Date Collected: 11/20/14 14:50
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 16:21	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:21	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:21	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 16:21	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 16:21	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 16:21	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 16:21	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 16:21	1
Naphthalene	ND		0.40		ug/L			11/24/14 16:21	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*80 - 127*		*11/24/14 16:21*	*1*
Toluene-d8 (Surr)	*102*		*75 - 125*		*11/24/14 16:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*11/24/14 16:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/24/14 16:21*	*1*
Dibromofluoromethane (Surr)	*101*		*85 - 115*		*11/24/14 16:21*	*1*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: MW-9
Date Collected: 11/20/14 15:27
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 21:54	50
Chloromethane	ND		5.0		ug/L			11/24/14 21:54	50
Vinyl chloride	**650**		1.0		ug/L			11/24/14 21:54	50
Bromomethane	ND		5.0		ug/L			11/24/14 21:54	50
Chloroethane	ND		13		ug/L			11/24/14 21:54	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 21:54	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 21:54	50
Methylene Chloride	ND		25		ug/L			11/24/14 21:54	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 21:54	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/24/14 21:54	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 21:54	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:54	50
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/24/14 21:54	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 21:54	50
Chloroform	ND		5.0		ug/L			11/24/14 21:54	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 21:54	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 21:54	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 21:54	50
Benzene	ND		5.0		ug/L			11/24/14 21:54	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 21:54	50
Trichloroethene	ND		5.0		ug/L			11/24/14 21:54	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 21:54	50
Dibromomethane	ND		5.0		ug/L			11/24/14 21:54	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 21:54	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:54	50
Toluene	ND		5.0		ug/L			11/24/14 21:54	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 21:54	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 21:54	50
Tetrachloroethene	ND		5.0		ug/L			11/24/14 21:54	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 21:54	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 21:54	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 21:54	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 21:54	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:54	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 21:54	50
o-Xylene	ND		5.0		ug/L			11/24/14 21:54	50
Styrene	ND		5.0		ug/L			11/24/14 21:54	50
Bromoform	ND		5.0		ug/L			11/24/14 21:54	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
Bromobenzene	ND		5.0		ug/L			11/24/14 21:54	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 21:54	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 21:54	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 21:54	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 21:54	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 21:54	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: MW-9
Date Collected: 11/20/14 15:27
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 21:54	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 21:54	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 21:54	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 21:54	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 21:54	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 21:54	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 21:54	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 21:54	50
Naphthalene	ND		20		ug/L			11/24/14 21:54	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 21:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 21:54*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/24/14 21:54*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 21:54*	*50*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*11/24/14 21:54*	*50*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/24/14 21:54*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1400**	**H**	1.5		ug/L			12/05/14 22:40	3
Ethane	**0.57**		0.50		ug/L			12/03/14 22:36	1
Ethene	**400**		0.50		ug/L			12/03/14 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*105*		*66 - 132*		*12/03/14 22:36*	*1*
1,1,1-Trifluoroethane	*115*		*66 - 132*		*12/05/14 22:40*	*3*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35**		0.90		mg/L			11/24/14 09:50	1
Nitrate as N	ND	H	0.90		mg/L			11/24/14 09:50	1
Sulfate	ND		1.2		mg/L			11/24/14 09:50	1
Total Organic Carbon	**22**		10		mg/L			12/04/14 09:30	10

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-4
Date Collected: 11/20/14 15:10
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 22:19	50
Chloromethane	ND		5.0		ug/L			11/24/14 22:19	50
Vinyl chloride	**290**		1.0		ug/L			11/24/14 22:19	50
Bromomethane	ND		5.0		ug/L			11/24/14 22:19	50
Chloroethane	ND		13		ug/L			11/24/14 22:19	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 22:19	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 22:19	50
Methylene Chloride	ND		25		ug/L			11/24/14 22:19	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 22:19	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/24/14 22:19	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 22:19	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 22:19	50
cis-1,2-Dichloroethene	**500**		5.0		ug/L			11/24/14 22:19	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 22:19	50
Chloroform	ND		5.0		ug/L			11/24/14 22:19	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 22:19	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 22:19	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 22:19	50
Benzene	ND		5.0		ug/L			11/24/14 22:19	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 22:19	50
Trichloroethene	**36**		5.0		ug/L			11/24/14 22:19	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 22:19	50
Dibromomethane	ND		5.0		ug/L			11/24/14 22:19	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 22:19	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 22:19	50
Toluene	ND		5.0		ug/L			11/24/14 22:19	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 22:19	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 22:19	50
Tetrachloroethene	**140**		5.0		ug/L			11/24/14 22:19	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 22:19	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 22:19	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 22:19	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 22:19	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 22:19	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 22:19	50
o-Xylene	ND		5.0		ug/L			11/24/14 22:19	50
Styrene	ND		5.0		ug/L			11/24/14 22:19	50
Bromoform	ND		5.0		ug/L			11/24/14 22:19	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
Bromobenzene	ND		5.0		ug/L			11/24/14 22:19	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 22:19	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 22:19	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 22:19	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 22:19	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 22:19	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-4
Date Collected: 11/20/14 15:10
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 22:19	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 22:19	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 22:19	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 22:19	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 22:19	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 22:19	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 22:19	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 22:19	50
Naphthalene	ND		20		ug/L			11/24/14 22:19	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 22:19	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/24/14 22:19*	*50*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 22:19*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 22:19*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 22:19*	*50*
Dibromofluoromethane (Surr)	*103*		*85 - 115*		*11/24/14 22:19*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**5.8**		2.0		mg/L			12/03/14 12:08	2

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-3
Date Collected: 11/20/14 16:09
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		20		ug/L			11/24/14 22:45	50
Chloromethane	ND		5.0		ug/L			11/24/14 22:45	50
Vinyl chloride	**900**		1.0		ug/L			11/24/14 22:45	50
Bromomethane	ND		5.0		ug/L			11/24/14 22:45	50
Chloroethane	ND		13		ug/L			11/24/14 22:45	50
Trichlorofluoromethane	ND		5.0		ug/L			11/24/14 22:45	50
1,1-Dichloroethene	ND		5.0		ug/L			11/24/14 22:45	50
Methylene Chloride	ND		25		ug/L			11/24/14 22:45	50
Methyl tert-butyl ether	ND		5.0		ug/L			11/24/14 22:45	50
trans-1,2-Dichloroethene	**16**		5.0		ug/L			11/24/14 22:45	50
1,1-Dichloroethane	ND		5.0		ug/L			11/24/14 22:45	50
2,2-Dichloropropane	ND		5.0		ug/L			11/24/14 22:45	50
cis-1,2-Dichloroethene	**1800**		5.0		ug/L			11/24/14 22:45	50
Chlorobromomethane	ND		5.0		ug/L			11/24/14 22:45	50
Chloroform	ND		5.0		ug/L			11/24/14 22:45	50
1,1,1-Trichloroethane	ND		5.0		ug/L			11/24/14 22:45	50
Carbon tetrachloride	ND		5.0		ug/L			11/24/14 22:45	50
1,1-Dichloropropene	ND		5.0		ug/L			11/24/14 22:45	50
Benzene	ND		5.0		ug/L			11/24/14 22:45	50
1,2-Dichloroethane	ND		5.0		ug/L			11/24/14 22:45	50
Trichloroethene	**95**		5.0		ug/L			11/24/14 22:45	50
1,2-Dichloropropane	ND		5.0		ug/L			11/24/14 22:45	50
Dibromomethane	ND		5.0		ug/L			11/24/14 22:45	50
Dichlorobromomethane	ND		5.0		ug/L			11/24/14 22:45	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 22:45	50
Toluene	ND		5.0		ug/L			11/24/14 22:45	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/24/14 22:45	50
1,1,2-Trichloroethane	ND		5.0		ug/L			11/24/14 22:45	50
Tetrachloroethene	**63**		5.0		ug/L			11/24/14 22:45	50
1,3-Dichloropropane	ND		5.0		ug/L			11/24/14 22:45	50
Chlorodibromomethane	ND		5.0		ug/L			11/24/14 22:45	50
Ethylene Dibromide	ND		5.0		ug/L			11/24/14 22:45	50
Chlorobenzene	ND		5.0		ug/L			11/24/14 22:45	50
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 22:45	50
Ethylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
m-Xylene & p-Xylene	ND		10		ug/L			11/24/14 22:45	50
o-Xylene	ND		5.0		ug/L			11/24/14 22:45	50
Styrene	ND		5.0		ug/L			11/24/14 22:45	50
Bromoform	ND		5.0		ug/L			11/24/14 22:45	50
Isopropylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
Bromobenzene	ND		5.0		ug/L			11/24/14 22:45	50
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/24/14 22:45	50
1,2,3-Trichloropropane	ND		10		ug/L			11/24/14 22:45	50
N-Propylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
2-Chlorotoluene	ND		5.0		ug/L			11/24/14 22:45	50
4-Chlorotoluene	ND		10		ug/L			11/24/14 22:45	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
tert-Butylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/24/14 22:45	50

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-3
Date Collected: 11/20/14 16:09
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
4-Isopropyltoluene	ND		10		ug/L			11/24/14 22:45	50
1,3-Dichlorobenzene	ND		10		ug/L			11/24/14 22:45	50
1,4-Dichlorobenzene	ND		10		ug/L			11/24/14 22:45	50
n-Butylbenzene	ND		5.0		ug/L			11/24/14 22:45	50
1,2-Dichlorobenzene	ND		10		ug/L			11/24/14 22:45	50
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/24/14 22:45	50
1,2,4-Trichlorobenzene	ND		10		ug/L			11/24/14 22:45	50
Hexachlorobutadiene	ND		10		ug/L			11/24/14 22:45	50
Naphthalene	ND		20		ug/L			11/24/14 22:45	50
1,2,3-Trichlorobenzene	ND		20		ug/L			11/24/14 22:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*11/24/14 22:45*	*50*
Toluene-d8 (Surr)	*101*		*75 - 125*		*11/24/14 22:45*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*11/24/14 22:45*	*50*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 22:45*	*50*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 22:45*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	12		2.0		mg/L			12/03/14 12:08	2

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-2
Date Collected: 11/20/14 16:30
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			11/25/14 18:00	10
1,1,1-Trichloroethane	ND		10		ug/L			11/25/14 18:00	10
1,1,2,2-Tetrachloroethane	ND		10		ug/L			11/25/14 18:00	10
1,1,2-Trichloroethane	ND		10		ug/L			11/25/14 18:00	10
1,1-Dichloroethane	ND		10		ug/L			11/25/14 18:00	10
1,1-Dichloroethene	ND		10		ug/L			11/25/14 18:00	10
1,1-Dichloropropene	ND		10		ug/L			11/25/14 18:00	10
1,2,3-Trichlorobenzene	ND		10		ug/L			11/25/14 18:00	10
1,2,3-Trichloropropane	ND		20		ug/L			11/25/14 18:00	10
1,2,4-Trichlorobenzene	ND		10		ug/L			11/25/14 18:00	10
1,2,4-Trimethylbenzene	ND		10		ug/L			11/25/14 18:00	10
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			11/25/14 18:00	10
1,2-Dichlorobenzene	ND		10		ug/L			11/25/14 18:00	10
1,2-Dichloroethane	ND		10		ug/L			11/25/14 18:00	10
1,2-Dichloropropane	ND		10		ug/L			11/25/14 18:00	10
1,3,5-Trimethylbenzene	ND		10		ug/L			11/25/14 18:00	10
1,3-Dichlorobenzene	ND		10		ug/L			11/25/14 18:00	10
1,3-Dichloropropane	ND		10		ug/L			11/25/14 18:00	10
1,4-Dichlorobenzene	ND		10		ug/L			11/25/14 18:00	10
2,2-Dichloropropane	ND		10		ug/L			11/25/14 18:00	10
2-Chlorotoluene	ND		10		ug/L			11/25/14 18:00	10
4-Chlorotoluene	ND		10		ug/L			11/25/14 18:00	10
4-Isopropyltoluene	ND		10		ug/L			11/25/14 18:00	10
Benzene	ND		10		ug/L			11/25/14 18:00	10
Bromobenzene	ND		10		ug/L			11/25/14 18:00	10
Bromoform	ND		10		ug/L			11/25/14 18:00	10
Bromomethane	ND		50		ug/L			11/25/14 18:00	10
Carbon tetrachloride	ND		10		ug/L			11/25/14 18:00	10
Chlorobenzene	ND		10		ug/L			11/25/14 18:00	10
Chlorobromomethane	ND		10		ug/L			11/25/14 18:00	10
Chlorodibromomethane	ND		10		ug/L			11/25/14 18:00	10
Chloroethane	ND		50		ug/L			11/25/14 18:00	10
Chloroform	ND		10		ug/L			11/25/14 18:00	10
Chloromethane	ND		50		ug/L			11/25/14 18:00	10
cis-1,3-Dichloropropene	ND		10		ug/L			11/25/14 18:00	10
Dibromomethane	ND		10		ug/L			11/25/14 18:00	10
Dichlorobromomethane	ND		10		ug/L			11/25/14 18:00	10
Dichlorodifluoromethane	ND		10		ug/L			11/25/14 18:00	10
Ethylbenzene	ND		10		ug/L			11/25/14 18:00	10
Ethylene Dibromide	ND		10		ug/L			11/25/14 18:00	10
Hexachlorobutadiene	ND		10		ug/L			11/25/14 18:00	10
Isopropylbenzene	ND		10		ug/L			11/25/14 18:00	10
Methyl tert-butyl ether	ND		10		ug/L			11/25/14 18:00	10
Methylene Chloride	ND		30		ug/L			11/25/14 18:00	10
m-Xylene & p-Xylene	ND		20		ug/L			11/25/14 18:00	10
Naphthalene	ND		30		ug/L			11/25/14 18:00	10
n-Butylbenzene	ND		20		ug/L			11/25/14 18:00	10
N-Propylbenzene	ND		10		ug/L			11/25/14 18:00	10
o-Xylene	ND		10		ug/L			11/25/14 18:00	10

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-2
Date Collected: 11/20/14 16:30
Date Received: 11/22/14 09:45

Lab Sample ID: 580-46453-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10		ug/L			11/25/14 18:00	10
Styrene	ND		50		ug/L			11/25/14 18:00	10
tert-Butylbenzene	ND		10		ug/L			11/25/14 18:00	10
Toluene	ND		10		ug/L			11/25/14 18:00	10
trans-1,2-Dichloroethene	**14**		10		ug/L			11/25/14 18:00	10
trans-1,3-Dichloropropene	ND		10		ug/L			11/25/14 18:00	10
Trichloroethene	**760**		10		ug/L			11/25/14 18:00	10
Trichlorofluoromethane	ND		10		ug/L			11/25/14 18:00	10
Vinyl chloride	**170**		10		ug/L			11/25/14 18:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*11/25/14 18:00*	*10*
Toluene-d8 (Surr)	*102*		*85 - 120*		*11/25/14 18:00*	*10*
Trifluorotoluene (Surr)	*96*		*70 - 136*		*11/25/14 18:00*	*10*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*11/25/14 18:00*	*10*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 120*		*11/25/14 18:00*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1800**		1000		ug/L			11/24/14 17:44	1000
Tetrachloroethene	**15000**		1000		ug/L			11/24/14 17:44	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*		*11/24/14 17:44*	*1000*
Toluene-d8 (Surr)	*99*		*85 - 120*		*11/24/14 17:44*	*1000*
Trifluorotoluene (Surr)	*99*		*70 - 136*		*11/24/14 17:44*	*1000*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 17:44*	*1000*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*11/24/14 17:44*	*1000*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30**		0.90		mg/L			11/24/14 10:33	1
Nitrate as N	**0.93**	**H**	0.90		mg/L			11/24/14 10:33	1
Sulfate	**5.8**		1.2		mg/L			11/24/14 10:33	1
Total Organic Carbon	**2.2**		1.0		mg/L			12/03/14 12:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			11/24/14 12:51	1
Chloromethane	ND		0.10		ug/L			11/24/14 12:51	1
Vinyl chloride	ND		0.020		ug/L			11/24/14 12:51	1
Bromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroethane	ND		0.25		ug/L			11/24/14 12:51	1
Trichlorofluoromethane	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Methylene Chloride	ND		0.50		ug/L			11/24/14 12:51	1
Methyl tert-butyl ether	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
2,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Chloroform	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Carbon tetrachloride	ND		0.10		ug/L			11/24/14 12:51	1
1,1-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Benzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Trichloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Dibromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Dichlorobromomethane	ND		0.10		ug/L			11/24/14 12:51	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
Toluene	ND		0.10		ug/L			11/24/14 12:51	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Tetrachloroethene	ND		0.10		ug/L			11/24/14 12:51	1
1,3-Dichloropropane	ND		0.10		ug/L			11/24/14 12:51	1
Chlorodibromomethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylene Dibromide	ND		0.10		ug/L			11/24/14 12:51	1
Chlorobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
Ethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/24/14 12:51	1
o-Xylene	ND		0.10		ug/L			11/24/14 12:51	1
Styrene	ND		0.10		ug/L			11/24/14 12:51	1
Bromoform	ND		0.10		ug/L			11/24/14 12:51	1
Isopropylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
Bromobenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/24/14 12:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/24/14 12:51	1
N-Propylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
2-Chlorotoluene	ND		0.10		ug/L			11/24/14 12:51	1
4-Chlorotoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
tert-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1

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

Lab Sample ID: MB 580-176588/7
Matrix: Water
Analysis Batch: 176588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
sec-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
4-Isopropyltoluene	ND		0.20		ug/L			11/24/14 12:51	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
n-Butylbenzene	ND		0.10		ug/L			11/24/14 12:51	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/24/14 12:51	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/24/14 12:51	1
Hexachlorobutadiene	ND		0.20		ug/L			11/24/14 12:51	1
Naphthalene	ND		0.40		ug/L			11/24/14 12:51	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/24/14 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*11/24/14 12:51*	*1*
Toluene-d8 (Surr)	*100*		*75 - 125*		*11/24/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 128*		*11/24/14 12:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/24/14 12:51*	*1*
Dibromofluoromethane (Surr)	*102*		*85 - 115*		*11/24/14 12:51*	*1*

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	6.01		ug/L		120	30 - 180
Chloromethane	5.00	5.95		ug/L		119	50 - 140
Vinyl chloride	5.00	5.58		ug/L		112	65 - 140
Bromomethane	5.00	5.88		ug/L		118	70 - 135
Chloroethane	5.00	5.00		ug/L		100	75 - 140
Trichlorofluoromethane	5.00	5.96		ug/L		119	30 - 180
1,1-Dichloroethene	5.00	5.22		ug/L		104	70 - 150
Methylene Chloride	5.00	5.74		ug/L		115	60 - 145
Methyl tert-butyl ether	5.00	4.87		ug/L		97	75 - 120
trans-1,2-Dichloroethene	5.00	5.39		ug/L		108	80 - 140
1,1-Dichloroethane	5.00	5.35		ug/L		107	75 - 135
2,2-Dichloropropane	5.00	5.85		ug/L		117	60 - 150
cis-1,2-Dichloroethene	5.00	5.17		ug/L		103	80 - 130
Chlorobromomethane	5.00	5.46		ug/L		109	80 - 125
Chloroform	5.00	5.43		ug/L		109	80 - 130
1,1,1-Trichloroethane	5.00	5.80		ug/L		116	80 - 140
Carbon tetrachloride	5.00	5.77		ug/L		115	75 - 140
1,1-Dichloropropene	5.00	5.33		ug/L		107	80 - 130
Benzene	5.00	4.99		ug/L		100	80 - 120
1,2-Dichloroethane	5.00	5.53		ug/L		111	80 - 140
Trichloroethene	5.00	5.45		ug/L		109	80 - 130
1,2-Dichloropropane	5.00	5.09		ug/L		102	80 - 120
Dibromomethane	5.00	5.22		ug/L		104	80 - 130

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

Lab Sample ID: LCS 580-176588/31
Matrix: Water
Analysis Batch: 176588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	5.00	5.51		ug/L		110	80 - 125
cis-1,3-Dichloropropene	5.00	5.08		ug/L		102	70 - 120
Toluene	5.00	5.33		ug/L		107	80 - 120
trans-1,3-Dichloropropene	5.00	5.04		ug/L		101	60 - 140
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 130
Tetrachloroethene	5.00	4.72		ug/L		94	40 - 180
1,3-Dichloropropane	5.00	5.02		ug/L		100	80 - 130
Chlorodibromomethane	5.00	4.91		ug/L		98	70 - 120
Ethylene Dibromide	5.00	5.08		ug/L		102	70 - 130
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.26		ug/L		105	75 - 125
Ethylbenzene	5.00	5.31		ug/L		106	80 - 125
m-Xylene & p-Xylene	5.00	5.27		ug/L		105	80 - 130
o-Xylene	5.00	5.47		ug/L		109	80 - 120
Styrene	5.00	5.18		ug/L		104	75 - 130
Bromoform	5.00	4.20		ug/L		84	65 - 130
Isopropylbenzene	5.00	5.47		ug/L		109	75 - 120
Bromobenzene	5.00	4.73		ug/L		95	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.89		ug/L		98	75 - 125
1,2,3-Trichloropropane	5.00	4.96		ug/L		99	75 - 120
N-Propylbenzene	5.00	5.12		ug/L		102	80 - 120
2-Chlorotoluene	5.00	5.03		ug/L		101	75 - 130
4-Chlorotoluene	5.00	5.05		ug/L		101	75 - 130
1,3,5-Trimethylbenzene	5.00	5.15		ug/L		103	80 - 125
tert-Butylbenzene	5.00	5.09		ug/L		102	80 - 130
1,2,4-Trimethylbenzene	5.00	5.08		ug/L		102	80 - 125
sec-Butylbenzene	5.00	5.21		ug/L		104	80 - 125
4-Isopropyltoluene	5.00	5.28		ug/L		106	80 - 120
1,3-Dichlorobenzene	5.00	5.05		ug/L		101	80 - 120
1,4-Dichlorobenzene	5.00	5.03		ug/L		101	80 - 120
n-Butylbenzene	5.00	5.17		ug/L		103	75 - 125
1,2-Dichlorobenzene	5.00	5.02		ug/L		100	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.23		ug/L		85	55 - 120
1,2,4-Trichlorobenzene	5.00	4.99		ug/L		100	60 - 125
Hexachlorobutadiene	5.00	5.03		ug/L		101	75 - 135
Naphthalene	5.00	4.76		ug/L		95	45 - 130
1,2,3-Trichlorobenzene	5.00	4.93		ug/L		99	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*95*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Dibromofluoromethane (Surr)	*106*		*85 - 115*

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

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
Dichlorodifluoromethane	5.00	5.99		ug/L		120	30 - 180	0	20
Chloromethane	5.00	5.89		ug/L		118	50 - 140	1	20
Vinyl chloride	5.00	5.55		ug/L		111	65 - 140	1	20
Bromomethane	5.00	5.82		ug/L		116	70 - 135	1	20
Chloroethane	5.00	5.16		ug/L		103	75 - 140	3	20
Trichlorofluoromethane	5.00	5.48		ug/L		110	30 - 180	8	20
1,1-Dichloroethene	5.00	5.37		ug/L		107	70 - 150	3	20
Methylene Chloride	5.00	5.88		ug/L		118	60 - 145	2	20
Methyl tert-butyl ether	5.00	4.81		ug/L		96	75 - 120	1	20
trans-1,2-Dichloroethene	5.00	5.34		ug/L		107	80 - 140	1	20
1,1-Dichloroethane	5.00	5.41		ug/L		108	75 - 135	1	20
2,2-Dichloropropane	5.00	5.53		ug/L		111	60 - 150	6	20
cis-1,2-Dichloroethene	5.00	5.08		ug/L		102	80 - 130	2	20
Chlorobromomethane	5.00	5.39		ug/L		108	80 - 125	1	20
Chloroform	5.00	5.50		ug/L		110	80 - 130	1	20
1,1,1-Trichloroethane	5.00	5.74		ug/L		115	80 - 140	1	20
Carbon tetrachloride	5.00	5.79		ug/L		116	75 - 140	0	20
1,1-Dichloropropene	5.00	5.35		ug/L		107	80 - 130	0	20
Benzene	5.00	5.03		ug/L		101	80 - 120	1	20
1,2-Dichloroethane	5.00	5.56		ug/L		111	80 - 140	1	20
Trichloroethene	5.00	5.54		ug/L		111	80 - 130	2	20
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 120	3	20
Dibromomethane	5.00	5.27		ug/L		105	80 - 130	1	20
Dichlorobromomethane	5.00	5.39		ug/L		108	80 - 125	2	20
cis-1,3-Dichloropropene	5.00	5.04		ug/L		101	70 - 120	1	20
Toluene	5.00	5.20		ug/L		104	80 - 120	2	20
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	60 - 140	1	20
1,1,2-Trichloroethane	5.00	5.04		ug/L		101	80 - 130	1	20
Tetrachloroethene	5.00	4.73		ug/L		95	40 - 180	0	20
1,3-Dichloropropane	5.00	5.01		ug/L		100	80 - 130	0	20
Chlorodibromomethane	5.00	4.82		ug/L		96	70 - 120	2	20
Ethylene Dibromide	5.00	5.13		ug/L		103	70 - 130	1	20
Chlorobenzene	5.00	5.18		ug/L		104	80 - 120	0	20
1,1,1,2-Tetrachloroethane	5.00	5.20		ug/L		104	75 - 125	1	20
Ethylbenzene	5.00	5.28		ug/L		106	80 - 125	1	20
m-Xylene & p-Xylene	5.00	5.22		ug/L		104	80 - 130	1	20
o-Xylene	5.00	5.36		ug/L		107	80 - 120	2	20
Styrene	5.00	5.20		ug/L		104	75 - 130	1	20
Bromoform	5.00	4.24		ug/L		85	65 - 130	1	20
Isopropylbenzene	5.00	5.34		ug/L		107	75 - 120	2	20
Bromobenzene	5.00	4.84		ug/L		97	80 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	4.97		ug/L		99	75 - 125	2	20
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120	4	20
N-Propylbenzene	5.00	5.22		ug/L		104	80 - 120	2	20
2-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	2	20
4-Chlorotoluene	5.00	5.12		ug/L		102	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.23		ug/L		105	80 - 125	2	20
tert-Butylbenzene	5.00	5.19		ug/L		104	80 - 130	2	20

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

Lab Sample ID: LCSD 580-176588/32
Matrix: Water
Analysis Batch: 176588

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
1,2,4-Trimethylbenzene			5.00	5.15		ug/L		103	80 - 125	1	20
sec-Butylbenzene			5.00	5.21		ug/L		104	80 - 125	0	20
4-Isopropyltoluene			5.00	5.27		ug/L		105	80 - 120	0	20
1,3-Dichlorobenzene			5.00	5.12		ug/L		102	80 - 120	1	20
1,4-Dichlorobenzene			5.00	5.06		ug/L		101	80 - 120	1	20
n-Butylbenzene			5.00	5.15		ug/L		103	75 - 125	0	20
1,2-Dichlorobenzene			5.00	5.06		ug/L		101	80 - 130	1	20
1,2-Dibromo-3-Chloropropane			5.00	4.20		ug/L		84	55 - 120	1	20
1,2,4-Trichlorobenzene			5.00	4.94		ug/L		99	60 - 125	1	20
Hexachlorobutadiene			5.00	5.08		ug/L		102	75 - 135	1	20
Naphthalene			5.00	4.80		ug/L		96	45 - 130	1	20
1,2,3-Trichlorobenzene			5.00	4.99		ug/L		100	60 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*98*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Dibromofluoromethane (Surr)	*104*		*85 - 115*

Lab Sample ID: MB 580-176610/4
Matrix: Water
Analysis Batch: 176610

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		3.0		ug/L			11/24/14 15:52	1
Tetrachloroethene	ND		1.0		ug/L			11/24/14 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*		*11/24/14 15:52*	*1*
Toluene-d8 (Surr)	*102*		*85 - 120*		*11/24/14 15:52*	*1*
Trifluorotoluene (Surr)	*99*		*70 - 136*		*11/24/14 15:52*	*1*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*11/24/14 15:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*11/24/14 15:52*	*1*

Lab Sample ID: LCS 580-176610/5
Matrix: Water
Analysis Batch: 176610

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride			20.0	22.2		ug/L		111	55 - 140
Tetrachloroethene			20.0	20.6		ug/L		103	45 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*101*		*85 - 120*
Trifluorotoluene (Surr)	*102*		*70 - 136*

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

Lab Sample ID: LCS 580-176610/5
Matrix: Water
Analysis Batch: 176610

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*

Lab Sample ID: LCSD 580-176610/6
Matrix: Water
Analysis Batch: 176610

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
Methylene Chloride			20.0	20.7		ug/L		104	55 - 140	7	30
Tetrachloroethene			20.0	20.2		ug/L		101	45 - 150	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*101*		*85 - 120*
Trifluorotoluene (Surr)	*101*		*70 - 136*
Dibromofluoromethane (Surr)	*97*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*

Lab Sample ID: MB 580-176704/4
Matrix: Water
Analysis Batch: 176704

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,1-Dichloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,1-Dichloroethene	ND		1.0		ug/L			11/25/14 13:03	1
1,1-Dichloropropene	ND		1.0		ug/L			11/25/14 13:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/25/14 13:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/25/14 13:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,2-Dichloroethane	ND		1.0		ug/L			11/25/14 13:03	1
1,2-Dichloropropane	ND		1.0		ug/L			11/25/14 13:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
1,3-Dichloropropane	ND		1.0		ug/L			11/25/14 13:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
2,2-Dichloropropane	ND		1.0		ug/L			11/25/14 13:03	1
2-Chlorotoluene	ND		1.0		ug/L			11/25/14 13:03	1
4-Chlorotoluene	ND		1.0		ug/L			11/25/14 13:03	1
4-Isopropyltoluene	ND		1.0		ug/L			11/25/14 13:03	1
Benzene	ND		1.0		ug/L			11/25/14 13:03	1
Bromobenzene	ND		1.0		ug/L			11/25/14 13:03	1

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

Lab Sample ID: MB 580-176704/4
Matrix: Water
Analysis Batch: 176704

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			11/25/14 13:03	1
Bromomethane	ND		5.0		ug/L			11/25/14 13:03	1
Carbon tetrachloride	ND		1.0		ug/L			11/25/14 13:03	1
Chlorobenzene	ND		1.0		ug/L			11/25/14 13:03	1
Chlorobromomethane	ND		1.0		ug/L			11/25/14 13:03	1
Chlorodibromomethane	ND		1.0		ug/L			11/25/14 13:03	1
Chloroethane	ND		5.0		ug/L			11/25/14 13:03	1
Chloroform	ND		1.0		ug/L			11/25/14 13:03	1
Chloromethane	ND		5.0		ug/L			11/25/14 13:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/25/14 13:03	1
Dibromomethane	ND		1.0		ug/L			11/25/14 13:03	1
Dichlorobromomethane	ND		1.0		ug/L			11/25/14 13:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/25/14 13:03	1
Ethylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
Ethylene Dibromide	ND		1.0		ug/L			11/25/14 13:03	1
Hexachlorobutadiene	ND		1.0		ug/L			11/25/14 13:03	1
Isopropylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/25/14 13:03	1
Methylene Chloride	ND		3.0		ug/L			11/25/14 13:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			11/25/14 13:03	1
Naphthalene	ND		3.0		ug/L			11/25/14 13:03	1
n-Butylbenzene	ND		2.0		ug/L			11/25/14 13:03	1
N-Propylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
o-Xylene	ND		1.0		ug/L			11/25/14 13:03	1
sec-Butylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
Styrene	ND		5.0		ug/L			11/25/14 13:03	1
tert-Butylbenzene	ND		1.0		ug/L			11/25/14 13:03	1
Toluene	ND		1.0		ug/L			11/25/14 13:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/25/14 13:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/25/14 13:03	1
Trichloroethene	ND		1.0		ug/L			11/25/14 13:03	1
Trichlorofluoromethane	ND		1.0		ug/L			11/25/14 13:03	1
Vinyl chloride	ND		1.0		ug/L			11/25/14 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*11/25/14 13:03*	*1*
Toluene-d8 (Surr)	*99*		*85 - 120*		*11/25/14 13:03*	*1*
Trifluorotoluene (Surr)	*104*		*70 - 136*		*11/25/14 13:03*	*1*
Dibromofluoromethane (Surr)	*104*		*85 - 115*		*11/25/14 13:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 120*		*11/25/14 13:03*	*1*

Lab Sample ID: LCS 580-176704/5
Matrix: Water
Analysis Batch: 176704

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	20.1		ug/L		101	80 - 130
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	65 - 130

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

Lab Sample ID: LCS 580-176704/5
Matrix: Water
Analysis Batch: 176704

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	20.0	20.1		ug/L		101	65 - 130
1,1,2-Trichloroethane	20.0	19.8		ug/L		99	75 - 125
1,1-Dichloroethane	20.0	18.8		ug/L		94	70 - 135
1,1-Dichloroethene	20.0	19.7		ug/L		98	70 - 130
1,1-Dichloropropene	20.0	20.2		ug/L		101	75 - 130
1,2,3-Trichlorobenzene	20.0	18.5		ug/L		93	55 - 140
1,2,3-Trichloropropane	20.0	20.3		ug/L		101	75 - 125
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	65 - 135
1,2,4-Trimethylbenzene	20.0	20.5		ug/L		102	75 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.7		ug/L		99	50 - 130
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 120
1,2-Dichloroethane	20.0	18.3		ug/L		91	70 - 130
1,2-Dichloropropane	20.0	19.6		ug/L		98	75 - 125
1,3,5-Trimethylbenzene	20.0	20.8		ug/L		104	75 - 130
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	75 - 125
1,3-Dichloropropane	20.0	19.6		ug/L		98	75 - 125
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	75 - 125
2,2-Dichloropropane	20.0	19.9		ug/L		100	70 - 135
2-Chlorotoluene	20.0	20.7		ug/L		104	75 - 125
4-Chlorotoluene	20.0	20.7		ug/L		104	75 - 130
4-Isopropyltoluene	20.0	20.4		ug/L		102	75 - 130
Benzene	20.0	19.8		ug/L		99	80 - 120
Bromobenzene	20.0	20.3		ug/L		101	75 - 125
Bromoform	20.0	20.8		ug/L		104	70 - 130
Bromomethane	20.0	22.7		ug/L		114	30 - 145
Carbon tetrachloride	20.0	19.8		ug/L		99	65 - 140
Chlorobenzene	20.0	20.1		ug/L		101	80 - 120
Chlorobromomethane	20.0	20.3		ug/L		101	65 - 130
Chlorodibromomethane	20.0	19.9		ug/L		100	60 - 135
Chloroethane	20.0	21.0		ug/L		105	60 - 135
Chloroform	20.0	19.3		ug/L		96	65 - 135
Chloromethane	20.0	16.0		ug/L		80	40 - 125
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	70 - 130
Dibromomethane	20.0	20.4		ug/L		102	75 - 125
Dichlorobromomethane	20.0	19.6		ug/L		98	75 - 120
Dichlorodifluoromethane	20.0	18.9		ug/L		94	30 - 155
Ethylbenzene	20.0	20.7		ug/L		103	75 - 125
Ethylene Dibromide	20.0	20.1		ug/L		100	80 - 120
Hexachlorobutadiene	20.0	19.2		ug/L		96	50 - 140
Isopropylbenzene	20.0	20.7		ug/L		104	75 - 125
Methyl tert-butyl ether	20.0	18.7		ug/L		94	65 - 125
Methylene Chloride	20.0	21.5		ug/L		107	55 - 140
m-Xylene & p-Xylene	20.0	20.4		ug/L		102	75 - 130
Naphthalene	20.0	17.1		ug/L		86	55 - 140
n-Butylbenzene	20.0	20.7		ug/L		103	70 - 135
N-Propylbenzene	20.0	21.0		ug/L		105	70 - 130
o-Xylene	20.0	20.2		ug/L		101	80 - 120
sec-Butylbenzene	20.0	20.7		ug/L		104	70 - 125

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

Lab Sample ID: LCS 580-176704/5
Matrix: Water
Analysis Batch: 176704

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	20.3		ug/L		101	65 - 135
tert-Butylbenzene	20.0	21.1		ug/L		105	70 - 130
Toluene	20.0	20.1		ug/L		101	75 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	60 - 140
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	55 - 140
Trichloroethene	20.0	20.5		ug/L		103	70 - 125
Trichlorofluoromethane	20.0	19.5		ug/L		98	60 - 145
Vinyl chloride	20.0	20.8		ug/L		104	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Toluene-d8 (Surr)	*102*		*85 - 120*
Trifluorotoluene (Surr)	*104*		*70 - 136*
Dibromofluoromethane (Surr)	*96*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 120*

Lab Sample ID: LCSD 580-176704/6
Matrix: Water
Analysis Batch: 176704

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
1,1,1,2-Tetrachloroethane	20.0	18.6		ug/L		93	80 - 130	8	30
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	65 - 130	10	30
1,1,2,2-Tetrachloroethane	20.0	18.5		ug/L		92	65 - 130	9	30
1,1,2-Trichloroethane	20.0	18.9		ug/L		94	75 - 125	5	30
1,1-Dichloroethane	20.0	17.3		ug/L		86	70 - 135	8	30
1,1-Dichloroethene	20.0	17.6		ug/L		88	70 - 130	11	30
1,1-Dichloropropene	20.0	18.2		ug/L		91	75 - 130	11	30
1,2,3-Trichlorobenzene	20.0	19.9		ug/L		99	55 - 140	7	30
1,2,3-Trichloropropane	20.0	19.3		ug/L		96	75 - 125	5	30
1,2,4-Trichlorobenzene	20.0	18.9		ug/L		95	65 - 135	1	30
1,2,4-Trimethylbenzene	20.0	18.1		ug/L		90	75 - 130	13	30
1,2-Dibromo-3-Chloropropane	20.0	19.1		ug/L		96	50 - 130	3	30
1,2-Dichlorobenzene	20.0	18.1		ug/L		91	70 - 120	8	30
1,2-Dichloroethane	20.0	17.1		ug/L		85	70 - 130	7	30
1,2-Dichloropropane	20.0	18.2		ug/L		91	75 - 125	7	30
1,3,5-Trimethylbenzene	20.0	17.9		ug/L		89	75 - 130	15	30
1,3-Dichlorobenzene	20.0	18.2		ug/L		91	75 - 125	11	30
1,3-Dichloropropane	20.0	18.5		ug/L		92	75 - 125	6	30
1,4-Dichlorobenzene	20.0	18.2		ug/L		91	75 - 125	9	30
2,2-Dichloropropane	20.0	16.7		ug/L		84	70 - 135	17	30
2-Chlorotoluene	20.0	17.8		ug/L		89	75 - 125	15	30
4-Chlorotoluene	20.0	18.0		ug/L		90	75 - 130	14	30
4-Isopropyltoluene	20.0	18.3		ug/L		91	75 - 130	11	30
Benzene	20.0	18.0		ug/L		90	80 - 120	10	30
Bromobenzene	20.0	18.1		ug/L		90	75 - 125	11	30
Bromoform	20.0	19.4		ug/L		97	70 - 130	7	30
Bromomethane	20.0	20.8		ug/L		104	30 - 145	9	30

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

Lab Sample ID: LCSD 580-176704/6
Matrix: Water
Analysis Batch: 176704

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
Carbon tetrachloride	20.0	17.1		ug/L		85	65 - 140	15	30
Chlorobenzene	20.0	18.2		ug/L		91	80 - 120	10	30
Chlorobromomethane	20.0	19.0		ug/L		95	65 - 130	7	30
Chlorodibromomethane	20.0	18.4		ug/L		92	60 - 135	8	30
Chloroethane	20.0	16.4		ug/L		82	60 - 135	25	30
Chloroform	20.0	17.6		ug/L		88	65 - 135	9	30
Chloromethane	20.0	14.8		ug/L		74	40 - 125	8	30
cis-1,3-Dichloropropene	20.0	18.8		ug/L		94	70 - 130	7	30
Dibromomethane	20.0	19.2		ug/L		96	75 - 125	6	30
Dichlorobromomethane	20.0	17.8		ug/L		89	75 - 120	9	30
Dichlorodifluoromethane	20.0	17.0		ug/L		85	30 - 155	10	30
Ethylbenzene	20.0	18.7		ug/L		93	75 - 125	10	30
Ethylene Dibromide	20.0	19.4		ug/L		97	80 - 120	4	30
Hexachlorobutadiene	20.0	19.3		ug/L		97	50 - 140	0	30
Isopropylbenzene	20.0	18.7		ug/L		93	75 - 125	10	30
Methyl tert-butyl ether	20.0	17.6		ug/L		88	65 - 125	6	30
Methylene Chloride	20.0	19.6		ug/L		98	55 - 140	9	30
m-Xylene & p-Xylene	20.0	18.2		ug/L		91	75 - 130	11	30
Naphthalene	20.0	18.7		ug/L		93	55 - 140	9	30
n-Butylbenzene	20.0	18.4		ug/L		92	70 - 135	11	30
N-Propylbenzene	20.0	18.0		ug/L		90	70 - 130	16	30
o-Xylene	20.0	18.5		ug/L		92	80 - 120	9	30
sec-Butylbenzene	20.0	18.3		ug/L		91	70 - 125	13	30
Styrene	20.0	18.5		ug/L		93	65 - 135	9	30
tert-Butylbenzene	20.0	18.4		ug/L		92	70 - 130	14	30
Toluene	20.0	18.2		ug/L		91	75 - 120	10	30
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	60 - 140	10	30
trans-1,3-Dichloropropene	20.0	18.8		ug/L		94	55 - 140	6	30
Trichloroethene	20.0	18.5		ug/L		92	70 - 125	11	30
Trichlorofluoromethane	20.0	17.8		ug/L		89	60 - 145	9	30
Vinyl chloride	20.0	18.1		ug/L		90	50 - 145	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*102*		*70 - 136*
Dibromofluoromethane (Surr)	*99*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-159321/27
Matrix: Water
Analysis Batch: 159321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/03/14 18:56	1
Ethane	ND		0.50		ug/L			12/03/14 18:56	1

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

Lab Sample ID: MB 240-159321/27
Matrix: Water
Analysis Batch: 159321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethene	ND		0.50		ug/L			12/03/14 18:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*114*		*66 - 132*		*12/03/14 18:56*	*1*

Lab Sample ID: LCS 240-159321/28
Matrix: Water
Analysis Batch: 159321

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			116	122		ug/L		105	76 - 120		
Ethane			218	214		ug/L		98	80 - 120		
Ethene			203	191		ug/L		94	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*112*		*66 - 132*

Lab Sample ID: MB 240-159736/30
Matrix: Water
Analysis Batch: 159736

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50		ug/L			12/05/14 22:15	1
Ethane	ND		0.50		ug/L			12/05/14 22:15	1
Ethene	ND		0.50		ug/L			12/05/14 22:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*115*		*66 - 132*		*12/05/14 22:15*	*1*

Lab Sample ID: LCS 240-159736/31
Matrix: Water
Analysis Batch: 159736

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			116	128		ug/L		111	76 - 120		
Ethane			218	232		ug/L		107	80 - 120		
Ethene			203	204		ug/L		100	81 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*114*		*66 - 132*

Lab Sample ID: 580-46453-6 MS
Matrix: Water
Analysis Batch: 159736

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	1400	H	347	1850	4	ug/L		132	34 - 153		

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

Lab Sample ID: 580-46453-6 MS
Matrix: Water
Analysis Batch: 159736

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	ND	H	653	682		ug/L		104	61 - 120
Ethene	350	H	610	957		ug/L		100	60 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*114*		*66 - 132*

Lab Sample ID: 580-46453-6 MSD
Matrix: Water
Analysis Batch: 159736

Client Sample ID: MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	1400	H	347	1800	4	ug/L		118	34 - 153	3	22
Ethane	ND	H	653	709		ug/L		109	61 - 120	4	21
Ethene	350	H	610	966		ug/L		102	60 - 120	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,1,1-Trifluoroethane	*114*		*66 - 132*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-176592/3
Matrix: Water
Analysis Batch: 176592

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90		mg/L			11/24/14 08:33	1
Sulfate	ND		1.2		mg/L			11/24/14 08:33	1

Lab Sample ID: LCS 580-176592/4
Matrix: Water
Analysis Batch: 176592

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.09		mg/L		101	90 - 110
Sulfate	12.0	11.0		mg/L		91	90 - 110

Lab Sample ID: LCSD 580-176592/5
Matrix: Water
Analysis Batch: 176592

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
Chloride	9.00	9.11		mg/L		101	90 - 110	0	15
Sulfate	12.0	11.0		mg/L		92	90 - 110	1	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-46453-6 MS — **Client Sample ID: MW-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176592

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	35		9.00	44.2		mg/L		99	90 - 110		
Sulfate	ND		12.0	10.3	F1	mg/L		86	90 - 110		

Lab Sample ID: 580-46453-6 DU — **Client Sample ID: MW-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176592

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	35			35.2		mg/L				0.1	10
Sulfate	ND			ND		mg/L				NC	10

Lab Sample ID: MB 580-176594/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90		mg/L			11/24/14 08:33	1

Lab Sample ID: LCS 580-176594/10 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176594

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.80	1.79		mg/L		99	90 - 110		

Lab Sample ID: LCSD 580-176594/11 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176594

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N			1.80	1.80		mg/L		100	90 - 110	1	15

Lab Sample ID: 580-46453-6 MS — **Client Sample ID: MW-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176594

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND	H	1.80	1.80		mg/L		100	90 - 110		

Lab Sample ID: 580-46453-6 DU — **Client Sample ID: MW-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 176594

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate as N	ND	H		ND		mg/L				NC	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-177296/1
Matrix: Water
Analysis Batch: 177296

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			12/03/14 12:08	1

Lab Sample ID: LCS 580-177296/2
Matrix: Water
Analysis Batch: 177296

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	15.0	14.4		mg/L		96	85 - 115

Lab Sample ID: MB 580-177315/1
Matrix: Water
Analysis Batch: 177315

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			12/04/14 09:30	1

Lab Sample ID: LCS 580-177315/2
Matrix: Water
Analysis Batch: 177315

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	15.0	14.1		mg/L		94	85 - 115

Client Sample ID: SPW-13
Lab Sample ID: 580-46453-1

Date Collected: 11/20/14 12:21
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 20:11	AS	TAL SEA

Client Sample ID: DUP-2
Lab Sample ID: 580-46453-2

Date Collected: 11/20/14 12:40
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 20:37	AS	TAL SEA

Client Sample ID: SPW-14
Lab Sample ID: 580-46453-3

Date Collected: 11/20/14 13:40
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 21:02	AS	TAL SEA

Client Sample ID: MW-1
Lab Sample ID: 580-46453-4

Date Collected: 11/20/14 14:26
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 21:28	AS	TAL SEA

Client Sample ID: EQB-2
Lab Sample ID: 580-46453-5

Date Collected: 11/20/14 14:50
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176588	11/24/14 16:21	AS	TAL SEA

Client Sample ID: MW-9
Lab Sample ID: 580-46453-6

Date Collected: 11/20/14 15:27
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 21:54	AS	TAL SEA
Total/NA	Analysis	RSK-175		1	159321	12/03/14 22:36	BPM	TAL CAN
Total/NA	Analysis	RSK-175		3	159736	12/05/14 22:40	BPM	TAL CAN
Total/NA	Analysis	300.0		1	176592	11/24/14 09:50	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176594	11/24/14 09:50	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		10	177315	12/04/14 09:30	JLS	TAL SEA

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Client Sample ID: EXT-4

Lab Sample ID: 580-46453-7

Date Collected: 11/20/14 15:10
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 22:19	AS	TAL SEA
Total/NA	Analysis	SM 5310B		2	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: EXT-3

Lab Sample ID: 580-46453-8

Date Collected: 11/20/14 16:09
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	176588	11/24/14 22:45	AS	TAL SEA
Total/NA	Analysis	SM 5310B		2	177296	12/03/14 12:08	JLS	TAL SEA

Client Sample ID: EXT-2

Lab Sample ID: 580-46453-9

Date Collected: 11/20/14 16:30
Matrix: Water
Date Received: 11/22/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	1000	176610	11/24/14 17:44	CJ	TAL SEA
Total/NA	Analysis	8260B		10	176704	11/25/14 18:00	CJ	TAL SEA
Total/NA	Analysis	300.0		1	176592	11/24/14 10:33	RSB	TAL SEA
Total/NA	Analysis	300.0		1	176594	11/24/14 10:33	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	177296	12/03/14 12:08	JLS	TAL SEA

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear Site

TestAmerica Job ID: 580-46453-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46453-1	SPW-13	Water	11/20/14 12:21	11/22/14 09:45
580-46453-2	DUP-2	Water	11/20/14 12:40	11/22/14 09:45
580-46453-3	SPW-14	Water	11/20/14 13:40	11/22/14 09:45
580-46453-4	MW-1	Water	11/20/14 14:26	11/22/14 09:45
580-46453-5	EQB-2	Water	11/20/14 14:50	11/22/14 09:45
580-46453-6	MW-9	Water	11/20/14 15:27	11/22/14 09:45
580-46453-7	EXT-4	Water	11/20/14 15:10	11/22/14 09:45
580-46453-8	EXT-3	Water	11/20/14 16:09	11/22/14 09:45
580-46453-9	EXT-2	Water	11/20/14 16:30	11/22/14 09:45

Sample Custody Record

Samples Shipped to: Test America – Seattle (5755 8th Str. E. Tacoma, WA 98424)

HART CROWSER

46453

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • Fax 503.620.6918

12/9/2014

JOB 17800-23 LAB NUMBER

PROJECT NAME FRANK WEAR SITE

HART CROWSER CONTACT Jill Kiernan / Kaylan Smyth

503-620-7284 / 503-620-6918

SAMPLED BY: Kaylan Smyth

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	# of Containers	VOC 8260B	Nitrate Cl- Sulfate 300.0	TOC SM 5310B	Ethane Methane Ethene RSK-175	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
1	SPW-13		11-20-14	12:21	W	6	X					
2	DUP-2		11-20-14	12:40	W 6	~~6~~	X					
3	SPW-14		11-20-14	13:40	W	6	X					
4	MW-1		11-20-14	14:26	W	6	X					
5	EQB-2		11-21-14	14:50	W	6	X					
6	MW-9		11-20-14	15:27	W	11	X	X	X	X		
7	EXT-4		11-20-14	15:10	W	6	X					
8	EXT-3		11-20-14	16:09	W	6	X					
9	EXT-2		11-20-14	16:30	W	8	X	X	X			

580-46453 Chain of Custody

#1 Cooler/TB Dig/IR cor 0-5 unc 1-8
Cooler Dscla Blue @Lab
Wet/Packs Packing Bubble
FEDEX P.O. WCS

Page 41 of 42

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Kaylan Smyth	11/21/14	[signature]	11/21/14
SIGNATURE	TIME	SIGNATURE	TIME
KAYLAN SMYTH	8:30	Phil Svabek-Scarr	0830
PRINT NAME		PRINT NAME	
HC		TAI	
COMPANY		COMPANY	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
[signature]	11/21/14	[signature]	11-24-14
SIGNATURE	TIME	SIGNATURE	TIME
Phil Svabek-Scarr	Fed Ex	Benjamin Nyson	09:45
PRINT NAME		PRINT NAME	
TAI		TAI/EA	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:
Results can be emailed to:
jill.kiernan@hartcrowser.com

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE _____
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____
for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

5.8 IR/G-L

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-46453-1

Login Number: 46453

List Source: TestAmerica Seattle

List Number: 1

Creator: Abello, Andrea N

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-46882-1
Client Project/Site: Frank Wear

For:
Hart Crowser, Inc.
8910 SW Gemini Drive
Beaverton, Oregon 97008

Attn: Jill Kiernan

Kristine D. Allen

Authorized for release by:
1/13/2015 3:09:30 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Job ID: 580-46882-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 12/30/2014 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

Except:

A trip blank was shipped with these samples; however, it was not listed on the Chain of Custody (COC). No analysis were added to Trip Blank.

GC/MS VOA

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for batch 179268 recovered outside control limits for the following analytes: sec-Butylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following sample was reanalyzed due to low failing QC for the target analyte 1,1-Dichloroethene during the original analysis: Ext-2 (580-46882-2). Results are reported from the reanalysis.

Method(s) 8260B: Reanalysis of the following sample(s) was performed at dilution outside of the analytical holding time due to the initial dilution being outside of the upper calibration limits, and reanalysis halted due to instrument failures: Ext-2 (580-46882-2). The out of hold results are reported as secondary, with the in-hold "E" flagged results reported as primary.

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.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control 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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-1
Date Collected: 12/23/14 12:30
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.10		ug/L			01/02/15 17:38	1
Bromomethane	ND		0.10		ug/L			01/02/15 17:38	1
Chloroethane	ND		0.25		ug/L			01/02/15 17:38	1
Trichlorofluoromethane	ND		0.10		ug/L			01/02/15 17:38	1
1,1-Dichloroethene	**0.55**		0.10		ug/L			01/02/15 17:38	1
Methylene Chloride	ND		0.50		ug/L			01/02/15 17:38	1
Methyl tert-butyl ether	ND		0.10		ug/L			01/02/15 17:38	1
trans-1,2-Dichloroethene	**3.6**		0.10		ug/L			01/02/15 17:38	1
1,1-Dichloroethane	**0.17**		0.10		ug/L			01/02/15 17:38	1
2,2-Dichloropropane	ND		0.10		ug/L			01/02/15 17:38	1
Chlorobromomethane	ND		0.10		ug/L			01/02/15 17:38	1
Chloroform	**4.6**		0.10		ug/L			01/02/15 17:38	1
1,1,1-Trichloroethane	**0.13**		0.10		ug/L			01/02/15 17:38	1
Carbon tetrachloride	ND		0.10		ug/L			01/02/15 17:38	1
1,1-Dichloropropene	ND		0.10		ug/L			01/02/15 17:38	1
Benzene	ND		0.10		ug/L			01/02/15 17:38	1
1,2-Dichloroethane	ND		0.10		ug/L			01/02/15 17:38	1
Trichloroethene	**22**		0.10		ug/L			01/02/15 17:38	1
1,2-Dichloropropane	ND		0.10		ug/L			01/02/15 17:38	1
Dibromomethane	ND		0.10		ug/L			01/02/15 17:38	1
Dichlorobromomethane	ND		0.10		ug/L			01/02/15 17:38	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 17:38	1
Toluene	ND		0.10		ug/L			01/02/15 17:38	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 17:38	1
1,1,2-Trichloroethane	ND		0.10		ug/L			01/02/15 17:38	1
1,3-Dichloropropane	ND		0.10		ug/L			01/02/15 17:38	1
Chlorodibromomethane	ND		0.10		ug/L			01/02/15 17:38	1
Ethylene Dibromide	ND		0.10		ug/L			01/02/15 17:38	1
Chlorobenzene	ND		0.10		ug/L			01/02/15 17:38	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 17:38	1
Ethylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
m-Xylene & p-Xylene	ND		0.20		ug/L			01/02/15 17:38	1
o-Xylene	ND		0.10		ug/L			01/02/15 17:38	1
Styrene	ND		0.10		ug/L			01/02/15 17:38	1
Bromoform	ND		0.10		ug/L			01/02/15 17:38	1
Isopropylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
Bromobenzene	ND		0.10		ug/L			01/02/15 17:38	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 17:38	1
1,2,3-Trichloropropane	ND		0.20		ug/L			01/02/15 17:38	1
N-Propylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
2-Chlorotoluene	ND		0.10		ug/L			01/02/15 17:38	1
4-Chlorotoluene	ND		0.20		ug/L			01/02/15 17:38	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
tert-Butylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
sec-Butylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
4-Isopropyltoluene	ND		0.20		ug/L			01/02/15 17:38	1
1,3-Dichlorobenzene	ND		0.20		ug/L			01/02/15 17:38	1
1,4-Dichlorobenzene	ND		0.20		ug/L			01/02/15 17:38	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-1
Date Collected: 12/23/14 12:30
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			01/02/15 17:38	1
1,2-Dichlorobenzene	ND		0.20		ug/L			01/02/15 17:38	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			01/02/15 17:38	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			01/02/15 17:38	1
Hexachlorobutadiene	ND		0.20		ug/L			01/02/15 17:38	1
Naphthalene	ND		0.40		ug/L			01/02/15 17:38	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			01/02/15 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*01/02/15 17:38*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*01/02/15 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 128*		*01/02/15 17:38*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*01/02/15 17:38*	*1*
Dibromofluoromethane (Surr)	*106*		*85 - 115*		*01/02/15 17:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		4.0		ug/L			01/05/15 21:28	10
Vinyl chloride	**72**		0.20		ug/L			01/05/15 21:28	10
cis-1,2-Dichloroethene	**590**		1.0		ug/L			01/05/15 21:28	10
Tetrachloroethene	**61**		1.0		ug/L			01/05/15 21:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*100*		*80 - 127*		*01/05/15 21:28*	*10*
Toluene-d8 (Surr)	*98*		*75 - 125*		*01/05/15 21:28*	*10*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 128*		*01/05/15 21:28*	*10*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*01/05/15 21:28*	*10*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*01/05/15 21:28*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			01/06/15 15:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-2
Date Collected: 12/23/14 13:20
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	**2.3**		1.0		ug/L			12/31/14 15:56	1
1,1,1-Trichloroethane	**8.9**		1.0		ug/L			12/31/14 15:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/31/14 15:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/31/14 15:56	1
1,1-Dichloroethane	ND		1.0		ug/L			12/31/14 15:56	1
1,1-Dichloropropene	ND		1.0		ug/L			12/31/14 15:56	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			12/31/14 15:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			12/31/14 15:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,2-Dichloroethane	ND		1.0		ug/L			12/31/14 15:56	1
1,2-Dichloropropane	ND		1.0		ug/L			12/31/14 15:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
1,3-Dichloropropane	ND		1.0		ug/L			12/31/14 15:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
2,2-Dichloropropane	ND		1.0		ug/L			12/31/14 15:56	1
2-Chlorotoluene	ND		1.0		ug/L			12/31/14 15:56	1
4-Chlorotoluene	ND		1.0		ug/L			12/31/14 15:56	1
4-Isopropyltoluene	ND		1.0		ug/L			12/31/14 15:56	1
Benzene	ND		1.0		ug/L			12/31/14 15:56	1
Bromobenzene	ND		1.0		ug/L			12/31/14 15:56	1
Bromoform	ND		1.0		ug/L			12/31/14 15:56	1
Bromomethane	ND		5.0		ug/L			12/31/14 15:56	1
Carbon tetrachloride	ND		1.0		ug/L			12/31/14 15:56	1
Chlorobenzene	ND		1.0		ug/L			12/31/14 15:56	1
Chlorobromomethane	ND		1.0		ug/L			12/31/14 15:56	1
Chlorodibromomethane	ND		1.0		ug/L			12/31/14 15:56	1
Chloroethane	ND		5.0		ug/L			12/31/14 15:56	1
Chloroform	**2.8**		1.0		ug/L			12/31/14 15:56	1
Chloromethane	ND		5.0		ug/L			12/31/14 15:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/31/14 15:56	1
Dibromomethane	ND		1.0		ug/L			12/31/14 15:56	1
Dichlorobromomethane	ND		1.0		ug/L			12/31/14 15:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			12/31/14 15:56	1
Ethylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
Ethylene Dibromide	ND		1.0		ug/L			12/31/14 15:56	1
Hexachlorobutadiene	ND		1.0		ug/L			12/31/14 15:56	1
Isopropylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/31/14 15:56	1
Methylene Chloride	ND		3.0		ug/L			12/31/14 15:56	1
m-Xylene & p-Xylene	ND		2.0		ug/L			12/31/14 15:56	1
Naphthalene	ND		3.0		ug/L			12/31/14 15:56	1
n-Butylbenzene	ND		2.0		ug/L			12/31/14 15:56	1
N-Propylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
o-Xylene	ND		1.0		ug/L			12/31/14 15:56	1
sec-Butylbenzene	ND	*	1.0		ug/L			12/31/14 15:56	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-2
Date Collected: 12/23/14 13:20
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0		ug/L			12/31/14 15:56	1
tert-Butylbenzene	ND		1.0		ug/L			12/31/14 15:56	1
Toluene	ND		1.0		ug/L			12/31/14 15:56	1
trans-1,2-Dichloroethene	**11**		1.0		ug/L			12/31/14 15:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			12/31/14 15:56	1
Trichlorofluoromethane	ND		1.0		ug/L			12/31/14 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*12/31/14 15:56*	*1*
Toluene-d8 (Surr)	*91*		*85 - 120*		*12/31/14 15:56*	*1*
Trifluorotoluene (Surr)	*84*		*70 - 136*		*12/31/14 15:56*	*1*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*12/31/14 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 120*		*12/31/14 15:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**900**		100		ug/L			12/31/14 18:42	100
Tetrachloroethene	**7100**	**E**	100		ug/L			12/31/14 18:42	100
Trichloroethene	**350**		100		ug/L			12/31/14 18:42	100
Vinyl chloride	**140**		100		ug/L			12/31/14 18:42	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*12/31/14 18:42*	*100*
Toluene-d8 (Surr)	*94*		*85 - 120*		*12/31/14 18:42*	*100*
Trifluorotoluene (Surr)	*91*		*70 - 136*		*12/31/14 18:42*	*100*
Dibromofluoromethane (Surr)	*97*		*85 - 115*		*12/31/14 18:42*	*100*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*12/31/14 18:42*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**2.7**		1.0		ug/L			12/31/14 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*12/31/14 20:55*	*1*
Toluene-d8 (Surr)	*106*		*85 - 120*		*12/31/14 20:55*	*1*
Trifluorotoluene (Surr)	*94*		*70 - 136*		*12/31/14 20:55*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*12/31/14 20:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 120*		*12/31/14 20:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**13000**	**H**	100		ug/L			01/08/15 22:11	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*01/08/15 22:11*	*100*
Toluene-d8 (Surr)	*100*		*85 - 120*		*01/08/15 22:11*	*100*
Trifluorotoluene (Surr)	*92*		*70 - 136*		*01/08/15 22:11*	*100*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*01/08/15 22:11*	*100*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*		*01/08/15 22:11*	*100*

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-2
Date Collected: 12/23/14 13:20
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.1		1.0		mg/L			01/06/15 15:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-3
Date Collected: 12/23/14 13:55
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.10		ug/L			01/02/15 18:03	1
Bromomethane	ND		0.10		ug/L			01/02/15 18:03	1
Chloroethane	ND		0.25		ug/L			01/02/15 18:03	1
Trichlorofluoromethane	ND		0.10		ug/L			01/02/15 18:03	1
1,1-Dichloroethene	**9.4**		0.10		ug/L			01/02/15 18:03	1
Methylene Chloride	ND		0.50		ug/L			01/02/15 18:03	1
Methyl tert-butyl ether	ND		0.10		ug/L			01/02/15 18:03	1
trans-1,2-Dichloroethene	**20**		0.10		ug/L			01/02/15 18:03	1
1,1-Dichloroethane	**0.72**		0.10		ug/L			01/02/15 18:03	1
2,2-Dichloropropane	ND		0.10		ug/L			01/02/15 18:03	1
Chlorobromomethane	ND		0.10		ug/L			01/02/15 18:03	1
Chloroform	**4.8**		0.10		ug/L			01/02/15 18:03	1
1,1,1-Trichloroethane	**1.8**		0.10		ug/L			01/02/15 18:03	1
Carbon tetrachloride	ND		0.10		ug/L			01/02/15 18:03	1
1,1-Dichloropropene	ND		0.10		ug/L			01/02/15 18:03	1
Benzene	ND		0.10		ug/L			01/02/15 18:03	1
1,2-Dichloroethane	ND		0.10		ug/L			01/02/15 18:03	1
1,2-Dichloropropane	ND		0.10		ug/L			01/02/15 18:03	1
Dibromomethane	ND		0.10		ug/L			01/02/15 18:03	1
Dichlorobromomethane	ND		0.10		ug/L			01/02/15 18:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 18:03	1
Toluene	**0.18**		0.10		ug/L			01/02/15 18:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 18:03	1
1,1,2-Trichloroethane	**0.27**		0.10		ug/L			01/02/15 18:03	1
1,3-Dichloropropane	ND		0.10		ug/L			01/02/15 18:03	1
Chlorodibromomethane	ND		0.10		ug/L			01/02/15 18:03	1
Ethylene Dibromide	ND		0.10		ug/L			01/02/15 18:03	1
Chlorobenzene	ND		0.10		ug/L			01/02/15 18:03	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 18:03	1
Ethylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L			01/02/15 18:03	1
o-Xylene	ND		0.10		ug/L			01/02/15 18:03	1
Styrene	ND		0.10		ug/L			01/02/15 18:03	1
Bromoform	ND		0.10		ug/L			01/02/15 18:03	1
Isopropylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
Bromobenzene	ND		0.10		ug/L			01/02/15 18:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 18:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			01/02/15 18:03	1
N-Propylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
2-Chlorotoluene	ND		0.10		ug/L			01/02/15 18:03	1
4-Chlorotoluene	ND		0.20		ug/L			01/02/15 18:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
tert-Butylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
sec-Butylbenzene	ND		0.10		ug/L			01/02/15 18:03	1
4-Isopropyltoluene	ND		0.20		ug/L			01/02/15 18:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:03	1
1,4-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:03	1
n-Butylbenzene	ND		0.10		ug/L			01/02/15 18:03	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-3
Date Collected: 12/23/14 13:55
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			01/02/15 18:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			01/02/15 18:03	1
Hexachlorobutadiene	ND		0.20		ug/L			01/02/15 18:03	1
Naphthalene	ND		0.40		ug/L			01/02/15 18:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			01/02/15 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*104*		*80 - 127*		*01/02/15 18:03*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*01/02/15 18:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 128*		*01/02/15 18:03*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*		*01/02/15 18:03*	*1*
Dibromofluoromethane (Surr)	*108*		*85 - 115*		*01/02/15 18:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		10		ug/L			01/05/15 22:51	25
Vinyl chloride	**940**		0.50		ug/L			01/05/15 22:51	25
Trichloroethene	**500**		2.5		ug/L			01/05/15 22:51	25
Tetrachloroethene	**370**		2.5		ug/L			01/05/15 22:51	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*01/05/15 22:51*	*25*
Toluene-d8 (Surr)	*98*		*75 - 125*		*01/05/15 22:51*	*25*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*01/05/15 22:51*	*25*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*01/05/15 22:51*	*25*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*01/05/15 22:51*	*25*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**2000**		100		ug/L			01/05/15 21:56	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*80 - 127*		*01/05/15 21:56*	*1000*
Toluene-d8 (Surr)	*96*		*75 - 125*		*01/05/15 21:56*	*1000*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 128*		*01/05/15 21:56*	*1000*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*01/05/15 21:56*	*1000*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*01/05/15 21:56*	*1000*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**2.8**		1.0		mg/L			01/06/15 15:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-4
Date Collected: 12/23/14 14:10
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.10		ug/L			01/02/15 18:29	1
Bromomethane	ND		0.10		ug/L			01/02/15 18:29	1
Chloroethane	ND		0.25		ug/L			01/02/15 18:29	1
Trichlorofluoromethane	ND		0.10		ug/L			01/02/15 18:29	1
1,1-Dichloroethene	**0.73**		0.10		ug/L			01/02/15 18:29	1
Methylene Chloride	ND		0.50		ug/L			01/02/15 18:29	1
Methyl tert-butyl ether	ND		0.10		ug/L			01/02/15 18:29	1
trans-1,2-Dichloroethene	**2.2**		0.10		ug/L			01/02/15 18:29	1
1,1-Dichloroethane	**0.30**		0.10		ug/L			01/02/15 18:29	1
2,2-Dichloropropane	ND		0.10		ug/L			01/02/15 18:29	1
Chlorobromomethane	ND		0.10		ug/L			01/02/15 18:29	1
Chloroform	**5.4**		0.10		ug/L			01/02/15 18:29	1
1,1,1-Trichloroethane	**0.16**		0.10		ug/L			01/02/15 18:29	1
Carbon tetrachloride	ND		0.10		ug/L			01/02/15 18:29	1
1,1-Dichloropropene	ND		0.10		ug/L			01/02/15 18:29	1
Benzene	ND		0.10		ug/L			01/02/15 18:29	1
1,2-Dichloroethane	ND		0.10		ug/L			01/02/15 18:29	1
Trichloroethene	**39**		0.10		ug/L			01/02/15 18:29	1
1,2-Dichloropropane	ND		0.10		ug/L			01/02/15 18:29	1
Dibromomethane	ND		0.10		ug/L			01/02/15 18:29	1
Dichlorobromomethane	ND		0.10		ug/L			01/02/15 18:29	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 18:29	1
Toluene	ND		0.10		ug/L			01/02/15 18:29	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 18:29	1
1,1,2-Trichloroethane	ND		0.10		ug/L			01/02/15 18:29	1
1,3-Dichloropropane	ND		0.10		ug/L			01/02/15 18:29	1
Chlorodibromomethane	ND		0.10		ug/L			01/02/15 18:29	1
Ethylene Dibromide	ND		0.10		ug/L			01/02/15 18:29	1
Chlorobenzene	ND		0.10		ug/L			01/02/15 18:29	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 18:29	1
Ethylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
m-Xylene & p-Xylene	ND		0.20		ug/L			01/02/15 18:29	1
o-Xylene	ND		0.10		ug/L			01/02/15 18:29	1
Styrene	ND		0.10		ug/L			01/02/15 18:29	1
Bromoform	ND		0.10		ug/L			01/02/15 18:29	1
Isopropylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
Bromobenzene	ND		0.10		ug/L			01/02/15 18:29	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 18:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			01/02/15 18:29	1
N-Propylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
2-Chlorotoluene	ND		0.10		ug/L			01/02/15 18:29	1
4-Chlorotoluene	ND		0.20		ug/L			01/02/15 18:29	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
tert-Butylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
sec-Butylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
4-Isopropyltoluene	ND		0.20		ug/L			01/02/15 18:29	1
1,3-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:29	1
1,4-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:29	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-4
Date Collected: 12/23/14 14:10
Date Received: 12/30/14 10:00

Lab Sample ID: 580-46882-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.10		ug/L			01/02/15 18:29	1
1,2-Dichlorobenzene	ND		0.20		ug/L			01/02/15 18:29	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			01/02/15 18:29	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			01/02/15 18:29	1
Hexachlorobutadiene	ND		0.20		ug/L			01/02/15 18:29	1
Naphthalene	ND		0.40		ug/L			01/02/15 18:29	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			01/02/15 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*80 - 127*		*01/02/15 18:29*	*1*
Toluene-d8 (Surr)	*99*		*75 - 125*		*01/02/15 18:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 128*		*01/02/15 18:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*01/02/15 18:29*	*1*
Dibromofluoromethane (Surr)	*107*		*85 - 115*		*01/02/15 18:29*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		4.0		ug/L			01/05/15 23:19	10
Vinyl chloride	**94**		0.20		ug/L			01/05/15 23:19	10
cis-1,2-Dichloroethene	**220**		1.0		ug/L			01/05/15 23:19	10
Tetrachloroethene	**64**		1.0		ug/L			01/05/15 23:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*80 - 127*		*01/05/15 23:19*	*10*
Toluene-d8 (Surr)	*98*		*75 - 125*		*01/05/15 23:19*	*10*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 128*		*01/05/15 23:19*	*10*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*01/05/15 23:19*	*10*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*01/05/15 23:19*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**2.0**		1.0		mg/L			01/06/15 15:43	1

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-179268/3
Matrix: Water
Analysis Batch: 179268

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,1-Dichloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,1-Dichloropropene	ND		1.0		ug/L			12/31/14 11:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,2,3-Trichloropropane	ND		2.0		ug/L			12/31/14 11:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			12/31/14 11:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,2-Dichloroethane	ND		1.0		ug/L			12/31/14 11:52	1
1,2-Dichloropropane	ND		1.0		ug/L			12/31/14 11:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
1,3-Dichloropropane	ND		1.0		ug/L			12/31/14 11:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
2,2-Dichloropropane	ND		1.0		ug/L			12/31/14 11:52	1
2-Chlorotoluene	ND		1.0		ug/L			12/31/14 11:52	1
4-Chlorotoluene	ND		1.0		ug/L			12/31/14 11:52	1
4-Isopropyltoluene	ND		1.0		ug/L			12/31/14 11:52	1
Benzene	ND		1.0		ug/L			12/31/14 11:52	1
Bromobenzene	ND		1.0		ug/L			12/31/14 11:52	1
Bromoform	ND		1.0		ug/L			12/31/14 11:52	1
Bromomethane	ND		5.0		ug/L			12/31/14 11:52	1
Carbon tetrachloride	ND		1.0		ug/L			12/31/14 11:52	1
Chlorobenzene	ND		1.0		ug/L			12/31/14 11:52	1
Chlorobromomethane	ND		1.0		ug/L			12/31/14 11:52	1
Chlorodibromomethane	ND		1.0		ug/L			12/31/14 11:52	1
Chloroethane	ND		5.0		ug/L			12/31/14 11:52	1
Chloroform	ND		1.0		ug/L			12/31/14 11:52	1
Chloromethane	ND		5.0		ug/L			12/31/14 11:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			12/31/14 11:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			12/31/14 11:52	1
Dibromomethane	ND		1.0		ug/L			12/31/14 11:52	1
Dichlorobromomethane	ND		1.0		ug/L			12/31/14 11:52	1
Dichlorodifluoromethane	ND		1.0		ug/L			12/31/14 11:52	1
Ethylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
Ethylene Dibromide	ND		1.0		ug/L			12/31/14 11:52	1
Hexachlorobutadiene	ND		1.0		ug/L			12/31/14 11:52	1
Isopropylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/31/14 11:52	1
Methylene Chloride	ND		3.0		ug/L			12/31/14 11:52	1
m-Xylene & p-Xylene	ND		2.0		ug/L			12/31/14 11:52	1
Naphthalene	ND		3.0		ug/L			12/31/14 11:52	1
n-Butylbenzene	ND		2.0		ug/L			12/31/14 11:52	1
N-Propylbenzene	ND		1.0		ug/L			12/31/14 11:52	1

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

Lab Sample ID: MB 580-179268/3
Matrix: Water
Analysis Batch: 179268

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			12/31/14 11:52	1
sec-Butylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
Styrene	ND		5.0		ug/L			12/31/14 11:52	1
tert-Butylbenzene	ND		1.0		ug/L			12/31/14 11:52	1
Toluene	ND		1.0		ug/L			12/31/14 11:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/31/14 11:52	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			12/31/14 11:52	1
Trichloroethene	ND		1.0		ug/L			12/31/14 11:52	1
Trichlorofluoromethane	ND		1.0		ug/L			12/31/14 11:52	1
Vinyl chloride	ND		1.0		ug/L			12/31/14 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*12/31/14 11:52*	*1*
Toluene-d8 (Surr)	*93*		*85 - 120*		*12/31/14 11:52*	*1*
Trifluorotoluene (Surr)	*90*		*70 - 136*		*12/31/14 11:52*	*1*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*12/31/14 11:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*12/31/14 11:52*	*1*

Lab Sample ID: LCS 580-179268/4
Matrix: Water
Analysis Batch: 179268

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	19.6		ug/L		98	80 - 130
1,1,1-Trichloroethane	20.0	20.8		ug/L		104	65 - 130
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		96	65 - 130
1,1,2-Trichloroethane	20.0	18.6		ug/L		93	75 - 125
1,1-Dichloroethane	20.0	18.2		ug/L		91	70 - 135
1,1-Dichloropropene	20.0	18.5		ug/L		93	75 - 130
1,2,3-Trichlorobenzene	20.0	19.4		ug/L		97	55 - 140
1,2,3-Trichloropropane	20.0	19.6		ug/L		98	75 - 125
1,2,4-Trichlorobenzene	20.0	20.1		ug/L		100	65 - 135
1,2,4-Trimethylbenzene	20.0	21.4		ug/L		107	75 - 130
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	50 - 130
1,2-Dichlorobenzene	20.0	19.5		ug/L		98	70 - 120
1,2-Dichloroethane	20.0	20.7		ug/L		104	70 - 130
1,2-Dichloropropane	20.0	16.9		ug/L		84	75 - 125
1,3,5-Trimethylbenzene	20.0	21.3		ug/L		107	75 - 130
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	75 - 125
1,3-Dichloropropane	20.0	18.6		ug/L		93	75 - 125
1,4-Dichlorobenzene	20.0	19.1		ug/L		96	75 - 125
2,2-Dichloropropane	20.0	21.7		ug/L		109	70 - 135
2-Chlorotoluene	20.0	18.7		ug/L		94	75 - 125
4-Chlorotoluene	20.0	19.3		ug/L		96	75 - 130
4-Isopropyltoluene	20.0	22.3		ug/L		111	75 - 130
Benzene	20.0	17.3		ug/L		87	80 - 120
Bromobenzene	20.0	18.8		ug/L		94	75 - 125
Bromoform	20.0	19.8		ug/L		99	70 - 130

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

Lab Sample ID: LCS 580-179268/4
Matrix: Water
Analysis Batch: 179268

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	20.0	18.4		ug/L		92	30 - 145
Carbon tetrachloride	20.0	22.8		ug/L		114	65 - 140
Chlorobenzene	20.0	18.3		ug/L		92	80 - 120
Chlorobromomethane	20.0	18.9		ug/L		94	65 - 130
Chlorodibromomethane	20.0	21.8		ug/L		109	60 - 135
Chloroethane	20.0	18.4		ug/L		92	60 - 135
Chloroform	20.0	19.6		ug/L		98	65 - 135
Chloromethane	20.0	16.6		ug/L		83	40 - 125
cis-1,2-Dichloroethene	20.0	17.8		ug/L		89	70 - 125
cis-1,3-Dichloropropene	20.0	18.8		ug/L		94	70 - 130
Dibromomethane	20.0	18.8		ug/L		94	75 - 125
Dichlorobromomethane	20.0	21.1		ug/L		105	75 - 120
Dichlorodifluoromethane	20.0	17.1		ug/L		86	30 - 155
Ethylbenzene	20.0	19.3		ug/L		97	75 - 125
Ethylene Dibromide	20.0	19.6		ug/L		98	80 - 120
Hexachlorobutadiene	20.0	21.3		ug/L		107	50 - 140
Isopropylbenzene	20.0	19.7		ug/L		98	75 - 125
Methyl tert-butyl ether	20.0	19.8		ug/L		99	65 - 125
Methylene Chloride	20.0	19.7		ug/L		99	55 - 140
m-Xylene & p-Xylene	20.0	19.4		ug/L		97	75 - 130
Naphthalene	20.0	19.2		ug/L		96	55 - 140
n-Butylbenzene	20.0	19.8		ug/L		99	70 - 135
N-Propylbenzene	20.0	22.5		ug/L		113	70 - 130
o-Xylene	20.0	19.1		ug/L		96	80 - 120
sec-Butylbenzene	20.0	22.7		ug/L		114	70 - 125
Styrene	20.0	19.2		ug/L		96	65 - 135
tert-Butylbenzene	20.0	21.0		ug/L		105	70 - 130
Toluene	20.0	17.5		ug/L		87	75 - 120
trans-1,2-Dichloroethene	20.0	17.9		ug/L		90	60 - 140
trans-1,3-Dichloropropene	20.0	21.0		ug/L		105	55 - 140
Trichloroethene	20.0	17.1		ug/L		86	70 - 125
Trichlorofluoromethane	20.0	21.9		ug/L		109	60 - 145
Vinyl chloride	20.0	21.1		ug/L		106	50 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*
Toluene-d8 (Surr)	*95*		*85 - 120*
Trifluorotoluene (Surr)	*96*		*70 - 136*
Dibromofluoromethane (Surr)	*96*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 120*

Lab Sample ID: LCSD 580-179268/5
Matrix: Water
Analysis Batch: 179268

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
1,1,1,2-Tetrachloroethane	20.0	22.1		ug/L		111	80 - 130	12	30
1,1,1-Trichloroethane	20.0	24.0		ug/L		120	65 - 130	14	30

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

Lab Sample ID: LCSD 580-179268/5
Matrix: Water
Analysis Batch: 179268

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
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/L		108	65 - 130	11	30
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	75 - 125	11	30
1,1-Dichloroethane	20.0	20.2		ug/L		101	70 - 135	10	30
1,1-Dichloropropene	20.0	22.4		ug/L		112	75 - 130	19	30
1,2,3-Trichlorobenzene	20.0	22.8		ug/L		114	55 - 140	16	30
1,2,3-Trichloropropane	20.0	21.7		ug/L		109	75 - 125	10	30
1,2,4-Trichlorobenzene	20.0	22.8		ug/L		114	65 - 135	13	30
1,2,4-Trimethylbenzene	20.0	24.6		ug/L		123	75 - 130	14	30
1,2-Dibromo-3-Chloropropane	20.0	22.4		ug/L		112	50 - 130	17	30
1,2-Dichlorobenzene	20.0	21.7		ug/L		109	70 - 120	11	30
1,2-Dichloroethane	20.0	23.0		ug/L		115	70 - 130	11	30
1,2-Dichloropropane	20.0	19.5		ug/L		97	75 - 125	14	30
1,3,5-Trimethylbenzene	20.0	24.9		ug/L		125	75 - 130	16	30
1,3-Dichlorobenzene	20.0	22.3		ug/L		112	75 - 125	15	30
1,3-Dichloropropane	20.0	20.7		ug/L		103	75 - 125	11	30
1,4-Dichlorobenzene	20.0	22.1		ug/L		110	75 - 125	14	30
2,2-Dichloropropane	20.0	24.3		ug/L		121	70 - 135	11	30
2-Chlorotoluene	20.0	21.0		ug/L		105	75 - 125	11	30
4-Chlorotoluene	20.0	21.8		ug/L		109	75 - 130	13	30
4-Isopropyltoluene	20.0	25.8		ug/L		129	75 - 130	15	30
Benzene	20.0	20.8		ug/L		104	80 - 120	18	30
Bromobenzene	20.0	21.2		ug/L		106	75 - 125	12	30
Bromoform	20.0	23.0		ug/L		115	70 - 130	15	30
Bromomethane	20.0	18.8		ug/L		94	30 - 145	2	30
Carbon tetrachloride	20.0	25.4		ug/L		127	65 - 140	11	30
Chlorobenzene	20.0	20.6		ug/L		103	80 - 120	12	30
Chlorobromomethane	20.0	21.4		ug/L		107	65 - 130	12	30
Chlorodibromomethane	20.0	24.0		ug/L		120	60 - 135	10	30
Chloroethane	20.0	18.1		ug/L		91	60 - 135	2	30
Chloroform	20.0	21.6		ug/L		108	65 - 135	10	30
Chloromethane	20.0	16.7		ug/L		84	40 - 125	1	30
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	70 - 125	14	30
cis-1,3-Dichloropropene	20.0	21.5		ug/L		107	70 - 130	13	30
Dibromomethane	20.0	21.3		ug/L		106	75 - 125	13	30
Dichlorobromomethane	20.0	24.0		ug/L		120	75 - 120	13	30
Dichlorodifluoromethane	20.0	17.7		ug/L		89	30 - 155	3	30
Ethylbenzene	20.0	22.7		ug/L		113	75 - 125	16	30
Ethylene Dibromide	20.0	21.6		ug/L		108	80 - 120	10	30
Hexachlorobutadiene	20.0	23.6		ug/L		118	50 - 140	10	30
Isopropylbenzene	20.0	23.6		ug/L		118	75 - 125	18	30
Methyl tert-butyl ether	20.0	21.8		ug/L		109	65 - 125	10	30
Methylene Chloride	20.0	21.0		ug/L		105	55 - 140	6	30
m-Xylene & p-Xylene	20.0	22.0		ug/L		110	75 - 130	13	30
Naphthalene	20.0	22.2		ug/L		111	55 - 140	14	30
n-Butylbenzene	20.0	22.7		ug/L		113	70 - 135	14	30
N-Propylbenzene	20.0	26.0		ug/L		130	70 - 130	14	30
o-Xylene	20.0	22.0		ug/L		110	80 - 120	14	30
sec-Butylbenzene	20.0	26.5	*	ug/L		133	70 - 125	16	30

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

Lab Sample ID: LCSD 580-179268/5
Matrix: Water
Analysis Batch: 179268

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
Styrene			20.0	22.2		ug/L		111	65 - 135	14	30
tert-Butylbenzene			20.0	25.1		ug/L		125	70 - 130	18	30
Toluene			20.0	20.7		ug/L		103	75 - 120	17	30
trans-1,2-Dichloroethene			20.0	20.0		ug/L		100	60 - 140	11	30
trans-1,3-Dichloropropene			20.0	23.4		ug/L		117	55 - 140	11	30
Trichloroethene			20.0	21.1		ug/L		105	70 - 125	21	30
Trichlorofluoromethane			20.0	21.0		ug/L		105	60 - 145	4	30
Vinyl chloride			20.0	20.4		ug/L		102	50 - 145	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*
Toluene-d8 (Surr)	*92*		*85 - 120*
Trifluorotoluene (Surr)	*91*		*70 - 136*
Dibromofluoromethane (Surr)	*98*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 120*

Lab Sample ID: MB 580-179291/3
Matrix: Water
Analysis Batch: 179291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0		ug/L			12/31/14 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*		*12/31/14 15:27*	*1*
Toluene-d8 (Surr)	*103*		*85 - 120*		*12/31/14 15:27*	*1*
Trifluorotoluene (Surr)	*98*		*70 - 136*		*12/31/14 15:27*	*1*
Dibromofluoromethane (Surr)	*96*		*85 - 115*		*12/31/14 15:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 120*		*12/31/14 15:27*	*1*

Lab Sample ID: LCS 580-179291/4
Matrix: Water
Analysis Batch: 179291

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene			20.0	24.4		ug/L		122	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Toluene-d8 (Surr)	*102*		*85 - 120*
Trifluorotoluene (Surr)	*104*		*70 - 136*
Dibromofluoromethane (Surr)	*96*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 120*

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

Lab Sample ID: LCSD 580-179291/5
Matrix: Water
Analysis Batch: 179291

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
1,1-Dichloroethene			20.0	24.2		ug/L		121	70 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*103*		*85 - 120*
Trifluorotoluene (Surr)	*103*		*70 - 136*
Dibromofluoromethane (Surr)	*97*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 120*

Lab Sample ID: MB 580-179344/6
Matrix: Water
Analysis Batch: 179344

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.10		ug/L			01/02/15 13:18	1
Bromomethane	ND		0.10		ug/L			01/02/15 13:18	1
Chloroethane	ND		0.25		ug/L			01/02/15 13:18	1
Trichlorofluoromethane	ND		0.10		ug/L			01/02/15 13:18	1
1,1-Dichloroethene	ND		0.10		ug/L			01/02/15 13:18	1
Methylene Chloride	ND		0.50		ug/L			01/02/15 13:18	1
Methyl tert-butyl ether	ND		0.10		ug/L			01/02/15 13:18	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			01/02/15 13:18	1
1,1-Dichloroethane	ND		0.10		ug/L			01/02/15 13:18	1
2,2-Dichloropropane	ND		0.10		ug/L			01/02/15 13:18	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			01/02/15 13:18	1
Chlorobromomethane	ND		0.10		ug/L			01/02/15 13:18	1
Chloroform	ND		0.10		ug/L			01/02/15 13:18	1
1,1,1-Trichloroethane	ND		0.10		ug/L			01/02/15 13:18	1
Carbon tetrachloride	ND		0.10		ug/L			01/02/15 13:18	1
1,1-Dichloropropene	ND		0.10		ug/L			01/02/15 13:18	1
Benzene	ND		0.10		ug/L			01/02/15 13:18	1
1,2-Dichloroethane	ND		0.10		ug/L			01/02/15 13:18	1
Trichloroethene	ND		0.10		ug/L			01/02/15 13:18	1
1,2-Dichloropropane	ND		0.10		ug/L			01/02/15 13:18	1
Dibromomethane	ND		0.10		ug/L			01/02/15 13:18	1
Dichlorobromomethane	ND		0.10		ug/L			01/02/15 13:18	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 13:18	1
Toluene	ND		0.10		ug/L			01/02/15 13:18	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			01/02/15 13:18	1
1,1,2-Trichloroethane	ND		0.10		ug/L			01/02/15 13:18	1
Tetrachloroethene	ND		0.10		ug/L			01/02/15 13:18	1
1,3-Dichloropropane	ND		0.10		ug/L			01/02/15 13:18	1
Chlorodibromomethane	ND		0.10		ug/L			01/02/15 13:18	1
Ethylene Dibromide	ND		0.10		ug/L			01/02/15 13:18	1
Chlorobenzene	ND		0.10		ug/L			01/02/15 13:18	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 13:18	1
Ethylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
m-Xylene & p-Xylene	ND		0.20		ug/L			01/02/15 13:18	1

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

Lab Sample ID: MB 580-179344/6
Matrix: Water
Analysis Batch: 179344

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.10		ug/L			01/02/15 13:18	1
Styrene	ND		0.10		ug/L			01/02/15 13:18	1
Bromoform	ND		0.10		ug/L			01/02/15 13:18	1
Isopropylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
Bromobenzene	ND		0.10		ug/L			01/02/15 13:18	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			01/02/15 13:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			01/02/15 13:18	1
N-Propylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
2-Chlorotoluene	ND		0.10		ug/L			01/02/15 13:18	1
4-Chlorotoluene	ND		0.20		ug/L			01/02/15 13:18	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
tert-Butylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
sec-Butylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
4-Isopropyltoluene	ND		0.20		ug/L			01/02/15 13:18	1
1,3-Dichlorobenzene	ND		0.20		ug/L			01/02/15 13:18	1
1,4-Dichlorobenzene	ND		0.20		ug/L			01/02/15 13:18	1
n-Butylbenzene	ND		0.10		ug/L			01/02/15 13:18	1
1,2-Dichlorobenzene	ND		0.20		ug/L			01/02/15 13:18	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			01/02/15 13:18	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			01/02/15 13:18	1
Hexachlorobutadiene	ND		0.20		ug/L			01/02/15 13:18	1
Naphthalene	ND		0.40		ug/L			01/02/15 13:18	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			01/02/15 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*80 - 127*		*01/02/15 13:18*	*1*
Toluene-d8 (Surr)	*101*		*75 - 125*		*01/02/15 13:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 128*		*01/02/15 13:18*	*1*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*		*01/02/15 13:18*	*1*
Dibromofluoromethane (Surr)	*100*		*85 - 115*		*01/02/15 13:18*	*1*

Lab Sample ID: LCS 580-179344/7
Matrix: Water
Analysis Batch: 179344

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	5.00	3.01		ug/L		60	50 - 140
Bromomethane	5.00	3.74		ug/L		75	70 - 135
Chloroethane	5.00	4.59		ug/L		92	75 - 140
Trichlorofluoromethane	5.00	3.46		ug/L		69	30 - 180
1,1-Dichloroethene	5.00	4.43		ug/L		89	70 - 150
Methylene Chloride	5.00	3.74		ug/L		75	60 - 145
Methyl tert-butyl ether	5.00	4.93		ug/L		99	75 - 120
trans-1,2-Dichloroethene	5.00	4.40		ug/L		88	80 - 140
1,1-Dichloroethane	5.00	4.61		ug/L		92	75 - 135
2,2-Dichloropropane	5.00	4.75		ug/L		95	60 - 150
cis-1,2-Dichloroethene	5.00	4.58		ug/L		92	80 - 130

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

Lab Sample ID: LCS 580-179344/7
Matrix: Water
Analysis Batch: 179344

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobromomethane	5.00	4.87		ug/L		97	80 - 125
Chloroform	5.00	4.80		ug/L		96	80 - 130
1,1,1-Trichloroethane	5.00	4.83		ug/L		97	80 - 140
Carbon tetrachloride	5.00	4.96		ug/L		99	75 - 140
1,1-Dichloropropene	5.00	4.61		ug/L		92	80 - 130
Benzene	5.00	4.55		ug/L		91	80 - 120
1,2-Dichloroethane	5.00	5.09		ug/L		102	80 - 140
Trichloroethene	5.00	4.68		ug/L		94	80 - 130
1,2-Dichloropropane	5.00	4.70		ug/L		94	80 - 120
Dibromomethane	5.00	5.09		ug/L		102	80 - 130
Dichlorobromomethane	5.00	5.23		ug/L		105	80 - 125
cis-1,3-Dichloropropene	5.00	5.29		ug/L		106	70 - 120
Toluene	5.00	4.75		ug/L		95	80 - 120
trans-1,3-Dichloropropene	5.00	5.36		ug/L		107	60 - 140
1,1,2-Trichloroethane	5.00	5.09		ug/L		102	80 - 130
Tetrachloroethene	5.00	4.56		ug/L		91	40 - 180
1,3-Dichloropropane	5.00	4.96		ug/L		99	80 - 130
Chlorodibromomethane	5.00	4.76		ug/L		95	70 - 120
Ethylene Dibromide	5.00	5.23		ug/L		105	70 - 130
Chlorobenzene	5.00	4.62		ug/L		92	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.02		ug/L		100	75 - 125
Ethylbenzene	5.00	4.83		ug/L		97	80 - 125
m-Xylene & p-Xylene	5.00	4.76		ug/L		95	80 - 130
o-Xylene	5.00	4.94		ug/L		99	80 - 120
Styrene	5.00	5.05		ug/L		101	75 - 130
Bromoform	5.00	4.41		ug/L		88	65 - 130
Isopropylbenzene	5.00	4.88		ug/L		98	75 - 120
Bromobenzene	5.00	4.58		ug/L		92	80 - 130
1,1,2,2-Tetrachloroethane	5.00	5.07		ug/L		101	75 - 125
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120
N-Propylbenzene	5.00	4.84		ug/L		97	80 - 120
2-Chlorotoluene	5.00	4.66		ug/L		93	75 - 130
4-Chlorotoluene	5.00	4.70		ug/L		94	75 - 130
1,3,5-Trimethylbenzene	5.00	4.89		ug/L		98	80 - 125
tert-Butylbenzene	5.00	4.77		ug/L		95	80 - 130
1,2,4-Trimethylbenzene	5.00	4.97		ug/L		99	80 - 125
sec-Butylbenzene	5.00	4.87		ug/L		97	80 - 125
4-Isopropyltoluene	5.00	4.73		ug/L		95	80 - 120
1,3-Dichlorobenzene	5.00	4.63		ug/L		93	80 - 120
1,4-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
n-Butylbenzene	5.00	4.54		ug/L		91	75 - 125
1,2-Dichlorobenzene	5.00	4.64		ug/L		93	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.05		ug/L		81	55 - 120
1,2,4-Trichlorobenzene	5.00	4.52		ug/L		90	60 - 125
Hexachlorobutadiene	5.00	4.37		ug/L		87	75 - 135
Naphthalene	5.00	4.63		ug/L		93	45 - 130
1,2,3-Trichlorobenzene	5.00	4.34		ug/L		87	60 - 125

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

Lab Sample ID: LCS 580-179344/7
Matrix: Water
Analysis Batch: 179344

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	*100*		*80 - 127*
Toluene-d8 (Surr)	*101*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*105*		*85 - 115*

Lab Sample ID: LCSD 580-179344/8
Matrix: Water
Analysis Batch: 179344

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
Chloromethane			5.00	3.19		ug/L		64	50 - 140	6	20
Bromomethane			5.00	3.93		ug/L		79	70 - 135	5	20
Chloroethane			5.00	4.96		ug/L		99	75 - 140	8	20
Trichlorofluoromethane			5.00	3.58		ug/L		72	30 - 180	3	20
1,1-Dichloroethene			5.00	4.69		ug/L		94	70 - 150	6	20
Methylene Chloride			5.00	3.97		ug/L		79	60 - 145	6	20
Methyl tert-butyl ether			5.00	5.21		ug/L		104	75 - 120	6	20
trans-1,2-Dichloroethene			5.00	4.66		ug/L		93	80 - 140	6	20
1,1-Dichloroethane			5.00	4.77		ug/L		95	75 - 135	3	20
2,2-Dichloropropane			5.00	4.82		ug/L		96	60 - 150	1	20
cis-1,2-Dichloroethene			5.00	4.76		ug/L		95	80 - 130	4	20
Chlorobromomethane			5.00	5.11		ug/L		102	80 - 125	5	20
Chloroform			5.00	5.02		ug/L		100	80 - 130	4	20
1,1,1-Trichloroethane			5.00	4.99		ug/L		100	80 - 140	3	20
Carbon tetrachloride			5.00	5.20		ug/L		104	75 - 140	5	20
1,1-Dichloropropene			5.00	4.83		ug/L		97	80 - 130	5	20
Benzene			5.00	4.85		ug/L		97	80 - 120	7	20
1,2-Dichloroethane			5.00	5.25		ug/L		105	80 - 140	3	20
Trichloroethene			5.00	5.06		ug/L		101	80 - 130	8	20
1,2-Dichloropropane			5.00	4.98		ug/L		100	80 - 120	6	20
Dibromomethane			5.00	5.45		ug/L		109	80 - 130	7	20
Dichlorobromomethane			5.00	5.73		ug/L		115	80 - 125	9	20
cis-1,3-Dichloropropene			5.00	5.40		ug/L		108	70 - 120	2	20
Toluene			5.00	4.94		ug/L		99	80 - 120	4	20
trans-1,3-Dichloropropene			5.00	5.72		ug/L		114	60 - 140	7	20
1,1,2-Trichloroethane			5.00	5.38		ug/L		108	80 - 130	6	20
Tetrachloroethene			5.00	4.91		ug/L		98	40 - 180	7	20
1,3-Dichloropropane			5.00	5.21		ug/L		104	80 - 130	5	20
Chlorodibromomethane			5.00	4.87		ug/L		97	70 - 120	2	20
Ethylene Dibromide			5.00	5.51		ug/L		110	70 - 130	5	20
Chlorobenzene			5.00	4.86		ug/L		97	80 - 120	5	20
1,1,1,2-Tetrachloroethane			5.00	5.33		ug/L		107	75 - 125	6	20
Ethylbenzene			5.00	5.11		ug/L		102	80 - 125	6	20
m-Xylene & p-Xylene			5.00	4.96		ug/L		99	80 - 130	4	20
o-Xylene			5.00	5.20		ug/L		104	80 - 120	5	20
Styrene			5.00	5.41		ug/L		108	75 - 130	7	20
Bromoform			5.00	4.73		ug/L		95	65 - 130	7	20

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

Lab Sample ID: LCSD 580-179344/8
Matrix: Water
Analysis Batch: 179344

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
Isopropylbenzene	5.00	5.25		ug/L		105	75 - 120	7	20
Bromobenzene	5.00	4.78		ug/L		96	80 - 130	4	20
1,1,2,2-Tetrachloroethane	5.00	5.29		ug/L		106	75 - 125	4	20
1,2,3-Trichloropropane	5.00	5.33		ug/L		107	75 - 120	3	20
N-Propylbenzene	5.00	5.05		ug/L		101	80 - 120	4	20
2-Chlorotoluene	5.00	4.83		ug/L		97	75 - 130	4	20
4-Chlorotoluene	5.00	4.92		ug/L		98	75 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.18		ug/L		104	80 - 125	6	20
tert-Butylbenzene	5.00	5.02		ug/L		100	80 - 130	5	20
1,2,4-Trimethylbenzene	5.00	5.26		ug/L		105	80 - 125	6	20
sec-Butylbenzene	5.00	5.19		ug/L		104	80 - 125	6	20
4-Isopropyltoluene	5.00	5.02		ug/L		100	80 - 120	6	20
1,3-Dichlorobenzene	5.00	4.85		ug/L		97	80 - 120	5	20
1,4-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120	5	20
n-Butylbenzene	5.00	4.80		ug/L		96	75 - 125	6	20
1,2-Dichlorobenzene	5.00	4.88		ug/L		98	80 - 130	5	20
1,2-Dibromo-3-Chloropropane	5.00	4.15		ug/L		83	55 - 120	2	20
1,2,4-Trichlorobenzene	5.00	4.69		ug/L		94	60 - 125	4	20
Hexachlorobutadiene	5.00	4.70		ug/L		94	75 - 135	7	20
Naphthalene	5.00	4.93		ug/L		99	45 - 130	6	20
1,2,3-Trichlorobenzene	5.00	4.56		ug/L		91	60 - 125	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*98*		*80 - 127*
Toluene-d8 (Surr)	*100*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*102*		*85 - 115*

Lab Sample ID: MB 580-179491/6
Matrix: Water
Analysis Batch: 179491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40		ug/L			01/05/15 18:16	1
Chloromethane	ND		0.10		ug/L			01/05/15 18:16	1
Vinyl chloride	ND		0.020		ug/L			01/05/15 18:16	1
Bromomethane	ND		0.10		ug/L			01/05/15 18:16	1
Chloroethane	ND		0.25		ug/L			01/05/15 18:16	1
Trichlorofluoromethane	ND		0.10		ug/L			01/05/15 18:16	1
1,1-Dichloroethene	ND		0.10		ug/L			01/05/15 18:16	1
Methylene Chloride	ND		0.50		ug/L			01/05/15 18:16	1
Methyl tert-butyl ether	ND		0.10		ug/L			01/05/15 18:16	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			01/05/15 18:16	1
1,1-Dichloroethane	ND		0.10		ug/L			01/05/15 18:16	1
2,2-Dichloropropane	ND		0.10		ug/L			01/05/15 18:16	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			01/05/15 18:16	1
Chlorobromomethane	ND		0.10		ug/L			01/05/15 18:16	1

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

Lab Sample ID: MB 580-179491/6
Matrix: Water
Analysis Batch: 179491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.10		ug/L			01/05/15 18:16	1
1,1,1-Trichloroethane	ND		0.10		ug/L			01/05/15 18:16	1
Carbon tetrachloride	ND		0.10		ug/L			01/05/15 18:16	1
1,1-Dichloropropene	ND		0.10		ug/L			01/05/15 18:16	1
Benzene	ND		0.10		ug/L			01/05/15 18:16	1
1,2-Dichloroethane	ND		0.10		ug/L			01/05/15 18:16	1
Trichloroethene	ND		0.10		ug/L			01/05/15 18:16	1
1,2-Dichloropropane	ND		0.10		ug/L			01/05/15 18:16	1
Dibromomethane	ND		0.10		ug/L			01/05/15 18:16	1
Dichlorobromomethane	ND		0.10		ug/L			01/05/15 18:16	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			01/05/15 18:16	1
Toluene	ND		0.10		ug/L			01/05/15 18:16	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			01/05/15 18:16	1
1,1,2-Trichloroethane	ND		0.10		ug/L			01/05/15 18:16	1
Tetrachloroethene	ND		0.10		ug/L			01/05/15 18:16	1
1,3-Dichloropropane	ND		0.10		ug/L			01/05/15 18:16	1
Chlorodibromomethane	ND		0.10		ug/L			01/05/15 18:16	1
Ethylene Dibromide	ND		0.10		ug/L			01/05/15 18:16	1
Chlorobenzene	ND		0.10		ug/L			01/05/15 18:16	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			01/05/15 18:16	1
Ethylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
m-Xylene & p-Xylene	ND		0.20		ug/L			01/05/15 18:16	1
o-Xylene	ND		0.10		ug/L			01/05/15 18:16	1
Styrene	ND		0.10		ug/L			01/05/15 18:16	1
Bromoform	ND		0.10		ug/L			01/05/15 18:16	1
Isopropylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
Bromobenzene	ND		0.10		ug/L			01/05/15 18:16	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			01/05/15 18:16	1
1,2,3-Trichloropropane	ND		0.20		ug/L			01/05/15 18:16	1
N-Propylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
2-Chlorotoluene	ND		0.10		ug/L			01/05/15 18:16	1
4-Chlorotoluene	ND		0.20		ug/L			01/05/15 18:16	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
tert-Butylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
sec-Butylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
4-Isopropyltoluene	ND		0.20		ug/L			01/05/15 18:16	1
1,3-Dichlorobenzene	ND		0.20		ug/L			01/05/15 18:16	1
1,4-Dichlorobenzene	ND		0.20		ug/L			01/05/15 18:16	1
n-Butylbenzene	ND		0.10		ug/L			01/05/15 18:16	1
1,2-Dichlorobenzene	ND		0.20		ug/L			01/05/15 18:16	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			01/05/15 18:16	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			01/05/15 18:16	1
Hexachlorobutadiene	ND		0.20		ug/L			01/05/15 18:16	1
Naphthalene	ND		0.40		ug/L			01/05/15 18:16	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			01/05/15 18:16	1

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

Lab Sample ID: MB 580-179491/6
Matrix: Water
Analysis Batch: 179491

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	*94*		*80 - 127*		*01/05/15 18:16*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*01/05/15 18:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 128*		*01/05/15 18:16*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*		*01/05/15 18:16*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*01/05/15 18:16*	*1*

Lab Sample ID: LCS 580-179491/7
Matrix: Water
Analysis Batch: 179491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	5.00	4.64		ug/L		93	30 - 180
Chloromethane	5.00	5.54		ug/L		111	50 - 140
Vinyl chloride	5.00	5.02		ug/L		100	65 - 140
Bromomethane	5.00	4.88		ug/L		98	70 - 135
Chloroethane	5.00	4.32		ug/L		86	75 - 140
Trichlorofluoromethane	5.00	4.97		ug/L		99	30 - 180
1,1-Dichloroethene	5.00	4.13		ug/L		83	70 - 150
Methylene Chloride	5.00	4.61		ug/L		92	60 - 145
Methyl tert-butyl ether	5.00	4.00		ug/L		80	75 - 120
trans-1,2-Dichloroethene	5.00	4.54		ug/L		91	80 - 140
1,1-Dichloroethane	5.00	4.73		ug/L		95	75 - 135
2,2-Dichloropropane	5.00	5.47		ug/L		109	60 - 150
cis-1,2-Dichloroethene	5.00	4.84		ug/L		97	80 - 130
Chlorobromomethane	5.00	4.89		ug/L		98	80 - 125
Chloroform	5.00	4.73		ug/L		95	80 - 130
1,1,1-Trichloroethane	5.00	4.89		ug/L		98	80 - 140
Carbon tetrachloride	5.00	4.69		ug/L		94	75 - 140
1,1-Dichloropropene	5.00	4.04		ug/L		81	80 - 130
Benzene	5.00	5.09		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	4.73		ug/L		95	80 - 140
Trichloroethene	5.00	4.79		ug/L		96	80 - 130
1,2-Dichloropropane	5.00	4.71		ug/L		94	80 - 120
Dibromomethane	5.00	4.77		ug/L		95	80 - 130
Dichlorobromomethane	5.00	4.89		ug/L		98	80 - 125
cis-1,3-Dichloropropene	5.00	4.17		ug/L		83	70 - 120
Toluene	5.00	4.80		ug/L		96	80 - 120
trans-1,3-Dichloropropene	5.00	4.01		ug/L		80	60 - 140
1,1,2-Trichloroethane	5.00	4.78		ug/L		96	80 - 130
Tetrachloroethene	5.00	5.44		ug/L		109	40 - 180
1,3-Dichloropropane	5.00	4.69		ug/L		94	80 - 130
Chlorodibromomethane	5.00	4.58		ug/L		92	70 - 120
Ethylene Dibromide	5.00	4.56		ug/L		91	70 - 130
Chlorobenzene	5.00	4.62		ug/L		92	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.62		ug/L		92	75 - 125
Ethylbenzene	5.00	4.60		ug/L		92	80 - 125
m-Xylene & p-Xylene	5.00	4.30		ug/L		86	80 - 130
o-Xylene	5.00	4.67		ug/L		93	80 - 120

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

Lab Sample ID: LCS 580-179491/7
Matrix: Water
Analysis Batch: 179491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	5.00	4.11		ug/L		82	75 - 130
Bromoform	5.00	4.40		ug/L		88	65 - 130
Isopropylbenzene	5.00	4.42		ug/L		88	75 - 120
Bromobenzene	5.00	4.69		ug/L		94	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.86		ug/L		97	75 - 125
1,2,3-Trichloropropane	5.00	4.60		ug/L		92	75 - 120
N-Propylbenzene	5.00	4.60		ug/L		92	80 - 120
2-Chlorotoluene	5.00	4.36		ug/L		87	75 - 130
4-Chlorotoluene	5.00	4.47		ug/L		89	75 - 130
1,3,5-Trimethylbenzene	5.00	4.42		ug/L		88	80 - 125
tert-Butylbenzene	5.00	4.01		ug/L		80	80 - 130
1,2,4-Trimethylbenzene	5.00	4.39		ug/L		88	80 - 125
sec-Butylbenzene	5.00	4.46		ug/L		89	80 - 125
4-Isopropyltoluene	5.00	4.92		ug/L		98	80 - 120
1,3-Dichlorobenzene	5.00	4.94		ug/L		99	80 - 120
1,4-Dichlorobenzene	5.00	4.84		ug/L		97	80 - 120
n-Butylbenzene	5.00	4.48		ug/L		90	75 - 125
1,2-Dichlorobenzene	5.00	5.07		ug/L		101	80 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.82		ug/L		96	55 - 120
1,2,4-Trichlorobenzene	5.00	4.58		ug/L		92	60 - 125
Hexachlorobutadiene	5.00	5.40		ug/L		108	75 - 135
Naphthalene	5.00	4.25		ug/L		85	45 - 130
1,2,3-Trichlorobenzene	5.00	4.91		ug/L		98	60 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*96*		*80 - 127*
Toluene-d8 (Surr)	*96*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: LCSD 580-179491/8
Matrix: Water
Analysis Batch: 179491

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
Dichlorodifluoromethane	5.00	4.80		ug/L		96	30 - 180	3	20
Chloromethane	5.00	5.39		ug/L		108	50 - 140	3	20
Vinyl chloride	5.00	5.02		ug/L		100	65 - 140	0	20
Bromomethane	5.00	5.29		ug/L		106	70 - 135	8	20
Chloroethane	5.00	5.57	*	ug/L		111	75 - 140	25	20
Trichlorofluoromethane	5.00	4.99		ug/L		100	30 - 180	1	20
1,1-Dichloroethene	5.00	4.58		ug/L		92	70 - 150	10	20
Methylene Chloride	5.00	4.69		ug/L		94	60 - 145	2	20
Methyl tert-butyl ether	5.00	4.06		ug/L		81	75 - 120	2	20
trans-1,2-Dichloroethene	5.00	4.81		ug/L		96	80 - 140	6	20
1,1-Dichloroethane	5.00	4.81		ug/L		96	75 - 135	2	20
2,2-Dichloropropane	5.00	5.18		ug/L		104	60 - 150	5	20

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

Lab Sample ID: LCSD 580-179491/8
Matrix: Water
Analysis Batch: 179491

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
cis-1,2-Dichloroethene	5.00	5.03		ug/L		101	80 - 130	4	20
Chlorobromomethane	5.00	4.79		ug/L		96	80 - 125	2	20
Chloroform	5.00	4.73		ug/L		95	80 - 130	0	20
1,1,1-Trichloroethane	5.00	4.83		ug/L		97	80 - 140	1	20
Carbon tetrachloride	5.00	4.75		ug/L		95	75 - 140	1	20
1,1-Dichloropropene	5.00	4.23		ug/L		85	80 - 130	5	20
Benzene	5.00	5.17		ug/L		103	80 - 120	2	20
1,2-Dichloroethane	5.00	4.64		ug/L		93	80 - 140	2	20
Trichloroethene	5.00	4.89		ug/L		98	80 - 130	2	20
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120	2	20
Dibromomethane	5.00	4.89		ug/L		98	80 - 130	3	20
Dichlorobromomethane	5.00	4.84		ug/L		97	80 - 125	1	20
cis-1,3-Dichloropropene	5.00	4.27		ug/L		85	70 - 120	2	20
Toluene	5.00	4.86		ug/L		97	80 - 120	1	20
trans-1,3-Dichloropropene	5.00	4.04		ug/L		81	60 - 140	1	20
1,1,2-Trichloroethane	5.00	4.68		ug/L		94	80 - 130	2	20
Tetrachloroethene	5.00	6.26		ug/L		125	40 - 180	14	20
1,3-Dichloropropane	5.00	4.49		ug/L		90	80 - 130	4	20
Chlorodibromomethane	5.00	4.58		ug/L		92	70 - 120	0	20
Ethylene Dibromide	5.00	4.54		ug/L		91	70 - 130	1	20
Chlorobenzene	5.00	4.58		ug/L		92	80 - 120	1	20
1,1,1,2-Tetrachloroethane	5.00	4.69		ug/L		94	75 - 125	1	20
Ethylbenzene	5.00	4.63		ug/L		93	80 - 125	1	20
m-Xylene & p-Xylene	5.00	4.38		ug/L		88	80 - 130	2	20
o-Xylene	5.00	4.78		ug/L		96	80 - 120	2	20
Styrene	5.00	4.18		ug/L		84	75 - 130	2	20
Bromoform	5.00	4.46		ug/L		89	65 - 130	1	20
Isopropylbenzene	5.00	4.61		ug/L		92	75 - 120	4	20
Bromobenzene	5.00	4.65		ug/L		93	80 - 130	1	20
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	75 - 125	5	20
1,2,3-Trichloropropane	5.00	4.37		ug/L		87	75 - 120	5	20
N-Propylbenzene	5.00	4.58		ug/L		92	80 - 120	0	20
2-Chlorotoluene	5.00	4.36		ug/L		87	75 - 130	0	20
4-Chlorotoluene	5.00	4.51		ug/L		90	75 - 130	1	20
1,3,5-Trimethylbenzene	5.00	4.40		ug/L		88	80 - 125	0	20
tert-Butylbenzene	5.00	4.16		ug/L		83	80 - 130	4	20
1,2,4-Trimethylbenzene	5.00	4.43		ug/L		89	80 - 125	1	20
sec-Butylbenzene	5.00	4.54		ug/L		91	80 - 125	2	20
4-Isopropyltoluene	5.00	4.95		ug/L		99	80 - 120	1	20
1,3-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 120	1	20
1,4-Dichlorobenzene	5.00	4.85		ug/L		97	80 - 120	0	20
n-Butylbenzene	5.00	4.70		ug/L		94	75 - 125	5	20
1,2-Dichlorobenzene	5.00	5.09		ug/L		102	80 - 130	0	20
1,2-Dibromo-3-Chloropropane	5.00	4.89		ug/L		98	55 - 120	1	20
1,2,4-Trichlorobenzene	5.00	4.70		ug/L		94	60 - 125	3	20
Hexachlorobutadiene	5.00	5.66		ug/L		113	75 - 135	5	20
Naphthalene	5.00	4.49		ug/L		90	45 - 130	6	20
1,2,3-Trichlorobenzene	5.00	4.94		ug/L		99	60 - 125	1	20

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

Lab Sample ID: LCSD 580-179491/8
Matrix: Water
Analysis Batch: 179491

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*93*		*80 - 127*
Toluene-d8 (Surr)	*97*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 128*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Dibromofluoromethane (Surr)	*99*		*85 - 115*

Lab Sample ID: MB 580-179776/16
Matrix: Water
Analysis Batch: 179776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			01/08/15 17:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*01/08/15 17:45*	*1*
Toluene-d8 (Surr)	*102*		*85 - 120*		*01/08/15 17:45*	*1*
Trifluorotoluene (Surr)	*98*		*70 - 136*		*01/08/15 17:45*	*1*
Dibromofluoromethane (Surr)	*99*		*85 - 115*		*01/08/15 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*		*01/08/15 17:45*	*1*

Lab Sample ID: LCS 580-179776/17
Matrix: Water
Analysis Batch: 179776

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			20.0	25.4		ug/L		127	45 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Toluene-d8 (Surr)	*102*		*85 - 120*
Trifluorotoluene (Surr)	*100*		*70 - 136*
Dibromofluoromethane (Surr)	*102*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 120*

Lab Sample ID: LCSD 580-179776/18
Matrix: Water
Analysis Batch: 179776

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
Tetrachloroethene			20.0	21.7		ug/L		109	45 - 150	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Toluene-d8 (Surr)	*100*		*85 - 120*
Trifluorotoluene (Surr)	*97*		*70 - 136*
Dibromofluoromethane (Surr)	*99*		*85 - 115*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-179607/1
Matrix: Water
Analysis Batch: 179607

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			01/06/15 15:43	1

Lab Sample ID: LCS 580-179607/2
Matrix: Water
Analysis Batch: 179607

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	15.0	15.0		mg/L		100	85 - 115

Lab Chronicle

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Client Sample ID: Ext-1

Lab Sample ID: 580-46882-1

Date Collected: 12/23/14 12:30
Matrix: Water
Date Received: 12/30/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	179344	01/02/15 17:38	A1C	TAL SEA
Total/NA	Analysis	8260B	DL	10	179491	01/05/15 21:28	IWH	TAL SEA
Total/NA	Analysis	SM 5310B		1	179607	01/06/15 15:43	RSB	TAL SEA

Client Sample ID: Ext-2

Lab Sample ID: 580-46882-2

Date Collected: 12/23/14 13:20
Matrix: Water
Date Received: 12/30/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	179268	12/31/14 15:56	TL1	TAL SEA
Total/NA	Analysis	8260B	DL	100	179268	12/31/14 18:42	TL1	TAL SEA
Total/NA	Analysis	8260B	RADL	100	179776	01/08/15 22:11	JMB	TAL SEA
Total/NA	Analysis	8260B	RA	1	179291	12/31/14 20:55	TL1	TAL SEA
Total/NA	Analysis	SM 5310B		1	179607	01/06/15 15:43	RSB	TAL SEA

Client Sample ID: Ext-3

Lab Sample ID: 580-46882-3

Date Collected: 12/23/14 13:55
Matrix: Water
Date Received: 12/30/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	179344	01/02/15 18:03	A1C	TAL SEA
Total/NA	Analysis	8260B	DL2	1000	179491	01/05/15 21:56	IWH	TAL SEA
Total/NA	Analysis	8260B	DL	25	179491	01/05/15 22:51	IWH	TAL SEA
Total/NA	Analysis	SM 5310B		1	179607	01/06/15 15:43	RSB	TAL SEA

Client Sample ID: Ext-4

Lab Sample ID: 580-46882-4

Date Collected: 12/23/14 14:10
Matrix: Water
Date Received: 12/30/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	179344	01/02/15 18:29	A1C	TAL SEA
Total/NA	Analysis	8260B	DL	10	179491	01/05/15 23:19	IWH	TAL SEA
Total/NA	Analysis	SM 5310B		1	179607	01/06/15 15:43	RSB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
US Fish & Wildlife	Federal		LE192332-0	02-28-16
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Frank Wear

TestAmerica Job ID: 580-46882-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46882-1	Ext-1	Water	12/23/14 12:30	12/30/14 10:00
580-46882-2	Ext-2	Water	12/23/14 13:20	12/30/14 10:00
580-46882-3	Ext-3	Water	12/23/14 13:55	12/30/14 10:00
580-46882-4	Ext-4	Water	12/23/14 14:10	12/30/14 10:00

1 2 3 4 5 6 7 8 9 10 11

Sample Custody Record

Samples Shipped to TA-Seattle

Hart Crowser, Inc.
8910 Southwest Gemini Drive
Beaverton, Oregon 97008-7123
Office: 503.620.7284 • Fax 503.620.6918

HARTCROWSER

JOB 17800-23 LAB NUMBER

PROJECT NAME Frank Wear

HART CROWSER CONTACT Jill Kiernan

jill.kiernan@hartcrowser.com

SAMPLED BY: Kaylan Smyth

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	VOCs 8260B	TOC SM 5310B	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	Ext-1		12/23/14	12:30	W	X	X		5 Bottles
	Ext-2		12/23/14	13:20	W	X	X		" "
	Ext-3		12/23/14	13:55	W	X	X		" "
	Ext-4		12/23/14	14:10	W	X	X		" "
FL 12/30	Trip Blank		12/15/14						

580-46882 Chain of Custody

Lg Blu/wh
wet/bub IR#1 = 2.2/2.0°c
Fed PO

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE: Kaylan Smyth	12/24/14	SIGNATURE: Clarissa A. Lehman	12/24/14
PRINT NAME: KAYLAN SMYTH	TIME	PRINT NAME: Clarissa A. Lehman	TIME
COMPANY: HART CROWSER	14:15	COMPANY: TA-Portland	1517

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE: [illegible]	12/29/14	SIGNATURE: Tom Blankinship	12/30/14
PRINT NAME: Phil Svabl-Sero /	TIME	PRINT NAME: Blankinship	TIME
COMPANY: TAP	1200	COMPANY: TA-Sea	1000

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

All analyses to be performed by TA-Seattle

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. ______
for Other Contract Requirements

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS:
☐YES ☐NO ☐N/A
GOOD CONDITION
☐YES ☐NO
TEMPERATURE ______
SHIPMENT METHOD: ☐HAND
☐COURIER ☐OVERNIGHT

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐48 HOURS ☐STANDARD
☐72 HOURS OTHER ______

White and Yellow Copies to Lab   Pink to Project Manager   Lab to Return White Copy to Hart Crowser   Gold to Sample Custodian

4.6°C IR16-B

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 580-46882-1

Login Number: 46882

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	False	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	